CITY OF HEMET

2015 URBAN WATER MANAGEMENT PLAN
VOLUME 2 – APPENDICES

JUNE 2016

Prepared by

KWC ENGINEERS
CIVIL ENGINEERS • PLANNERS • SURVEYORS

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PREPARED FOR

CITY OF HEMET
445 EAST FLORIDA AVENUE
HEMET, CA 92543

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This volume is intended to accompany Volume 1 of the City of Hemet 2015 Urban Water Management Plan (UWMP). Its purpose is to provide reference material cited in the UWMP as mandated by the California Urban Water Management Planning Act or in support thereof.

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References

References

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Table 2-1 Retail Only: Public Water Systems			
Public Water System Number	Public Water System Name	Number of Municipal Connections 2015	Volume of Water Supplied 2015
3310016	City of Hemet	9,304	3,750
	TOTAL	9,304	3,750
NOTES:			

Table 2-2: Plan Identification			
Select Only One	**Type of Plan**		**Name of RUWMP or Regional Alliance** *if applicable* *drop down list*
☑	**Individual UWMP**		
	☐	Water Supplier is also a member of a RUWMP	
	☐	Water Supplier is also a member of a Regional Alliance	
☐	**Regional Urban Water Management Plan (RUWMP)**		
NOTES:			

Table 2-3: Agency Identification	
Type of Agency (select one or both)	
☐	Agency is a wholesaler
☑	Agency is a retailer
Fiscal or Calendar Year (select one)	
☑	UWMP Tables Are in Calendar Years
☐	UWMP Tables Are in Fiscal Years
If Using Fiscal Years Provide Month and Date that the Fiscal Year Begins (mm/dd)	
Units of Measure Used in UWMP (select from Drop down)	
Unit	AF
NOTES:	

Table 2-4 Retail: Water Supplier Information Exchange
The retail supplier has informed the following wholesale supplier(s) of projected water use in accordance with CWC 10631.
Wholesale Water Supplier Name *(Add additional rows as needed)*
Eastern Municipal Water District
NOTES:

Table 3-1 Retail: Population - Current and Projected						
Population Served	2015	2020	2025	2030	2035	2040*(opt)*
	31,873	32,600	33,300	33,800	34,300	34,600
NOTES:						

Table 4-1 Retail: Demands for Potable and Raw Water - Actual			
Use Type *(Add additional rows as needed)*	2015 Actual		
Drop down list *May select each use multiple times* *These are the only Use Types that will be recognized by the WUEdata online submittal tool*	Additional Description *(as needed)*	Level of Treatment When Delivered *Drop down list*	Volume
Single Family	Single Family	Drinking Water	1,467
Landscape	AF Meters: Well/Golf	Drinking Water	163
Multi-Family	Multi-Family Duplex	Drinking Water	114
Multi-Family	Mobile Home Park	Drinking Water	262
Multi-Family	RV Park	Drinking Water	10
Multi-Family	Multi-Family Triplex	Drinking Water	36
Multi-Family	Multi-Family 4 +	Drinking Water	558
Commercial	Commercial	Drinking Water	372
Landscape	Comm-Landscape Allow	Drinking Water	10
Institutional/Governmental	School	Drinking Water	108
Commercial	Motel/Hotel	Drinking Water	38
Institutional/Governmental	City of Hemet	Drinking Water	117
Institutional/Governmental	Church	Drinking Water	19
Institutional/Governmental	Convalescent Hospital	Drinking Water	143
Landscape	Landscape or HOA	Drinking Water	99
Losses		Drinking Water	234
		TOTAL	3,750
NOTES:			

Table 4-2 Retail: Demands for Potable and Raw Water - Projected						
Use Type *(Add additional rows as needed)*	Additional Description *(as needed)*	Projected Water Use *Report To the Extent that Records are Available*				
Drop down list *May select each use multiple times These are the only Use Types that will be recognized by the WUEdata online submittal tool*		2020	2025	2030	2035	2040-opt
Single Family		1,834	1,872	1,902	1,929	1,943
Multi-Family		1,388	1,417	1,440	1,459	1,471
Commercial	CII	907	925	940	953	961
Landscape		383	391	397	403	406
Losses		348	355	361	366	369
TOTAL		4,860	4,960	5,040	5,110	5,150
NOTES:						

Table 4-3 Retail: Total Water Demands						
	2015	2020	2025	2030	2035	2040 *(opt)*
Potable and Raw Water *From Tables 4-1 and 4-2*	3,750	4,860	4,960	5,040	5,110	5,150
Recycled Water Demand* *From Table 6-4*	0	0	0	0	0	0
TOTAL WATER DEMAND	3,750	4,860	4,960	5,040	5,110	5,150
**Recycled water demand fields will be blank until Table 6-4 is complete.*						
NOTES:						

Table 4-4 Retail: 12 Month Water Loss Audit Reporting	
Reporting Period Start Date (mm/yyyy)	Volume of Water Loss*
01/2015	234
** Taken from the field "Water Losses" (a combination of apparent losses and real losses) from the AWWA worksheet.*	
NOTES:	

Table 4-5 Retail Only: Inclusion in Water Use Projections	
Are Future Water Savings Included in Projections? (Refer to Appendix K of UWMP Guidebook) *Drop down list (y/n)*	No
If "Yes" to above, state the section or page number, in the cell to the right, where citations of the codes, ordinances, etc... utilized in demand projections are found.	
Are Lower Income Residential Demands Included In Projections? *Drop down list (y/n)*	No
NOTES:	

Table 5-1 Baselines and Targets Summary

Retail Agency or Regional Alliance Only

Baseline Period	Start Year	End Year	Average Baseline GPCD*	2015 Interim Target *	Confirmed 2020 Target*
10-15 year	*1995*	*2004*	*178*	*160*	*142*
5 Year	*2003*	*2007*	*173*		

*All values are in Gallons per Capita per Day (GPCD)

NOTES:

Table 5-2: 2015 Compliance

Retail Agency or Regional Alliance Only

Actual 2015 GPCD*	2015 Interim Target GPCD*	Optional Adjustments to 2015 GPCD *From Methodology 8*					2015 GPCD* *(Adjusted if applicable)*	Did Supplier Achieve Targeted Reduction for 2015? Y/N
		Extraordinary Events*	Economic Adjustment*	Weather Normalization*	TOTAL Adjustments*	Adjusted 2015 GPCD*		
105	160				0	105	105	Yes

**All values are in Gallons per Capita per Day (GPCD)*

NOTES:

Table 6-1 Retail: Groundwater Volume Pumped						
☐	Supplier does not pump groundwater. The supplier will not complete the table below.					
Groundwater Type ***Drop Down List*** *May use each category multiple times*	Location or Basin Name	2011	2012	2013	2014	2015
Add additional rows as needed						
Alluvial Basin	Hemet/San Jacinto Groundwater Management Area	4240	4503	4542	4457	3750
	TOTAL	4,240	4,503	4,542	4,457	3,750
NOTES:						

Table 6-2 Retail: Wastewater Collected Within Service Area in 2015						
❑	There is no wastewater collection system. The supplier will not complete the table below.					
	Percentage of 2015 service area covered by wastewater collection system *(optional)*					
	Percentage of 2015 service area population covered by wastewater collection system *(optional)*					
Wastewater Collection			**Recipient of Collected Wastewater**			
Name of Wastewater Collection Agency	Wastewater Volume Metered or Estimated? *Drop Down List*	Volume of Wastewater Collected from UWMP Service Area 2015	Name of Wastewater Treatment Agency Receiving Collected Wastewater	Treatment Plant Name	Is WWTP Located Within UWMP Area? *Drop Down List*	Is WWTP Operation Contracted to a Third Party? *(optional)* *Drop Down List*
Add additional rows as needed						
City of Hemet	Estimated	1,770	EMWD	San Jacinto Valley Regional Water Reclamation Facility	No	
Total Wastewater Collected from Service Area in 2015:		1,770				

NOTES: Wastewater generation estimate provided by EMWD: "We estimate that approximately 1,770 AF of wastewater was collected from the City of Hemet. This estimate was made using the proportion of the population within the San Jacinto Valley RWRF's sewer service area that correlated with the City of Hemet's water service area (not the city boundary). The population data used was from the 2014 American Community Survey at the census tract level."

Table 6-3 Retail: Wastewater Treatment and Discharge Within Service Area in 2015

☑	No wastewater is treated or disposed of within the UWMP service area. The supplier will not complete the table below.

Wastewater Treatment Plant Name	Discharge Location Name or Identifier	Discharge Location Description	Wastewater Discharge ID Number *(optional)*	Method of Disposal *Drop down list*	Does This Plant Treat Wastewater Generated Outside the Service Area?	Treatment Level *Drop down list*	2015 volumes			
							Wastewater Treated	Discharged Treated Wastewater	Recycled Within Service Area	Recycled Outside of Service Area
Add additional rows as needed										
						Total	0	0	0	0

NOTES:

Table 6-4 Retail: Current and Projected Recycled Water Direct Beneficial Uses Within Service Area

☑	Recycled water is not used and is not planned for use within the service area of the supplier. The supplier will not complete the table below.

Name of Agency Producing (Treating) the Recycled Water:	EMWD
Name of Agency Operating the Recycled Water Distribution System:	EMWD
Supplemental Water Added in 2015	
Source of 2015 Supplemental Water	

Beneficial Use Type	General Description of 2015 Uses	Level of Treatment *Drop down list*	2015	2020	2025	2030	2035	2040 (opt)
Agricultural irrigation								
Landscape irrigation (excludes golf courses)								
Golf course irrigation								
Commercial use								
Industrial use								
Geothermal and other energy production								
Seawater intrusion barrier								
Recreational impoundment								
Wetlands or wildlife habitat								
Groundwater recharge (IPR)*								
Surface water augmentation (IPR)*								
Direct potable reuse								
Other *(Provide General Description)*								
		Total:	0	0	0	0	0	0

**IPR - Indirect Potable Reuse*

NOTES:

Table 6-5 Retail: 2010 UWMP Recycled Water Use Projection Compared to 2015 Actual			
☑	Recycled water was not used in 2010 nor projected for use in 2015. The supplier will not complete the table below.		
Use Type		**2010 Projection for 2015**	**2015 Actual Use**
Agricultural irrigation		0	0
Landscape irrigation (excludes golf courses)		0	0
Golf course irrigation		0	0
Commercial use		0	0
Industrial use		0	0
Geothermal and other energy production		0	0
Seawater intrusion barrier		0	0
Recreational impoundment		0	0
Wetlands or wildlife habitat		0	0
Groundwater recharge (IPR)		0	0
Surface water augmentation (IPR)		0	0
Direct potable reuse		0	0
Other	*Type of Use*	0	0
Total		0	0
NOTES:			

Table 6-6 Retail: Methods to Expand Future Recycled Water Use			
☑	Supplier does not plan to expand recycled water use in the future. Supplier will not complete the table below but will provide narrative explanation.		
6-23	Provide page location of narrative in UWMP		
Name of Action	Description	Planned Implementation Year	Expected Increase in Recycled Water Use
Add additional rows as needed			
		Total	0
NOTES:			

Table 6-7 Retail: Expected Future Water Supply Projects or Programs						
☑	No expected future water supply projects or programs that provide a quantifiable increase to the agency's water supply. Supplier will not complete the table below.					
☐	Some or all of the supplier's future water supply projects or programs are not compatible with this table and are described in a narrative format.					
	Provide page location of narrative in the UWMP					
Name of Future Projects or Programs	Joint Project with other agencies?		Description (if needed)	Planned Implementation Year	Planned for Use in Year Type *Drop Down List*	Expected Increase in Water Supply to Agency *This may be a range*
	Drop Down List (y/n)	*If Yes, Agency Name*				
Add additional rows as needed						
NOTES:						

Table 6-8 Retail: Water Supplies — Actual				
Water Supply		2015		
Drop down list *May use each category multiple times. These are the only water supply categories that will be recognized by the WUEdata online submittal tool*	Additional Detail on Water Supply	Actual Volume	Water Quality *Drop Down List*	Total Right or Safe Yield *(optional)*
Add additional rows as needed				
Groundwater		3,750	Drinking Water	
	Total	3,750		0
NOTES:				

Table 6-9 Retail: Water Supplies — Projected											
Water Supply	Additional Detail on Water Supply	Projected Water Supply *Report To the Extent Practicable*									
Drop down list *May use each category multiple times. These are the only water supply categories that will be recognized by the WUEdata online submittal tool*		**2020**		**2025**		**2030**		**2035**		**2040** *(opt)*	
		Reasonably Available Volume	Total Right or Safe Yield *(optional)*	Reasonably Available Volume	Total Right or Safe Yield *(optional)*	Reasonably Available Volume	Total Right or Safe Yield *(optional)*	Reasonably Available Volume	Total Right or Safe Yield *(optional)*	Reasonably Available Volume	Total Right or Safe Yield *(optional)*
Add additional rows as needed											
Groundwater	GWMP Adjusted Base Production Rights	4,542		4,542		4,542		4,542		4,542	
Groundwater	GWMP Excess Imported Water	1,000		1,000		1,000		1,000		1,000	
	Total	5,542	0	5,542	0	5,542	0	5,542	0	5,542	0
NOTES: Per the GWMP, the Adjusted Base Production Rights beginning in 2020 are 4,542 AFY; excess Imported Water is estimated at 1,000 AFY.											

Table 7-1 Retail: Basis of Water Year Data			
Year Type	**Base Year** *If not using a calendar year, type in the last year of the fiscal, water year, or range of years, for example, water year 1999-2000, use 2000*	**Available Supplies if Year Type Repeats**	
		☐	Quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP. Location _____
		☑	Quantification of available supplies is provided in this table as either volume only, percent only, or both.
		Volume Available	**% of Average Supply**
Average Year	1996	5542	100%
Single-Dry Year	2002	5542	100%
Multiple-Dry Years 1st Year	2011	5542	100%
Multiple-Dry Years 2nd Year	2012	5542	100%
Multiple-Dry Years 3rd Year	2013	5542	100%
Multiple-Dry Years 4th Year *Optional*	2014	5542	100%
Multiple-Dry Years 5th Year *Optional*	2015	5542	100%
Multiple-Dry Years 6th Year *Optional*			

Agency may use multiple versions of Table 7-1 if different water sources have different base years and the supplier chooses to report the base years for each water source separately. If an agency uses multiple versions of Table 7-1, in the "Note" section of each table, state that multiple versions of Table 7-1 are being used and identify the particular water source that is being reported in each table.

NOTES:

Table 7-2 Retail: Normal Year Supply and Demand Comparison					
	2020	2025	2030	2035	2040 *(Opt)*
Supply totals *(autofill from Table 6-9)*	5,542	5,542	5,542	5,542	5,542
Demand totals *(autofill from Table 4-3)*	4,860	4,960	5,040	5,110	5,150
Difference	682	582	502	432	392
NOTES:					

Table 7-3 Retail: Single Dry Year Supply and Demand Comparison					
	2020	2025	2030	2035	2040 (Opt)
Supply totals	5,542	5,542	5,542	5,542	5,542
Demand totals	4,960	5,060	5,140	5,210	5,250
Difference	582	482	402	332	292
NOTES:102% of projected demand.					

Table 7-4 Retail: Multiple Dry Years Supply and Demand Comparison						
		2020	2025	2030	2035	2040 (Opt)
First year	Supply totals	5,542	5,542	5,542	5,542	5,542
	Demand totals	4,860	4,960	5,040	5,110	5,150
	Difference	682	582	502	432	392
Second year	Supply totals	5,542	5,542	5,542	5,542	5,542
	Demand totals	5,150	5,260	5,340	5,420	5,460
	Difference	392	282	202	122	82
Third year	Supply totals	5,542	5,542	5,542	5,542	5,542
	Demand totals	5,200	5,310	5,390	5,470	5,510
	Difference	342	232	152	72	32
Fourth year *(optional)*	Supply totals	5,542	5,542	5,542	5,542	5,542
	Demand totals	5,100	5,210	5,290	5,370	5,410
	Difference	442	332	252	172	132
Fifth year *(optional)*	Supply totals	5,542	5,542	5,542	5,542	5,542
	Demand totals	4,280	4,360	4,440	4,500	4,530
	Difference	1,262	1,182	1,102	1,042	1,012
Sixth year *(optional)*	Supply totals					
	Demand totals					
	Difference	0	0	0	0	0
NOTES: 100%, 106%, 107%, 105%, 88% of projected normaql demand.						

Table 8-1 Retail Stages of Water Shortage Contingency Plan		
Stage	Complete Both	
	Percent Supply Reduction[1] *Numerical value as a percent*	Water Supply Condition (*Narrative description)*
Add additional rows as needed		
1	10%	Minor Shortage - * Normal operating production drops by 10% during the highest production time of the year (May 15 through October 15) * Water level in the underground aquifer drops by an average of 25 feet
2	25%	Moderate Shortage - * Normal operating production drops by 25% during the highest production time of the year (May 15 through October 15) * Water level in the underground aquifer drops by an average of 50 feet
3	35%	Serious Shortage - * Normal operating production drops by 35% during the highest production time of the year (May 15 through October 15) * Water level in the underground aquifer drops by an average of 60 feet
4	50%	Critical Shortage - * Normal operating production drops by 50% during the highest production time of the year (May 15 through October 15) * Water level in the underground aquifer drops by an average of 70 feet
[1] *One stage in the Water Shortage Contingency Plan must address a water shortage of 50%.*		
NOTES:		

Table 8-2 Retail Only: Restrictions and Prohibitions on End Uses			
Stage	Restrictions and Prohibitions on End Users ***Drop down list*** *These are the only categories that will be accepted by the WUEdata online submittal tool*	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement? *Drop Down List*
Add additional rows as needed			
Always	Landscape - Restrict or prohibit runoff from landscape irrigation		Yes
Always	Other - Require automatic shut of hoses		Yes
Always	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner		Yes
Always	Other - Prohibit use of potable water for construction and dust control	Potable water must not be used for earthwork, grading or road construction purposes when nonpotable water is available.	Yes
Always	Other - Prohibit use of potable water for washing hard surfaces		Yes
Always	Other water feature or swimming pool restriction	Draining and filling of swimming pools with a capacity of 1,500 gallons or greater, or a depth of four feet or greater, regardless of capacity, shall require a permit for such draining or filling.	Yes
1	Landscape - Other landscape restriction or prohibition	All single-family residential accounts (single-family detached units and individually metered mobile homes) shall be allocated their 1990/91 district average adjusted to achieve a 10% reduction in the single-family category, but in no case shall consumers be asked to reduce their consumption to less than 2,000 cubic feet per bimonthly billing period per service.	Yes
1	Landscape - Other landscape restriction or prohibition	All other accounts (multifamily, apartment complexes, commercial, irrigation and mobile home parks on a single water meter) shall be allotted their historic consumption during the 1990/91 fiscal year less 10%, but in no case shall consumers be asked to reduce their consumption to less than 2,000 cubic feet per bimonthly billing period. All other accounts without historic consumption shall be allotted 2,000 cubic feet per bimonthly billing period per service.	Yes
1	CII - Restaurants may only serve water upon request		Yes
1	Landscape - Prohibit certain types of landscape irrigation	Additional water shall not be allowed for new landscaping or expansion of existing facilities unless low water use landscape designs and efficient irrigation systems are used.	Yes
2	Other	All madatory water use restriction included in Phase 1 are also included in Phase 2	Yes
2	Landscape - Other landscape restriction or prohibition	All single-family residential accounts (single-family detached units and individually metered mobile homes) shall be allocated their 1990/91 district average adjusted to achieve a 25% reduction in the single-family category, but in no case shall consumers be asked to reduce their consumption to less than 2,000 cubic feet per bimonthly billing period per service.	Yes

Table 8-2 Retail Only: Restrictions and Prohibitions on End Uses			
Stage	Restrictions and Prohibitions on End Users ***Drop down list*** *These are the only categories that will be accepted by the WUEdata online submittal tool*	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement? *Drop Down List*
Add additional rows as needed			
2	Landscape - Other landscape restriction or prohibition	All other accounts (multifamily, apartment complexes, commercial, irrigation and mobile home parks on a single water meter) shall be allotted their historic consumption during the 1990/91 fiscal year less 25%, but in no case shall consumers be asked to reduce their consumption to less than 2,000 cubic feet per bimonthly billing period. All other accounts without historic consumption shall be allotted 2,000 cubic feet per bimonthly billing period per service.	Yes
2	Other	Commercial carwash businesses must recycle their water.	Yes
2	Other	Car washing is prohibited except with a bucket or container not exceeding a three-gallon capacity.	Yes
2	Other	No water shall be used for fire drills.	Yes
2	Landscape - Limit landscape irrigation to specific times	Landscape watering is prohibited between 6:00 a.m. and 6:00 p.m. except for performing regular maintenance checks and repairs, watering golf course greens and tees, using a hand-held hose equipped with a positive shutoff nozzle, using a hand-held bucket of five gallons in capacity or less, or watering with a drip irrigation system. Watering between 6:00 a.m. and 6:00 p.m. may be allowed if freezing temperatures prevent irrigation at night.	Yes
2	Landscape - Limit landscape irrigation to specific days	Irrigation of ornamental landscaping and turf with potable water is limited to no more than two days per week.	Yes
3	Other	All madatory water use restriction included in Phases 1 and 2 are also included in Phase 3	Yes
3	Landscape - Other landscape restriction or prohibition	All single-family residential accounts (single-family detached units and individually metered mobile homes) shall be allocated their 1990/91 district average adjusted to achieve a 35% reduction in the single-family category, but in no case shall consumers be asked to reduce their consumption to less than 2,000 cubic feet per bimonthly billing period per service.	Yes
3	Landscape - Other landscape restriction or prohibition	All other accounts (multifamily, apartment complexes, commercial, irrigation and mobile home parks on a single water meter) shall be allotted their historic consumption during the 1990/91 fiscal year less 35%, but in no case shall consumers be asked to reduce their consumption to less than 2,000 cubic feet per bimonthly billing period. All other accounts without historic consumption shall be allotted 2,000 cubic feet per bimonthly billing period per service.	Yes
3	Other water feature or swimming pool restriction	No water is to be used for filling of new pools.	Yes
3	Water Features - Restrict water use for decorative water features, such as fountains	Operation of decorative fountains is prohibited unless water is recycled.	Yes
3	Water Features - Restrict water use for decorative water features, such as fountains	Water shall not be used to clean, fill or maintain levels in decorative fountains, ponds or artificial lakes.	Yes

Table 8-2 Retail Only: Restrictions and Prohibitions on End Uses			
Stage	Restrictions and Prohibitions on End Users ***Drop down list*** *These are the only categories that will be accepted by the WUEdata online submittal tool*	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement? *Drop Down List*
Add additional rows as needed			
4	Other	All madatory water use restriction included in Phases 1 and 2 are also included in Phase 3	Yes
4	Landscape - Other landscape restriction or prohibition	All single-family residential accounts (single-family detached units and individually metered mobile homes) shall be allocated their 1990/91 district average adjusted to achieve a 50% reduction in the single-family category, but in no case shall consumers be asked to reduce their consumption to less than 2,000 cubic feet per bimonthly billing period per service.	Yes
4	Landscape - Other landscape restriction or prohibition	All other accounts (multifamily, apartment complexes, commercial, irrigation and mobile home parks on a single water meter) shall be allotted their historic consumption during the 1990/91 fiscal year less 50%, but in no case shall consumers be asked to reduce their consumption to less than 2,000 cubic feet per bimonthly billing period. All other accounts without historic consumption shall be allotted 2,000 cubic feet per bimonthly billing period per service.	Yes
4	Landscape - Other landscape restriction or prohibition	No installation of new turf.	Yes
NOTES:			

Table 8-3 Retail Only: Stages of Water Shortage Contingency Plan - Consumption Reduction Methods		
Stage	Consumption Reduction Methods by Water Supplier ***Drop down list*** *These are the only categories that will be accepted by the WUEdata online submittal tool*	Additional Explanation or Reference *(optional)*
Add additional rows as needed		
All	Reduce System Water Loss	See §9.4.3
All	Offer Water Use Surveys	See §9.4.1
Stage 4	Implement or Modify Drought Rate Structure or Surcharge	The current tiered water rates shall be increased to create an incentive rate structure to achieve the required reduction in consumption.
NOTES:		

Table 8-4 Retail: Minimum Supply Next Three Years			
	2016	2017	2018
Available Water Supply	5,590	5,590	5,590
NOTES: 2014 Adjusted Base Production Rights			

Table 10-1 Retail: Notification to Cities and Counties		
City Name	60 Day Notice	Notice of Public Hearing
Add additional rows as needed		
Hemet	☑	☑
	☐	☐
	☐	☐
County Name *Drop Down List*	60 Day Notice	Notice of Public Hearing
Add additional rows as needed		
Riverside County	☑	☑
	☐	☐

SB X7-7 Table 0: Units of Measure Used in UWMP* *(select one from the drop down list)*
Acre Feet
**The unit of measure must be consistent with Table 2-3*
NOTES:

SB X7-7 Table-1: Baseline Period Ranges			
Baseline	**Parameter**	**Value**	**Units**
10- to 15-year baseline period	2008 total water deliveries	4,784	Acre Feet
	2008 total volume of delivered recycled water	-	Acre Feet
	2008 recycled water as a percent of total deliveries	0.00%	Percent
	Number of years in baseline period[1, 2]	10	Years
	Year beginning baseline period range	1995	
	Year ending baseline period range[3]	2004	
5-year baseline period	Number of years in baseline period	5	Years
	Year beginning baseline period range	2003	
	Year ending baseline period range[4]	2007	

[1] *If the 2008 recycled water percent is less than 10 percent, then the first baseline period is a continuous 10-year period. If the amount of recycled water delivered in 2008 is 10 percent or greater, the first baseline period is a continuous 10- to 15-year period.* [2] *The Water Code requires that the baseline period is between 10 and 15 years. However, DWR recognizes that some water suppliers may not have the minimum 10 years of baseline data.*

[3] *The ending year must be between December 31, 2004 and December 31, 2010.*

[4] *The ending year must be between December 31, 2007 and December 31, 2010.*

NOTES:

SB X7-7 Table 2: Method for Population Estimates	
Method Used to Determine Population (may check more than one)	
☐	**1. Department of Finance** (DOF) DOF Table E-8 (1990 - 2000) and (2000-2010) and DOF Table E-5 (2011 - 2015) when available
☐	**2. Persons-per-Connection Method**
☑	**3. DWR Population Tool**
☐	**4. Other** DWR recommends pre-review
NOTES:	

SB X7-7 Table 3: Service Area Population		
Year		**Population**
10 to 15 Year Baseline Population		
Year 1	1995	26,915
Year 2	1996	27,215
Year 3	1997	27,485
Year 4	1998	27,729
Year 5	1999	27,948
Year 6	2000	28,139
Year 7	2001	27,881
Year 8	2002	28,259
Year 9	2003	28,594
Year 10	2004	27,763
Year 11		
Year 12		
Year 13		
Year 14		
Year 15		
5 Year Baseline Population		
Year 1	2003	28,594
Year 2	2004	27,763
Year 3	2005	28,125
Year 4	2006	28,480
Year 5	2007	28,268
2015 Compliance Year Population		
2015		31,873
NOTES:		

SB X7-7 Table 4: Annual Gross Water Use *								
Baseline Year *Fm SB X7-7 Table 3*		**Volume Into Distribution System** *This column will remain blank until SB X7-7 Table 4-A is completed.*	**Deductions**					**Annual Gross Water Use**
			Exported Water	**Change in Dist. System Storage** (+/-)	**Indirect Recycled Water** *This column will remain blank until SB X7-7 Table 4-B is completed.*	**Water Delivered for Agricultural Use**	**Process Water** *This column will remain blank until SB X7-7 Table 4-D is completed.*	
10 to 15 Year Baseline - Gross Water Use								
Year 1	1995	5,643			-		-	5,643
Year 2	1996	5,958			-		-	5,958
Year 3	1997	5,863			-		-	5,863
Year 4	1998	4,800			-		-	4,800
Year 5	1999	5,398			-		-	5,398
Year 6	2000	5,446			-		-	5,446
Year 7	2001	5,482			-		-	5,482
Year 8	2002	5,598			-		-	5,598
Year 9	2003	5,459			-		-	5,459
Year 10	2004	5,710			-		-	5,710
Year 11	0	-			-		-	-
Year 12	0	-			-		-	-
Year 13	0	-			-		-	-
Year 14	0	-			-		-	-
Year 15	0	-			-		-	-
10 - 15 year baseline average gross water use								**5,536**
5 Year Baseline - Gross Water Use								
Year 1	2003	5,459			-		-	5,459
Year 2	2004	5,710			-		-	5,710
Year 3	2005	5,365			-		-	5,365
Year 4	2006	5,493			-		-	5,493
Year 5	2007	5,314			-		-	5,314
5 year baseline average gross water use								**5,468**
2015 Compliance Year - Gross Water Use								
2015		3,750	-		-		-	**3,750**

* NOTE that the units of measure must remain consistent throughout the UWMP, as reported in Table 2-3

NOTES:

SB X7-7 Table 4-A: Volume Entering the Distribution				
Name of Source	EMWD			
This water source is:				
☐	The supplier's own water source			
☑	A purchased or imported source			
Baseline Year *Fm SB X7-7 Table 3*		Volume Entering Distribution System	Meter Error Adjustment* *Optional (+/-)*	Corrected Volume Entering Distribution System
10 to 15 Year Baseline - Water into Distribution System				
Year 1	1,995	0		0
Year 2	1,996	0		0
Year 3	1,997	0		0
Year 4	1,998	0		0
Year 5	1,999	595		595
Year 6	2,000	398		398
Year 7	2,001	745		745
Year 8	2,002	641		641
Year 9	2,003	460		460
Year 10	2,004	26		26
Year 11	-			0
Year 12	-			0
Year 13	-			0
Year 14	-			0
Year 15	-			0
5 Year Baseline - Water into Distribution System				
Year 1	2,003	460		460
Year 2	2,004	26		26
Year 3	2,005	35		35
Year 4	2,006	94		94
Year 5	2,007	0		0
2015 Compliance Year - Water into Distribution System				
2015		0		0
** Meter Error Adjustment - See guidance in Methodology 1, Step 3 of Methodologies Document*				
NOTES:				

SB X7-7 Table 4-A: Volume Entering the Distribution System(s)

Complete one table for each source.

Name of Source	San Jacinto Ground Water Basin
This water source is:	
☑	The supplier's own water source
☐	A purchased or imported source

Baseline Year *Fm SB X7-7 Table 3*		Volume Entering Distribution System	Meter Error Adjustment* *Optional (+/-)*	Corrected Volume Entering Distribution System
10 to 15 Year Baseline - Water into Distribution System				
Year 1	1995	5,643		5,643
Year 2	1996	5,958		5,958
Year 3	1997	5,863		5,863
Year 4	1998	4,800		4,800
Year 5	1999	4,803		4,803
Year 6	2000	5,048		5,048
Year 7	2001	4,737		4,737
Year 8	2002	4,957		4,957
Year 9	2003	4,999		4,999
Year 10	2004	5,684		5,684
Year 11	0			-
Year 12	0			-
Year 13	0			-
Year 14	0			-
Year 15	0			-
5 Year Baseline - Water into Distribution System				
Year 1	2003	4,999		4,999
Year 2	2004	5,684		5,684
Year 3	2005	5,330		5,330
Year 4	2006	5,399		5,399
Year 5	2007	5,314		5,314
2015 Compliance Year - Water into Distribution System				
2015		3,750		3,750

** Meter Error Adjustment - See guidance in Methodology 1, Step 3 of Methodologies Document*

NOTES:

SB X7-7 Table 5: Gallons Per Capita Per Day (GPCD)				
Baseline Year *Fm SB X7-7 Table 3*		Service Area Population *Fm SB X7-7 Table 3*	Annual Gross Water Use *Fm SB X7-7 Table 4*	Daily Per Capita Water Use (GPCD)
10 to 15 Year Baseline GPCD				
Year 1	1995	26,915	5,643	187
Year 2	1996	27,215	5,958	195
Year 3	1997	27,485	5,863	190
Year 4	1998	27,729	4,800	155
Year 5	1999	27,948	5,398	172
Year 6	2000	28,139	5,446	173
Year 7	2001	27,881	5,482	176
Year 8	2002	28,259	5,598	177
Year 9	2003	28,594	5,459	170
Year 10	2004	27,763	5,710	184
Year 11	0	-	-	
Year 12	0	-	-	
Year 13	0	-	-	
Year 14	0	-	-	
Year 15	0	-	-	
10-15 Year Average Baseline GPCD				**178**
5 Year Baseline GPCD				
Baseline Year *Fm SB X7-7 Table 3*		Service Area Population *Fm SB X7-7 Table 3*	Gross Water Use *Fm SB X7-7 Table 4*	Daily Per Capita Water Use
Year 1	2003	28,594	5,459	170
Year 2	2004	27,763	5,710	184
Year 3	2005	28,125	5,365	170
Year 4	2006	28,480	5,493	172
Year 5	2007	28,268	5,314	168
5 Year Average Baseline GPCD				**173**
2015 Compliance Year GPCD				
2015		31,873	3,749	**105**
NOTES:				

SB X7-7 Table 6: Gallons per Capita per Day *Summary From Table SB X7-7 Table 5*	
10-15 Year Baseline GPCD	178
5 Year Baseline GPCD	173
2015 Compliance Year GPCD	105
NOTES:	

SB X7-7 Table 7: 2020 Target Method *Select Only One*		
Target Method		Supporting Documentation
☑	Method 1	SB X7-7 Table 7A
☐	Method 2	SB X7-7 Tables 7B, 7C, and 7D *Contact DWR for these tables*
☐	Method 3	SB X7-7 Table 7-E
☐	Method 4	Method 4 Calculator
NOTES:		

SB X7-7 Table 7-A: Target Method 1 20% Reduction	
10-15 Year Baseline GPCD	**2020 Target GPCD**
178	**142**
NOTES:	

SB X7-7 Table 7-E: Target Method 3				
Agency May Select More Than One as Applicable	Percentage of Service Area in This Hydrological Region	Hydrologic Region	"2020 Plan" Regional Targets	Method 3 Regional Targets (95%)
☐		North Coast	137	130
☐		North Lahontan	173	164
☐		Sacramento River	176	167
☐		San Francisco Bay	131	124
☐		San Joaquin River	174	165
☐		Central Coast	123	117
☐		Tulare Lake	188	179
☐		South Lahontan	170	162
☑	100%	South Coast	149	142
☐		Colorado River	211	200
Target *(If more than one region is selected, this value is calculated.)*				**142**

NOTES:

SB X7-7 Table 7-F: Confirm Minimum Reduction for 2020 Target			
5 Year Baseline GPCD *From SB X7-7 Table 5*	Maximum 2020 Target[1]	Calculated 2020 Target[2]	**Confirmed 2020 Target**
173	164	139	**139**

[1] Maximum 2020 Target is 95% of the 5 Year Baseline GPCD *[2] 2020 Target is calculated based on the selected Target Method, see SB X7-7 Table 7 and corresponding tables for agency's calculated target.*

NOTES:

SB X7-7 Table 8: 2015 Interim Target GPCD		
Confirmed 2020 Target *Fm SB X7-7 Table 7-F*	10-15 year Baseline GPCD *Fm SB X7-7 Table 5*	**2015 Interim Target GPCD**
139	178	**158**
NOTES:		

SB X7-7 Table 9: 2015 Compliance								
Actual 2015 GPCD	2015 Interim Target GPCD	Optional Adjustments *(in GPCD)*			TOTAL Adjustments	Adjusted 2015 GPCD	2015 GPCD *(Adjusted if applicable)*	**Did Supplier Achieve Targeted Reduction for 2015?**
		Enter "0" if Adjustment Not Used						
		Extraordinary Events	Weather Normalization	Economic Adjustment				
105	158	*From Methodology 8 (Optional)*	*From Methodology 8 (Optional)*	*From Methodology 8 (Optional)*	-	105	105	**YES**
NOTES:								

Appendix B

California Water Code

Urban Water Management Planning

California Water Code
Urban Water Management Planning Act

California Water Code Division 6, Part 2.6.

Chapter 1. General Declaration and Policy §10610-10610.4 **Chapter 2. Definitions** §10611-10617
Chapter 3. Urban Water Management Plans
Article 1. General Provisions §10620-10621
Article 2. Contents of Plans §10630-10634
Article 2.5. Water Service Reliability §10635
Article 3. Adoption and Implementation of Plans §10640-10645
Chapter 4. Miscellaneous Provisions §10650-10656

Chapter 1. General Declaration and Policy

SECTION 10610-10610.4

10610. This part shall be known and may be cited as the "Urban Water Management Planning Act."

10610.2. (a) The Legislature finds and declares all of the following:

(1) The waters of the state are a limited and renewable resource subject to ever-increasing demands.

(2) The conservation and efficient use of urban water supplies are of statewide concern; however, the planning for that use and the implementation of those plans can best be accomplished at the local level.

(3) A long-term, reliable supply of water is essential to protect the productivity of California's businesses and economic climate.

(4) As part of its long-range planning activities, every urban water supplier should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry water years.

(5) Public health issues have been raised over a number of contaminants that have been identified in certain local and imported water supplies.

(6) Implementing effective water management strategies, including groundwater storage projects and recycled water projects, may require specific water quality and salinity targets for meeting groundwater basins water quality objectives and promoting beneficial use of recycled water.

(7) Water quality regulations are becoming an increasingly important factor in water agencies' selection of raw water sources, treatment alternatives, and modifications to existing treatment facilities.

(8) Changes in drinking water quality standards may also impact the usefulness of water supplies and may ultimately impact supply reliability.

(9) The quality of source supplies can have a significant impact on water management strategies and supply reliability.

(b) This part is intended to provide assistance to water agencies in carrying out their long-term resource planning responsibilities to ensure adequate water supplies to meet existing and future demands for water.

10610.1. The Legislature finds and declares that it is the policy of the state as follows:

(a) The management of urban water demands and efficient use of water shall be actively pursued to protect both the people of the state and their water resources.

(b) The management of urban water demands and efficient use of urban water supplies shall be a guiding criterion in public decisions.

(c) Urban water suppliers shall be required to develop water management plans to actively pursue the efficient use of available supplies.

Chapter 2. Definitions

SECTION 10611-10617

10611. Unless the context otherwise requires, the definitions of this chapter govern the construction of this part.

10611.5. “Demand management" means those water conservation measures, programs, and incentives that prevent the waste of water and promote the reasonable and efficient use and reuse of available supplies.

10612. "Customer" means a purchaser of water from a water supplier who uses the water for municipal purposes, including residential, commercial, governmental, and industrial uses.

10613. "Efficient use" means those management measures that result in the most effective use of water so as to prevent its waste or unreasonable use or unreasonable

method of use.

10614. "Person" means any individual, firm, association, organization, partnership, business, trust, corporation, company, public agency, or any agency of such an entity.

10615. "Plan" means an urban water management plan prepared pursuant to this part. A plan shall describe and evaluate sources of supply, reasonable and practical efficient uses, reclamation and demand management activities. The components of the plan may vary according to an individual community or area's characteristics and its capabilities to efficiently use and conserve water. The plan shall address measures for residential, commercial, governmental, and industrial water demand management as set forth in Article 2 (commencing with Section 10630) of Chapter 3. In addition, a strategy and time schedule for implementation shall be included in the plan.

10616. "Public agency" means any board, commission, county, city and county, city, regional agency, district, or other public entity.

10616.5. "Recycled water" means the reclamation and reuse of wastewater for beneficial use.

10617. "Urban water supplier" means a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. An urban water supplier includes a supplier or contractor for water, regardless of the basis of right, which distributes or sells for ultimate resale to customers. This part applies only to water supplied from public water systems subject to Chapter 4 (commencing with Section 116275) of Part 12 of Division 104 of the Health and Safety Code.

Chapter 3. Urban Water Management Plans

Article 1. General Provisions

SECTION 10620-10621

10620. (a) Every urban water supplier shall prepare and adopt an urban water management plan in the manner set forth in Article 3 (commencing with Section 10640).

(b) Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.

(c) An urban water supplier indirectly providing water shall not include planning elements in its water management plan as provided in Article 2 (commencing with Section 10630) that would be applicable to urban water suppliers or public agencies

directly providing water, or to their customers, without the consent of those suppliers or public agencies.

(d) (1) An urban water supplier may satisfy the requirements of this part by participation in areawide, regional, watershed, or basinwide urban water management planning where those plans will reduce preparation costs and contribute to the achievement of conservation and efficient water use.

(2) Each urban water supplier shall coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that

share a common source, water management agencies, and relevant public agencies, to the extent practicable.

(e) The urban water supplier may prepare the plan with its own staff, by contract, or in cooperation with other governmental agencies.

(f) An urban water supplier shall describe in the plan water management tools and options used by that entity that will maximize resources and minimize the need to import water from other regions.

10621. (a) Each urban water supplier shall update its plan at least once every five years on or before December 31, in years ending in five and zero, except as provided in subdivision (d).

(b) Every urban water supplier required to prepare a plan pursuant to this part shall, at least 60 days before the public hearing on the plan required by Section 10642, notify any city or county within which the supplier provides water supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan. The urban water supplier may consult with, and obtain comments from, any city or county that receives notice pursuant to this subdivision.

(c) The amendments to, or changes in, the plan shall be adopted and filed in the manner set forth in Article 3 (commencing with Section 10640).

(d) Each urban water supplier shall update and submit its 2015 plan to the department by July 1, 2016.

Article 2. Contents of Plan

SECTION 10630-10634

10630. It is the intention of the Legislature, in enacting this part, to permit levels of water management planning commensurate with the numbers of customers served and the volume of water supplied.

10631. A plan shall be adopted in accordance with this chapter that shall do all of the following:

(a) Describe the service area of the supplier, including current and projected population, climate, and other demographic factors affecting the supplier's water management planning. The projected population estimates shall be based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier and shall be in five-year increments to 20 years or as far as data is available.

(b) Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a). If groundwater is identified as an existing or planned source of water available to the supplier, all of the following information shall be included in the plan:

(1) A copy of any groundwater management plan adopted by the urban water supplier, including plans adopted pursuant to Part 2.75 (commencing 8with Section 10750), or any other specific authorization for groundwater management.

(2) A description of any groundwater basin or basins from which the urban water supplier pumps groundwater. For basins that a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the urban water supplier has the legal right to pump under the order or decree. For basins that have not been adjudicated, information as to whether the department has identified the basin or basins as overdrafted or has projected that the basin will become overdrafted if present management conditions continue, in the most current official departmental bulletin that characterizes the condition of the groundwater basin, and a detailed description of the efforts being undertaken by the urban water supplier to eliminate the long-term overdraft condition.

(3) A detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

(4) A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the urban water supplier. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

(c) (1) Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage, to the extent practicable, and provide data for each of the following:

(A) An average water year.

(B) A single-dry water year.

(C) Multiple-dry water years.

(2) For any water source that may not be available at a consistent level of use, given specific legal, environmental, water quality, or climatic factors, describe plans to supplement or replace that source with alternative sources or water demand management measures, to the extent practicable.

(d) Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.

(e) (1) Quantify, to the extent records are available, past and current water use, over the same five-year increments described in subdivision (a), and projected water use, identifying the uses among water use sectors, including, but not necessarily limited to, all of the following uses:

(A) Single-family residential.

(B) Multifamily.

(C) Commercial.

(D) Industrial.

(E) Institutional and governmental.

(F) Landscape.

(G) Sales to other agencies.

(H) Saline water intrusion barriers, groundwater recharge, or conjunctive use, or any combination thereof.

(I) Agricultural.

(J) Distribution system water loss.

(2) The water use projections shall be in the same five-year increments described in subdivision (a).

(3) (A) For the 2015 urban water management plan update, the distribution system water loss shall be quantified for the most recent 12-month period available. For all subsequent updates, the distribution system water loss shall be quantified for each of the five years preceding the plan update.

(B) The distribution system water loss quantification shall be reported in accordance with a worksheet approved or developed by the department through a public process. The water loss quantification worksheet shall be based on the water system balance methodology developed by the American Water Works Association.

(4) (A) If available and applicable to an urban water supplier, water use projections may display and account for the water savings estimated to result from adopted codes, standards, ordinances, or transportation and land use plans identified by the urban water supplier, as applicable to the service area.

(B) To the extent that an urban water supplier reports the information described in subparagraph (A), an urban water supplier shall do both of the following:

(i) Provide citations of the various codes, standards, ordinances, or transportation and land use plans utilized in making the projections.

(ii) Indicate the extent that the water use projections consider savings from codes, standards, ordinances, or transportation and land use plans. Water use projections that do not account for these water savings shall be noted of that fact.

(f) Provide a description of the supplier's water demand management measures. This description shall include all of the following:

(1) (A) For an urban retail water supplier, as defined in Section 10608.12, a narrative description that addresses the nature and extent of each water demand management measure implemented over the past five years. The narrative shall describe the water demand management measures that the supplier plans to implement to achieve its water use targets pursuant to Section 10608.20.

(B) The narrative pursuant to this paragraph shall include descriptions of the following water demand management measures:

(i) Water waste prevention ordinances.

(ii) Metering.

(iii) Conservation pricing.

(iv) Public education and outreach.

(v) Programs to assess and manage distribution system real loss.

(vi) Water conservation program coordination and staffing support.

(vii) Other demand management measures that have a significant impact on water use as measured in gallons per capita per day, including innovative measures, if implemented.

(2) For an urban wholesale water supplier, as defined in Section 10608.12, a narrative description of the items in clauses (ii), (iv), (vi), and (vii) of subparagraph (B) of paragraph (1), and a narrative description of its distribution system asset management and wholesale supplier assistance programs.

(g) Include a description of all water supply projects and water supply programs that may be undertaken by the urban water supplier to meet the total projected water use, as established pursuant to subdivision (a) of Section 10635. The urban water supplier shall include a detailed description of expected future projects and programs that the urban water supplier may implement to increase the amount of the water supply available to the urban water supplier in average, single-dry, and multiple-dry water years. The description shall identify specific projects and include a description of the increase in water supply that is expected to be available from each project. The description shall include an estimate with regard to the implementation timeline for each project or program.

(h) Describe the opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply.

(i) For purposes of this part, urban water suppliers that are members of the California Urban Water Conservation Council shall be deemed in compliance with the requirements of subdivision (f) by complying with all the provisions of the "Memorandum of Understanding Regarding Urban Water Conservation in California," dated December 10, 2008, as it may be amended, and by submitting the annual reports required by Section 6.2 of that memorandum.

(j) An urban water supplier that relies upon a wholesale agency for a source of water shall provide the wholesale agency with water use projections from that agency for that source of water in five-year increments to 20 years or as far as data is

available. The wholesale agency shall provide information to the urban water supplier for inclusion in the urban water supplier's plan that identifies and quantifies, to the extent practicable, the existing and planned sources of water as required by subdivision (b), available from the wholesale agency to the urban water supplier over the same five-year increments, and during various water-year types in accordance with subdivision (c). An urban water supplier may rely upon water supply information provided by the wholesale agency in fulfilling the plan informational requirements of subdivisions (b) and (c).

10631.1. (a) The water use projections required by Section 10631 shall include projected water use for single-family and multifamily residential housing needed for lower income households, as defined in Section 50079.5 of the Health and Safety Code, as identified in the housing element of any city, county, or city and county in the service area of the supplier.

(b) It is the intent of the Legislature that the identification of projected water use for single-family and multifamily residential housing for lower income households will assist a supplier in complying with the requirement under Section 65589.7 of the Government Code to grant a priority for the provision of service to housing units affordable to lower income households.

10631.2. (a) In addition to the requirements of Section 10631, an urban water management plan may, but is not required to, include any of the following information:

(1) An estimate of the amount of energy used to extract or divert water supplies.

(2) An estimate of the amount of energy used to convey water supplies to the water treatment plants or distribution systems.

(3) An estimate of the amount of energy used to treat water supplies.

(4) An estimate of the amount of energy used to distribute water supplies through its distribution systems.

(5) An estimate of the amount of energy used for treated water supplies in comparison to the amount used for nontreated water supplies.

(6) An estimate of the amount of energy used to place water into or withdraw from storage.

(7) Any other energy-related information the urban water supplier deems appropriate.

(b) The department shall include in its guidance for the preparation of urban water management plans a methodology for the voluntary calculation or estimation of the

energy intensity of urban water systems. The department may consider studies and calculations conducted by the Public Utilities Commission in developing the methodology.

10631.5. (a) (1) Beginning January 1, 2009, the terms of, and eligibility for, a water management grant or loan made to an urban water supplier and awarded or administered by the department, state board, or California Bay-Delta Authority or its successor agency shall be conditioned on the implementation of the water demand management measures described in Section 10631, as determined by the department pursuant to subdivision (b).

(2) For the purposes of this section, water management grants and loans include funding for programs and projects for surface water or groundwater storage, recycling, desalination, water conservation, water supply reliability, and water supply augmentation. This section does not apply to water management projects funded by the federal American Recovery and Reinvestment Act of 2009 (Public Law 111-5).

(3) Notwithstanding paragraph (1), the department shall determine that an urban water supplier is eligible for a water management grant or loan even though the supplier is not implementing all of the water demand management measures described in Section 10631, if the urban water supplier has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for implementation of the water demand management measures. The supplier may request grant or loan funds to implement the water demand management measures to the extent the request is consistent with the eligibility requirements applicable to the water management funds.

(4) (A) Notwithstanding paragraph (1), the department shall determine that an urban water supplier is eligible for a water management grant or loan even though the supplier is not implementing all of the water demand management measures described in Section 10631, if an urban water supplier submits to the department for approval documentation demonstrating that a water demand management measure is not locally cost effective. If the department determines that the documentation submitted by the urban water supplier fails to demonstrate that a water demand management measure is not locally cost effective, the department shall notify the urban water supplier and the agency administering the grant or loan program within 120 days that the documentation does not satisfy the requirements for an exemption, and include in that notification a detailed statement to support the determination.

(B) For purposes of this paragraph, "not locally cost effective" means that the present value of the local benefits of implementing a water demand management measure is less than the present value of the local costs of implementing that measure.

(b) (1) The department, in consultation with the state board and the California Bay-Delta Authority or its successor agency, and after soliciting public comment regarding eligibility requirements, shall develop eligibility requirements to implement the requirement of paragraph (1) of subdivision (a). In establishing these eligibility requirements, the department shall do both of the following:

(A) Consider the conservation measures described in the Memorandum of Understanding Regarding Urban Water Conservation in California, and alternative conservation approaches that provide equal or greater water savings.

(B) Recognize the different legal, technical, fiscal, and practical roles and responsibilities of wholesale water suppliers and retail water suppliers.

(2) (A) For the purposes of this section, the department shall determine whether an urban water supplier is implementing all of the water demand management measures described in Section 10631 based on either, or a combination, of the following:

(i) Compliance on an individual basis.

(ii) Compliance on a regional basis. Regional compliance shall require participation in a regional conservation program consisting of two or more urban water suppliers that achieves the level of conservation or water efficiency savings equivalent to the amount of conservation or savings achieved if each of the participating urban water suppliers implemented the water demand management measures. The urban water supplier administering the regional program shall provide participating urban water suppliers and the department with data to demonstrate that the regional program is consistent with this clause. The department shall review the data to determine whether the urban water suppliers in the regional program are meeting the eligibility requirements.

(B) The department may require additional information for any determination pursuant to this section.

(3) The department shall not deny eligibility to an urban water supplier in compliance with the requirements of this section that is participating in a

multiagency water project, or an integrated regional water management plan, developed pursuant to Section 75026 of the Public Resources Code, solely on the basis that one or more of the agencies participating in the project or plan is not implementing all of the water demand management measures described in Section 10631.

(c) In establishing guidelines pursuant to the specific funding authorization for any water management grant or loan program subject to this section, the agency administering the grant or loan program shall include in the guidelines the eligibility requirements developed by the department pursuant to subdivision (b).

(d) Upon receipt of a water management grant or loan application by an agency administering a grant and loan program subject to this section, the agency shall request an eligibility determination from the department with respect to the requirements of this section. The department shall respond to the request within 60 days of the request.

(e) The urban water supplier may submit to the department copies of its annual reports and other relevant documents to assist the department in determining whether the urban water supplier is implementing or scheduling the implementation of water demand management activities. In addition, for urban water suppliers that are signatories to the Memorandum of Understanding Regarding Urban Water Conservation in California and submit biennial reports to the California Urban Water Conservation Council in accordance with the memorandum, the department may use these reports to assist in tracking the implementation of water demand management measures.

(f) This section shall remain in effect only until July 1, 2016, and as of that date is repealed, unless a later enacted statute, that is enacted before July 1, 2016, deletes or extends that date.

10631.7. The department, in consultation with the California Urban Water Conservation Council, shall convene an independent technical panel to provide information and recommendations to the department and the Legislature on new demand management measures, technologies, and approaches. The panel shall consist of no more than seven members, who shall be selected by the department to reflect a balanced representation of experts. The panel shall have at least one, but no more than two, representatives from each of the following: retail water suppliers, environmental organizations, the business community, wholesale water suppliers, and academia. The panel shall be convened by January 1, 2009, and shall report to the Legislature no later than January 1, 2010, and every five years thereafter. The department shall review the panel report and include in the final report to the Legislature the department's recommendations and comments regarding the panel process and the panel's

recommendations.

10632. (a) The plan shall provide an urban water shortage contingency analysis that includes each of the following elements that are within the authority of the urban water supplier:

(1) Stages of action to be undertaken by the urban water supplier in response to water supply shortages, including up to a 50 percent reduction in water supply, and an outline of specific water supply conditions that are applicable to each stage.

(2) An estimate of the minimum water supply available during each of the next three water years based on the driest three-year historic sequence for the agency's water supply.

(3) Actions to be undertaken by the urban water supplier to prepare for, and implement during, a catastrophic interruption of water supplies including, but not limited to, a regional power outage, an earthquake, or other disaster.

(4) Additional, mandatory prohibitions against specific water use practices during water shortages, including, but not limited to, prohibiting the use of potable water for street cleaning.

(5) Consumption reduction methods in the most restrictive stages. Each urban water supplier may use any type of consumption reduction methods in its water shortage contingency analysis that would reduce water use, are appropriate for its area, and have the ability to achieve a water use reduction consistent with up to a 50 percent reduction in water supply.

(6) Penalties or charges for excessive use, where applicable.

(7) An analysis of the impacts of each of the actions and conditions described in paragraphs (1) to (6), inclusive, on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts, such as the development of reserves and rate adjustments.

(8) A draft water shortage contingency resolution or ordinance.

(9) A mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis.

(b) Commencing with the urban water management plan update due July 1, 2016, for purposes of developing the water shortage contingency analysis pursuant to subdivision (a), the urban water supplier shall analyze and define water features that

are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas, as defined in subdivision (a) of Section 115921 of the Health and Safety Code.

10633. The plan shall provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier. The preparation of the plan shall be coordinated with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area, and shall include all of the following:

(a) A description of the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.

(b) A description of the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.

(c) A description of the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use.

(d) A description and quantification of the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, indirect potable reuse, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.

(e) The projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision.

(f) A description of actions, including financial incentives, which may be taken to encourage the use of recycled water, and the projected results of these actions in terms of acre-feet of recycled water used per year.

(g) A plan for optimizing the use of recycled water in the supplier's service area, including actions to facilitate the installation of dual distribution systems, to promote recirculating uses, to facilitate the increased use of treated wastewater that meets recycled water standards, and to overcome any obstacles to achieving that increased use.

10634. The plan shall include information, to the extent practicable, relating to the quality of existing sources of water available to the supplier over the same five-year increments as described in subdivision (a) of Section 10631, and the manner in which water quality affects water management strategies and supply reliability.

Article 2.5. Water Service Reliability

SECTION 10635

10635. (a) Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and multiple dry water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.

(b) The urban water supplier shall provide that portion of its urban water management plan prepared pursuant to this article to any city or county within which it provides water supplies no later than 60 days after the submission of its urban water management plan.

(c) Nothing in this article is intended to create a right or entitlement to water service or any specific level of water service.

(d) Nothing in this article is intended to change existing law concerning an urban water supplier's obligation to provide water service to its existing customers or to any potential future customers.

Article 3. Adoption and Implementation of Plans

SECTION 10640-10645

10640. Every urban water supplier required to prepare a plan pursuant to this part shall prepare its plan pursuant to Article 2 (commencing with Section 10630). The supplier shall likewise periodically review the plan as required by Section 10621, and any amendments or changes required as a result of that review shall be adopted pursuant to this article.

10641. An urban water supplier required to prepare a plan may consult with, and obtain comments from, any public agency or state agency or any person who has special expertise with respect to water demand management methods and techniques.

10642. Each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan. Prior to adopting a plan, the urban water supplier shall make the plan available for public inspection and shall hold a public hearing

thereon. Prior to the hearing, notice of the time and place of hearing shall be published within the jurisdiction of the publicly owned water supplier pursuant to Section 6066 of the Government Code. The urban water supplier shall provide notice of the time and place of hearing to any city or county within which the supplier provides water supplies. A privately owned water supplier shall provide an equivalent notice within its service area.

After the hearing, the plan shall be adopted as prepared or as modified after the hearing.

10643. An urban water supplier shall implement its plan adopted pursuant to this chapter in accordance with the schedule set forth in its plan.

10644. (a) (1) An urban water supplier shall submit to the department, the California State Library, and any city or county within which the supplier provides water supplies a copy of its plan no later than 30 days after adoption. Copies of amendments or changes to the plans shall be submitted to the department, the California State Library, and any city or county within which the supplier provides water supplies within 30 days after adoption.

(2) The plan, or amendments to the plan, submitted to the department pursuant to paragraph (1) shall be submitted electronically and shall include any standardized forms, tables, or displays specified by the department.

(b) (1) Notwithstanding Section 10231.5 of the Government Code, the department shall prepare and submit to the Legislature, on or before December 31, in the years ending in six and one, a report summarizing the status of the plans adopted pursuant to this part.

The report prepared by the department shall identify the exemplary elements of the individual plans. The department shall provide a copy of the report to each urban water supplier that has submitted its plan to the department. The department shall also prepare reports and provide data for any legislative hearings designed to consider the effectiveness of plans submitted pursuant to this part.

(2) A report to be submitted pursuant to paragraph (1) shall be submitted in compliance with Section 9795 of the Government Code.

(c) (1) For the purpose of identifying the exemplary elements of the individual plans, the department shall identify in the report water demand management measures adopted and implemented by specific urban water suppliers, and identified pursuant to Section 10631, that achieve water savings significantly above the levels established by the department to meet the requirements of

Section 10631.5.

(2) The department shall distribute to the panel convened pursuant to Section 10631.7 the results achieved by the implementation of those water demand management measures described in paragraph (1).

(3) The department shall make available to the public the standard the department will use to identify exemplary water demand management measures.

10645. Not later than 30 days after filing a copy of its plan with the department, the urban water supplier and the department shall make the plan available for public review during normal business hours.

Chapter 4. Miscellaneous Provisions

SECTION 10650-10656

10650. Any actions or proceedings to attack, review, set aside, void, or annul the acts or decisions of an urban water supplier on the grounds of noncompliance with this part shall be commenced as follows:

(a) An action or proceeding alleging failure to adopt a plan shall be commenced within 18 months after that adoption is required by this part.

(b) Any action or proceeding alleging that a plan, or action taken pursuant to the plan, does not comply with this part shall be commenced within 90 days after filing of the plan or amendment thereto pursuant to Section 10644 or the taking of that action.

10651. In any action or proceeding to attack, review, set aside, void, or annul a plan, or an action taken pursuant to the plan by an urban water supplier on the grounds of noncompliance with this part, the inquiry shall extend only to whether there was a prejudicial abuse of discretion. Abuse of discretion is established if the supplier has not proceeded in a manner required by law or if the action by the water supplier is not supported by substantial evidence.

10652. The California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) does not apply to the preparation and adoption of plans pursuant to this part or to the implementation of actions taken pursuant to Section 10632. Nothing in this part shall be interpreted as exempting from the California Environmental Quality Act any project that would significantly affect water supplies for fish and wildlife, or any project for implementation of the plan, other than projects implementing Section 10632, or any project for expanded or additional water

supplies.

10653. The adoption of a plan shall satisfy any requirements of state law, regulation, or order, including those of the State Water Resources Control Board and the Public Utilities Commission, for the preparation of water management plans or conservation plans; provided, that if the State Water Resources Control Board or the Public Utilities Commission requires additional information concerning water conservation to implement its existing authority, nothing in this part shall be deemed to limit the board or the commission in obtaining that information. The requirements of this part shall be satisfied by any urban water demand management plan prepared to meet federal laws or regulations after the effective date of this part, and which substantially meets the requirements of this part, or by any existing urban water management plan which includes the contents of a plan required under this part.

10654. An urban water supplier may recover in its rates the costs incurred in preparing its plan and implementing the reasonable water conservation measures included in the plan. Any best water management practice that is included in the plan that is identified in the "Memorandum of Understanding Regarding Urban Water Conservation in California" is deemed to be reasonable for the purposes of this section.

10655. If any provision of this part or the application thereof to any person or circumstances is held invalid, that invalidity shall not affect other provisions or applications of this part which can be given effect without the invalid provision or application thereof, and to this end the provisions of this part are severable.

10656. An urban water supplier that does not prepare, adopt, and submit its urban water management plan to the department in accordance with this part, is ineligible to receive funding pursuant to Division 24 (commencing with Section 78500) or Division 26 (commencing with Section 79000), or receive drought assistance from the state until the urban water management plan is submitted pursuant to this article.

Appendix C

California Water Code

Sustainable Water Use and Demand Reduction (SB X7-7)

California Water Code
Sustainable Water Use and Demand Reduction

California Water Code Division 6, Part 2.55.

Chapter 1. General Declarations and Policy §10608-10608.8
Chapter 2. Definitions §10608.12
Chapter 3. Urban Retail Water Suppliers §10608.16-10608.44
Chapter 4. Agricultural Water Suppliers §10608.48
Chapter 5. Sustainable Water Management §10608.50
Chapter 6 Standardized Data Collection §10608.52
Chapter 7 Funding Provisions §10608.56-10608.60
Chapter 8 Quantifying Agricultural Water Use Efficiency §10608.64

Chapter 1. General Declarations and Policy

SECTION 10608-10608.8

10608. The Legislature finds and declares all of the following:

(a) Water is a public resource that the California Constitution protects against waste and unreasonable use.

(b) Growing population, climate change, and the need to protect and grow California's economy while protecting and restoring our fish and wildlife habitats make it essential that the state manage its water resources as efficiently as possible.

(c) Diverse regional water supply portfolios will increase water supply reliability and reduce dependence on the Delta.

(d) Reduced water use through conservation provides significant energy and environmental benefits, and can help protect water quality, improve streamflows, and reduce greenhouse gas emissions.

(e) The success of state and local water conservation programs to increase efficiency of water use is best determined on the basis of measurable outcomes related to water use or efficiency.

(f) Improvements in technology and management practices offer the potential for increasing water efficiency in California over time, providing an essential water management tool to meet the need for water for urban, agricultural, and environmental uses.

(g) The Governor has called for a 20 percent per capita reduction in urban water use statewide by 2020.

(h) The factors used to formulate water use efficiency targets can vary significantly from location to location based on factors including weather, patterns of urban and suburban development, and past efforts to enhance water use efficiency.

(i) Per capita water use is a valid measure of a water provider's efforts to reduce urban water use within its service area. However, per capita water use is less useful for measuring relative water use efficiency between different water providers. Differences in weather, historical patterns of urban and suburban development, and density of housing in a particular location need to be considered when assessing per capita water use as a measure of efficiency.

10608.4. It is the intent of the Legislature, by the enactment of this part, to do all of the following:

(a) Require all water suppliers to increase the efficiency of use of this essential resource.

(b) Establish a framework to meet the state targets for urban water conservation identified in this part and called for by the Governor.

(c) Measure increased efficiency of urban water use on a per capita basis.

(d) Establish a method or methods for urban retail water suppliers to determine targets for achieving increased water use efficiency by the year 2020, in accordance with the Governor's goal of a 20-percent reduction.

(e) Establish consistent water use efficiency planning and implementation standards for urban water suppliers and agricultural water suppliers.

(f) Promote urban water conservation standards that are consistent with the California Urban Water Conservation Council's adopted best management practices and the requirements for demand management in Section 10631.

(g) Establish standards that recognize and provide credit to water suppliers that made substantial capital investments in urban water conservation since the drought of the early 1990s.

(h) Recognize and account for the investment of urban retail water suppliers in providing recycled water for beneficial uses.

(i) Require implementation of specified efficient water management practices for agricultural water suppliers.

(j) Support the economic productivity of California's agricultural, commercial, and industrial sectors.

(k) Advance regional water resources management.

10608.8. (a) (1) Water use efficiency measures adopted and implemented pursuant to this part or Part 2.8 (commencing with Section 10800) are water conservation measures subject to the protections provided under Section 1011.

(2) Because an urban agency is not required to meet its urban water use target until 2020 pursuant to subdivision (b) of Section 10608.24, an urban retail water supplier's failure to meet those targets shall not establish a violation of law for purposes of any state administrative or judicial proceeding prior to January 1, 2021. Nothing in this paragraph limits the use of data reported to the department or the board in litigation or an administrative proceeding. This paragraph shall become inoperative on January 1, 2021.

(3) To the extent feasible, the department and the board shall provide for the use of water conservation reports required under this part to meet the requirements of Section 1011 for water conservation reporting.

(b) This part does not limit or otherwise affect the application of Chapter 3.5 (commencing with Section 11340), Chapter 4 (commencing with Section 11370), Chapter 4.5 (commencing with Section 11400), and Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code.

(c) This part does not require a reduction in the total water used in the agricultural or urban sectors, because other factors, including, but not limited to, changes in agricultural economics or population growth may have greater effects on water use. This part does not limit the economic productivity of California's agricultural, commercial, or industrial sectors.

(d) The requirements of this part do not apply to an agricultural water supplier that is a party to the Quantification Settlement Agreement, as defined in subdivision (a) of Section 1 of Chapter 617 of the Statutes of 2002, during the period within which the Quantification Settlement Agreement remains in effect. After the expiration of the Quantification Settlement Agreement, to the extent conservation water projects implemented as part of the Quantification Settlement Agreement remain in effect, the conserved water created as part of those projects shall be credited against the obligations of the agricultural water supplier pursuant to this part.

Chapter 2 Definitions

SECTION 10608.12

10608.12. Unless the context otherwise requires, the following definitions govern the construction of this part:

(a) "Agricultural water supplier" means a water supplier, either publicly or privately owned, providing water to 10,000 or more irrigated acres, excluding recycled water. "Agricultural water supplier" includes a supplier or contractor for water, regardless of the basis of right, that distributes or sells water for ultimate resale to customers. "Agricultural water supplier" does not include the department.

(b) "Base daily per capita water use" means any of the following:

(1) The urban retail water supplier's estimate of its average gross water use, reported in gallons per capita per day and calculated over a continuous 10- year period ending no earlier than December 31, 2004, and no later than December 31, 2010.

(2) For an urban retail water supplier that meets at least 10 percent of its 2008 measured retail water demand through recycled water that is delivered within the service area of an urban retail water supplier or its urban wholesale water supplier, the urban retail water supplier may extend the calculation described in paragraph (1) up to an additional five years to a maximum of a continuous 15-year period ending no earlier than December 31, 2004, and no later than December 31, 2010.

(3) For the purposes of Section 10608.22, the urban retail water supplier's estimate of its average gross water use, reported in gallons per capita per day and calculated over a continuous five-year period ending no earlier than December 31, 2007, and no later than December 31, 2010.

(c) "Baseline commercial, industrial, and institutional water use" means an urban retail water supplier's base daily per capita water use for commercial, industrial, and institutional users.

(d) "Commercial water user" means a water user that provides or distributes a product or service.

(e) "Compliance daily per capita water use" means the gross water use during the final year of the reporting period, reported in gallons per capita per day.

(f) "Disadvantaged community" means a community with an annual median household income that is less than 80 percent of the statewide annual median household income.

(g) "Gross water use" means the total volume of water, whether treated or untreated, entering the distribution system of an urban retail water supplier, excluding all of the following:

(1) Recycled water that is delivered within the service area of an urban retail water supplier or its urban wholesale water supplier.

(2) The net volume of water that the urban retail water supplier places into long- term storage.

(3) The volume of water the urban retail water supplier conveys for use by another urban water supplier.

(4) The volume of water delivered for agricultural use, except as otherwise provided in subdivision (f) of Section 10608.24.

(h) "Industrial water user" means a water user that is primarily a manufacturer or processor of materials as defined by the North American Industry Classification System code sectors 31 to 33, inclusive, or an entity that is a water user primarily engaged in research and development.

(i) "Institutional water user" means a water user dedicated to public service. This type of user includes, among other users, higher education institutions, schools, courts, churches, hospitals, government facilities, and nonprofit research institutions.

(j) "Interim urban water use target" means the midpoint between the urban retail water supplier's base daily per capita water use and the urban retail water supplier's urban water use target for 2020.

(k) "Locally cost effective" means that the present value of the local benefits of implementing an agricultural efficiency water management practice is greater than or equal to the present value of the local cost of implementing that measure.

(l) "Process water" means water used for producing a product or product content or water used for research and development, including, but not limited to, continuous manufacturing processes, water used for testing and maintaining equipment used in producing a product or product content, and water used in combined heat and power facilities used in producing a product or product content. Process water does not mean incidental water uses not related to the production of a product or product content, including, but not limited to, water used for restrooms, landscaping, air conditioning, heating, kitchens, and laundry.

(m) "Recycled water" means recycled water, as defined in subdivision (n) of Section 13050, that is used to offset potable demand, including recycled water supplied for direct use and indirect potable reuse, that meets the following requirements, where applicable:

(1) For groundwater recharge, including recharge through spreading basins, water supplies that are all of the following:

(A) Metered.

(B) Developed through planned investment by the urban water supplier or a wastewater treatment agency.

(C) Treated to a minimum tertiary level.

(D) Delivered within the service area of an urban retail water supplier or its urban wholesale water supplier that helps an urban retail water supplier meet its urban water use target.

(2) For reservoir augmentation, water supplies that meet the criteria of paragraph (1) and are conveyed through a distribution system constructed specifically for recycled water.

(j) "Regional water resources management" means sources of supply resulting from watershed-based planning for sustainable local water reliability or any of the following alternative sources of water:

(1) The capture and reuse of stormwater or rainwater.

(2) The use of recycled water.

(3) The desalination of brackish groundwater.

(4) The conjunctive use of surface water and groundwater in a manner that is consistent with the safe yield of the groundwater basin.

(k) "Reporting period" means the years for which an urban retail water supplier reports compliance with the urban water use targets.

(l) "Urban retail water supplier" means a water supplier, either publicly or privately owned, that directly provides potable municipal water to more than 3,000 end users or that supplies more than 3,000 acre-feet of potable water annually at retail for municipal purposes.

(m)"Urban water use target" means the urban retail water supplier's targeted future daily per capita water use.

(n)"Urban wholesale water supplier," means a water supplier, either publicly or privately owned, that provides more than 3,000 acre-feet of water annually at wholesale for potable municipal purposes.

Chapter 3 Urban Retail Water Suppliers

SECTION 10608.16-10608.44

10608.16.(a) The state shall achieve a 20-percent reduction in urban per capita water use in California on or before December 31, 2020.

(b) The state shall make incremental progress towards the state target specified in subdivision (a) by reducing urban per capita water use by at least 10 percent on or before December 31, 2015.

10608.20.(a) (1) Each urban retail water supplier shall develop urban water use targets and an interim urban water use target by July 1, 2011. Urban retail water suppliers may elect to determine and report progress toward achieving these targets on an individual or regional basis, as provided in subdivision (a) of Section 10608.28, and may determine the targets on a fiscal year or calendar year basis.

(2) It is the intent of the Legislature that the urban water use targets described in paragraph (1) cumulatively result in a 20-percent reduction from the baseline daily per capita water use by December 31, 2020.

(b) An urban retail water supplier shall adopt one of the following methods for determining its urban water use target pursuant to subdivision (a):

(1) Eighty percent of the urban retail water supplier's baseline per capita daily water use.

(2) The per capita daily water use that is estimated using the sum of the following performance standards:

(A) For indoor residential water use, 55 gallons per capita daily water use as a provisional standard. Upon completion of the department's 2016 report to the Legislature pursuant to Section 10608.42, this standard may be adjusted by the Legislature by statute.

(B) For landscape irrigated through dedicated or residential meters or connections, water efficiency equivalent to the standards of the Model Water Efficient Landscape Ordinance set forth in Chapter 2.7 (commencing with Section 490) of Division 2 of Title 23 of the California Code of Regulations, as in effect the later of the year of the landscape's installation or 1992. An urban retail water supplier using the approach specified in this subparagraph shall use satellite imagery, site visits, or other best available technology to develop an accurate estimate of landscaped areas.

(C) For commercial, industrial, and institutional uses, a 10-percent reduction in water use from the baseline commercial, industrial, and institutional water use by 2020.

(3) Ninety-five percent of the applicable state hydrologic region target, as set forth in the state's draft 20x2020 Water Conservation Plan (dated April 30, 2009). If the service area of an urban water supplier includes more than one hydrologic region, the supplier shall apportion its service area to each region based on population or area.

(4) A method that shall be identified and developed by the department, through a public process, and reported to the Legislature no later than December 31, 2010. The method developed by the department shall identify per capita targets that cumulatively result in a statewide 20-percent reduction in urban daily per capita water use by December 31,

2020. In developing urban daily per capita water use targets, the department shall do all of the following:

(A) Consider climatic differences within the state.

(B) Consider population density differences within the state.

(C) Provide flexibility to communities and regions in meeting the targets.

(D) Consider different levels of per capita water use according to plant water needs in different regions.

(E) Consider different levels of commercial, industrial, and institutional water use in different regions of the state.

(F) Avoid placing an undue hardship on communities that have implemented conservation measures or taken actions to keep per capita water use low.

(c) If the department adopts a regulation pursuant to paragraph (4) of subdivision (b) that results in a requirement that an urban retail water supplier achieve a reduction in daily per capita water use that is greater than 20 percent by December 31, 2020, an urban retail water supplier that adopted the method described in paragraph (4) of subdivision (b) may limit its urban water use target to a reduction of not more than 20 percent by December 31, 2020, by adopting the method described in paragraph (1) of subdivision (b).

(d) The department shall update the method described in paragraph (4) of subdivision (b) and report to the Legislature by December 31, 2014. An urban retail water supplier that adopted the method described in paragraph (4) of subdivision (b) may adopt a new urban daily per capita water use target pursuant to this updated method.

(e) An urban retail water supplier shall include in its urban water management plan due in 2010 pursuant to Part 2.6 (commencing with Section 10610) the baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data.

(f) When calculating per capita values for the purposes of this chapter, an urban retail water supplier shall determine population using federal, state, and local population reports and projections.

(g) An urban retail water supplier may update its 2020 urban water use target in its 2015 urban water management plan required pursuant to Part 2.6 (commencing with Section 10610).

(h) (1) The department, through a public process and in consultation with the California Urban Water Conservation Council, shall develop technical

methodologies and criteria for the consistent implementation of this part, including, but not limited to, both of the following:

(A) Methodologies for calculating base daily per capita water use, baseline commercial, industrial, and institutional water use, compliance daily per capita water use, gross water use, service area population, indoor residential water use, and landscaped area water use.

(B) Criteria for adjustments pursuant to subdivisions (d) and (e) of Section 10608.24.

(2) The department shall post the methodologies and criteria developed pursuant to this subdivision on its Internet Web site, and make written copies available, by October 1, 2010. An urban retail water supplier shall use the methods developed by the department in compliance with this part.

(i) (1) The department shall adopt regulations for implementation of the provisions relating to process water in accordance with subdivision (l) of Section 10608.12, subdivision (e) of Section 10608.24, and subdivision (d) of Section 10608.26.

(2) The initial adoption of a regulation authorized by this subdivision is deemed to address an emergency, for purposes of Sections 11346.1 and 11349.6 of the Government Code, and the department is hereby exempted for that purpose from the requirements of subdivision (b) of Section 11346.1 of the Government Code. After the initial adoption of an emergency regulation pursuant to this subdivision, the department shall not request approval from the Office of Administrative Law to readopt the regulation as an emergency regulation pursuant to Section 11346.1 of the Government Code.

(j) (1) An urban retail water supplier is granted an extension to July 1, 2011, for adoption of an urban water management plan pursuant to Part 2.6 (commencing with Section 10610) due in 2010 to allow the use of technical methodologies developed by the department pursuant to paragraph (4) of subdivision (b) and subdivision (h). An urban retail water supplier that adopts an urban water management plan due in 2010 that does not use the methodologies developed by the department pursuant to subdivision (h) shall amend the plan by July 1, 2011, to comply with this part.

(2) An urban wholesale water supplier whose urban water management plan prepared pursuant to Part 2.6 (commencing with Section 10610) was due and not submitted in 2010 is granted an extension to July 1, 2011, to permit coordination between an urban wholesale water supplier and urban retail water suppliers.

10608.22. Notwithstanding the method adopted by an urban retail water supplier pursuant to Section 10608.20, an urban retail water supplier's per capita daily water use reduction shall be no less than 5 percent of base daily per capita water use as

defined in paragraph(3) of subdivision (b) of Section 10608.12. This section does not apply to an urban retail water supplier with a base daily per capita water use at or below 100 gallons per capita per day.

10608.24.(a) Each urban retail water supplier shall meet its interim urban water use target by December 31, 2015.

(b) Each urban retail water supplier shall meet its urban water use target by December 31, 2020.

(c) An urban retail water supplier's compliance daily per capita water use shall be the measure of progress toward achievement of its urban water use target.

(d) (1) When determining compliance daily per capita water use, an urban retail water supplier may consider the following factors:

(A) Differences in evapotranspiration and rainfall in the baseline period compared to the compliance reporting period.

(B) Substantial changes to commercial or industrial water use resulting from increased business output and economic development that have occurred during the reporting period.

(C) Substantial changes to institutional water use resulting from fire suppression services or other extraordinary events, or from new or expanded operations, that have occurred during the reporting period.

(2) If the urban retail water supplier elects to adjust its estimate of compliance daily per capita water use due to one or more of the factors described in paragraph (1), it shall provide the basis for, and data supporting, the adjustment in the report required by Section 10608.40.

(e) When developing the urban water use target pursuant to Section 10608.20, an urban retail water supplier that has a substantial percentage of industrial water use in its service area may exclude process water from the calculation of gross water use to avoid a disproportionate burden on another customer sector.

(f) (1) An urban retail water supplier that includes agricultural water use in an urban water management plan pursuant to Part 2.6 (commencing with Section 10610) may include the agricultural water use in determining gross water use. An urban retail water supplier that includes agricultural water use in determining gross water use and develops its urban water use target pursuant to paragraph (2) of subdivision (b) of Section 10608.20 shall use a water efficient standard for agricultural irrigation of 100 percent of reference evapotranspiration multiplied by the crop coefficient for irrigated acres.

(2) An urban retail water supplier, that is also an agricultural water supplier, is not subject to the requirements of Chapter 4 (commencing with Section

10608.48), if the agricultural water use is incorporated into its urban water use target pursuant to paragraph (1).

10608.26.(a) In complying with this part, an urban retail water supplier shall conduct at least one public hearing to accomplish all of the following:

(1) Allow community input regarding the urban retail water supplier's implementation plan for complying with this part.

(2) Consider the economic impacts of the urban retail water supplier's implementation plan for complying with this part.

(3) Adopt a method, pursuant to subdivision (b) of Section 10608.20, for determining its urban water use target.

(b) In complying with this part, an urban retail water supplier may meet its urban water use target through efficiency improvements in any combination among its customer sectors. An urban retail water supplier shall avoid placing a disproportionate burden on any customer sector.

(c) For an urban retail water supplier that supplies water to a United States Department of Defense military installation, the urban retail water supplier's implementation plan for complying with this part shall consider the conservation of that military installation under federal Executive Order 13514.

(d) (1) Any ordinance or resolution adopted by an urban retail water supplier after the effective date of this section shall not require existing customers as of the effective date of this section, to undertake changes in product formulation, operations, or equipment that would reduce process water use, but may provide technical assistance and financial incentives to those customers to implement efficiency measures for process water. This section shall not limit an ordinance or resolution adopted pursuant to a declaration of drought emergency by an urban retail water supplier.

(2) This part shall not be construed or enforced so as to interfere with the requirements of Chapter 4 (commencing with Section 113980) to Chapter 13 (commencing with Section 114380), inclusive, of Part 7 of Division 104 of the Health and Safety Code, or any requirement or standard for the protection of public health, public safety, or worker safety established by federal, state, or local government or recommended by recognized standard setting organizations or trade associations.

10608.28.(a) An urban retail water supplier may meet its urban water use target within its retail service area, or through mutual agreement, by any of the following:

(1) Through an urban wholesale water supplier.

(2) Through a regional agency authorized to plan and implement water conservation, including, but not limited to, an agency established under the Bay Area Water Supply and Conservation Agency Act (Division 31

(commencing with Section 81300)).

(3) Through a regional water management group as defined in Section 10537.

(4) By an integrated regional water management funding area.

(5) By hydrologic region.

(6) Through other appropriate geographic scales for which computation methods have been developed by the department.

(b) A regional water management group, with the written consent of its member agencies, may undertake any or all planning, reporting, and implementation functions under this chapter for the member agencies that consent to those activities. Any data or reports shall provide information both for the regional water management group and separately for each consenting urban retail water supplier and urban wholesale water supplier.

10608.32. All costs incurred pursuant to this part by a water utility regulated by the Public Utilities Commission may be recoverable in rates subject to review and
approval by the Public Utilities Commission, and may be recorded in a memorandum account and reviewed for reasonableness by the Public Utilities Commission.

10608.36. Urban wholesale water suppliers shall include in the urban water management plans required pursuant to Part 2.6 (commencing with Section 10610) an assessment of their present and proposed future measures, programs, and policies to help achieve the water use reductions required by this part.

10608.40. Urban water retail suppliers shall report to the department on their progress in meeting their urban water use targets as part of their urban water management plans submitted pursuant to Section 10631. The data shall be reported using a standardized form developed pursuant to Section 10608.52.

10608.42.(a) The department shall review the 2015 urban water management plans and report to the Legislature by July 1, 2017, on progress towards achieving a 20-percent reduction in urban water use by December 31, 2020. The report shall include recommendations on changes to water efficiency standards or urban water use targets to achieve the 20-percent reduction and to reflect updated efficiency information and technology changes.

(b) A report to be submitted pursuant to subdivision (a) shall be submitted in compliance with Section 9795 of the Government Code.

10608.43 The department, in conjunction with the California Urban Water Conservation Council, by April 1, 2010, shall convene a representative task force consisting of academic experts, urban retail water suppliers, environmental organizations, commercial water users, industrial water users, and institutional water users to develop alternative best management practices for commercial, industrial, and

institutional users and an assessment of the potential statewide water use efficiency improvement in the commercial, industrial, and institutional sectors that would result from implementation of these best management practices. The taskforce, in conjunction with the department, shall submit a report to the Legislature by April 1, 2012, that shall include a review of multiple sectors within commercial, industrial, and institutional users and that shall recommend water use efficiency standards for commercial, industrial, and institutional users among various sectors of water use. The report shall include, but not be limited to, the following:

(a) Appropriate metrics for evaluating commercial, industrial, and institutional water use.

(b) Evaluation of water demands for manufacturing processes, goods, and cooling.

(c) Evaluation of public infrastructure necessary for delivery of recycled water to the commercial, industrial, and institutional sectors.

(d) Evaluation of institutional and economic barriers to increased recycled water use within the commercial, industrial, and institutional sectors.

(e) Identification of technical feasibility and cost of the best management practices to achieve more efficient water use statewide in the commercial, industrial, and institutional sectors that is consistent with the public interest and reflects past investments in water use efficiency.

10608.44. Each state agency shall reduce water use at facilities it operates to support urban retail water suppliers in meeting the target identified in Section 10608.16.

Chapter 4 Agricultural Water Suppliers

SECTION 10608.48

10608.48.(a) On or before July 31, 2012, an agricultural water supplier shall implement efficient water management practices pursuant to subdivisions (b) and (c).

(b) Agricultural water suppliers shall implement all of the following critical efficient management practices:

(1) Measure the volume of water delivered to customers with sufficient accuracy to comply with subdivision (a) of Section 531.10 and to implement paragraph (2).

(2) Adopt a pricing structure for water customers based at least in part on quantity delivered.

(c) Agricultural water suppliers shall implement additional efficient management

practices, including, but not limited to, practices to accomplish all of the following, if the measures are locally cost effective and technically feasible:

(1) Facilitate alternative land use for lands with exceptionally high water duties or whose irrigation contributes to significant problems, including drainage.

(2) Facilitate use of available recycled water that otherwise would not be used beneficially, meets all health and safety criteria, and does not harm crops or soils.

(3) Facilitate the financing of capital improvements for on-farm irrigation systems.

(4) Implement an incentive pricing structure that promotes one or more of the following goals:

(A) More efficient water use at the farm level.

(B) Conjunctive use of groundwater.

(C) Appropriate increase of groundwater recharge.

(D) Reduction in problem drainage.

(E) Improved management of environmental resources.

(F) Effective management of all water sources throughout the year by adjusting seasonal pricing structures based on current conditions.

(5) Expand line or pipe distribution systems, and construct regulatory reservoirs to increase distribution system flexibility and capacity, decrease maintenance, and reduce seepage.

(6) Increase flexibility in water ordering by, and delivery to, water customers within operational limits.

(7) Construct and operate supplier spill and tailwater recovery systems.

(8) Increase planned conjunctive use of surface water and groundwater within the supplier service area.

(9) Automate canal control structures.

(10) Facilitate or promote customer pump testing and evaluation.

(11) Designate a water conservation coordinator who will develop and implement the water management plan and prepare progress reports.

(12) Provide for the availability of water management services to water users.

These services may include, but are not limited to, all of the following:

(A) On-farm irrigation and drainage system evaluations.

(B) Normal year and real-time irrigation scheduling and crop evapotranspiration information.

(C) Surface water, groundwater, and drainage water quantity and quality data.

(D) Agricultural water management educational programs and materials for farmers, staff, and the public.

(13) Evaluate the policies of agencies that provide the supplier with water to identify the potential for institutional changes to allow more flexible water deliveries and storage.

(14) Evaluate and improve the efficiencies of the supplier's pumps.

(d) Agricultural water suppliers shall include in the agricultural water management plans required pursuant to Part 2.8 (commencing with Section 10800) a report on which efficient water management practices have been implemented and are planned to be implemented, an estimate of the water use efficiency improvements that have occurred since the last report, and an estimate of the water use efficiency improvements estimated to occur five and 10 years in the future. If an agricultural water supplier determines that an efficient water management practice is not locally cost effective or technically feasible, the supplier shall submit information documenting that determination.

(e) The data shall be reported using a standardized form developed pursuant to Section 10608.52.

(f) An agricultural water supplier may meet the requirements of subdivisions (d) and (e) by submitting to the department a water conservation plan submitted to the United States Bureau of Reclamation that meets the requirements described in Section 10828.

(g) On or before December 31, 2013, December 31, 2016, and December 31, 2021, the department, in consultation with the board, shall submit to the Legislature a report on the agricultural efficient water management practices that have been implemented and are planned to be implemented and an assessment of the manner in which the implementation of those efficient water management practices has affected and will affect agricultural operations, including estimated water use efficiency improvements, if any.

(h) The department may update the efficient water management practices required pursuant to subdivision (c), in consultation with the Agricultural Water Management Council, the United States Bureau of Reclamation, and the board. All efficient water management practices for agricultural water use pursuant to this chapter shall be adopted or revised by the department only after the

department conducts public hearings to allow participation of the diverse geographical areas and interests of the state.

(i) (1) The department shall adopt regulations that provide for a range of options that agricultural water suppliers may use or implement to comply with the measurement requirement in paragraph (1) of subdivision (b).

(2) The initial adoption of a regulation authorized by this subdivision is deemed to address an emergency, for purposes of Sections 11346.1 and 11349.6 of the Government Code, and the department is hereby exempted for that purpose from the requirements of subdivision (b) of Section 11346.1 of the Government Code. After the initial adoption of an emergency regulation pursuant to this subdivision, the department shall not request approval from the Office of Administrative Law to readopt the regulation as an emergency regulation pursuant to Section 11346.1 of the Government Code.

Chapter 5 Sustainable Water Management

Section 10608.50

10608.50.(a) The department, in consultation with the board, shall promote implementation of regional water resources management practices through increased incentives and removal of barriers consistent with state and federal law. Potential changes may include, but are not limited to, all of the following:

(1) Revisions to the requirements for urban and agricultural water management plans.

(2) Revisions to the requirements for integrated regional water management plans.

(3) Revisions to the eligibility for state water management grants and loans.

(4) Revisions to state or local permitting requirements that increase water supply opportunities, but do not weaken water quality protection under state and federal law.

(5) Increased funding for research, feasibility studies, and project construction.

(6) Expanding technical and educational support for local land use and water management agencies.

(b) No later than January 1, 2011, and updated as part of the California Water Plan, the department, in consultation with the board, and with public input, shall propose new statewide targets, or review and update existing statewide targets, for regional water resources management practices, including, but not limited to, recycled water, brackish groundwater desalination, and infiltration and direct use of urban stormwater runoff.

Chapter 6 Standardized Data Collection

SECTION 10608.52

10608.52.(a) The department, in consultation with the board, the California Bay-Delta Authority or its successor agency, the State Department of Public Health, and the Public Utilities Commission, shall develop a single standardized water use reporting form to meet the water use information needs of each agency, including the needs of urban water suppliers that elect to determine and report progress toward achieving targets on a regional basis as provided in subdivision (a) of Section 10608.28.

(b) At a minimum, the form shall be developed to accommodate information sufficient to assess an urban water supplier's compliance with conservation targets pursuant to Section 10608.24 and an agricultural water supplier's compliance with implementation of efficient water management practices pursuant to subdivision (a) of Section 10608.48. The form shall accommodate reporting by urban water suppliers on an individual or regional basis as provided in subdivision (a) of Section 10608.28.

Chapter 7 Funding Provisions

Section 10608.56-10608.60

10608.56.(a) On and after July 1, 2016, an urban retail water supplier is not eligible for a water grant or loan awarded or administered by the state unless the supplier complies with this part.

(b) On and after July 1, 2013, an agricultural water supplier is not eligible for a water grant or loan awarded or administered by the state unless the supplier complies with this part.

(c) Notwithstanding subdivision (a), the department shall determine that an urban retail water supplier is eligible for a water grant or loan even though the supplier has not met the per capita reductions required pursuant to Section 10608.24, if the urban retail water supplier has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for achieving the per capita reductions. The supplier may request grant or loan funds to achieve the per capita reductions to the extent the request is consistent with the eligibility requirements applicable to the water funds.

(d) Notwithstanding subdivision (b), the department shall determine that an agricultural water supplier is eligible for a water grant or loan even though the supplier is not implementing all of the efficient water management practices described in Section 10608.48, if the agricultural water supplier has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for implementation of the efficient

water management practices. The supplier may request grant or loan funds to implement the efficient water management practices to the extent the request is consistent with the eligibility requirements applicable to the water funds.

(e) Notwithstanding subdivision (a), the department shall determine that an urban retail water supplier is eligible for a water grant or loan even though the supplier has not met the per capita reductions required pursuant to Section 10608.24, if the urban retail water supplier has submitted to the department for approval documentation demonstrating that its entire service area qualifies as a disadvantaged community.

(f) The department shall not deny eligibility to an urban retail water supplier or agricultural water supplier in compliance with the requirements of this part and Part 2.8 (commencing with Section 10800), that is participating in a multiagency water project, or an integrated regional water management plan, developed pursuant to Section 75026 of the Public Resources Code, solely on the basis that one or more of the agencies participating in the project or plan is not implementing all of the requirements of this part or Part 2.8 (commencing with Section 10800).

10608.60.(a) It is the intent of the Legislature that funds made available by Section 75026 of the Public Resources Code should be expended, consistent with Division 43 (commencing with Section 75001) of the Public Resources Code and upon appropriation by the Legislature, for grants to implement this part. In the allocation of funding, it is the intent of the Legislature that the department give consideration to disadvantaged communities to assist in implementing the requirements of this part.

(b) It is the intent of the Legislature that funds made available by Section 75041 of the Public Resources Code, should be expended, consistent with Division 43 (commencing with Section 75001) of the Public Resources Code and upon appropriation by the Legislature, for direct expenditures to implement this part.

Chapter 8 Quantifying Agricultural Water Use Efficiency

SECTION 10608.64

The department, in consultation with the Agricultural Water Management Council, academic experts, and other stakeholders, shall develop a methodology for quantifying the efficiency of agricultural water use. Alternatives to be assessed shall include, but not be limited to, determination of efficiency levels based on crop type or irrigation system distribution uniformity. On or before December 31, 2011, the department shall report to the Legislature on a proposed methodology and a plan for implementation. The plan shall include the estimated implementation costs and the types of data needed to support the methodology. Nothing in this section authorizes the department to implement a methodology established pursuant to this section.

Appendix D

Notification of Intent to Prepare the Urban Water Management Plan

City of Hemet

From the Office of
PUBLIC WORKS

3777 INDUSTRIAL AVENUE · HEMET, CALIFORNIA 92545 · (951) 765-3712

March 1, 2016

Jay Orr, County Executive Officer
County Administrative Center
4080 Lemon Street - 4th Floor
Riverside CA 92501

RE: Notification of the Preparation of the 2015 Urban Water Management Plan for the City of Hemet

Dear Mr. Orr,

The City of Hemet (City), pursuant to §10621(b) of the California Water Code, is hereby providing notification to the County of Riverside of the preparation of the 2015 Urban Water Management Plan (UWMP) in compliance of the Urban Water Management Planning Act.

The subject notification is intended to inform the County of Riverside of the opportunity to consult with, and submit comments for consideration by, the City regarding the UWMP during the review process.

Sincerely,

Kristen Jensen
Public Works Director, City of Hemet

KJ/amh

Anthony Herda

From: Linda Nixon <LNixon@cityofhemet.org>
Sent: Tuesday, May 31, 2016 7:42 PM
To: raysmith@rceo.org
Cc: Kristen Jensen; Ron Proze; Anthony Herda
Subject: City of Hemet 2015 Urban Water Management Plan Draft

TO: Ray Smith, Public Information Office, Riverside County Executive Office

Ray, earlier this evening I sent this email to CEO Jay Orr. I received a message that the email cannot be delivered because Mr. Orr's email box is full. Would you please share this message with Mr. Orr or any other staff in the Executive Office that might be interested in reviewing the City of Hemet 2015 Urban Water Management Plan Draft. Thank you very much! Linda Nixon – City of Hemet

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Good Evening,

The City of Hemet has completed its 2015 Urban Water Management Plan Draft (UWMP). A copy can be downloaded for review at: http://www.cityofhemet.org/index.aspx?NID=784

Email or written comments are due by June 13, 2016. Please address comments via email to RProze@cityofhemet.org or via mail to:
Ron Proze, Water/Wastewater Superintendent
3777 Industrial Avenue
Hemet, CA 92545

In addition, a public hearing to allow community input on the 2015 UWMP Draft has been scheduled to be held during a regular meeting of the Hemet City Council at 7:00 PM on June 14, 2016 at:
Hemet City Council Chambers
450 E. Latham Avenue
Hemet, CA 92543

Linda Nixon, Environmental Services Manager
City of Hemet Public Works Department
3777 Industrial Avenue – Hemet, CA 92545
951-765-3880 (office)
951-765-2493 (fax)
951-634-3113 (cell)

How was your recent service? To tell us visit www.cityofhemet.info.

Appendix E

2014 Consumer Confidence Report

City of Hemet 2014 Drinking Water Quality Report

CITY OF HEMET WATER DEPARTMENT ♦ 3777 INDUSTRIAL AVE ♦ HEMET CA 92545
WATER QUALITY / WATER CONSERVATION—951-765-3711

Este informe contiene informacion muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

Inside this report:

Drinking water & pollutants	2
Important health information	2
Drinking water definitions	2
Contaminant Monitoring	2
2014 Water Quality Data	3
Citation for Noncompliance	4
Notice of Violation	4

California is now experiencing a serious drought.

We can't afford to waste any water.

There are simple ways you can reduce the amount of water used at home, both inside and out.

Learn how at:

www.saveourh2o.org

What is in this report?

The purpose of this report is to inform City of Hemet water customers about the sources and quality of our drinking water. The report includes details about where the City of Hemet's water originates, what it contains, and how it compares to standards set by regulatory agencies. All water suppliers are required by federal and state law to prepare and provide a brief annual water quality report to their customers.

In 2014, we conducted tests for over 80 contaminants. We detected only one of these contaminants, **nitrate**, at a level higher than the State allows. **As we told you at the time, our water temporarily exceeded drinking water standards. (See page 4)**

OUR WATER SOURCES

The City of Hemet has two water supply sources. Local groundwater is pumped from both the Hemet and San Jacinto Groundwater Basins by nine deep wells. Seven wells are in the Hemet Groundwater Basin and two wells are in the San Jacinto Groundwater Basin. Stormwater collected in basins infiltrates into the soil to eventually replenish our groundwater supply. The City of Hemet has two connections with Eastern Municipal Water District and one connection with Lake Hemet Municipal Water District, used only as needed to supplement our water supply.

WATER SOURCE ASSESSMENT

An assessment of the drinking water sources for the City of Hemet was completed in June 2002. City of Hemet wells are not considered vulnerable to any potential activities associated with contaminants detected in the water supply. The wells are considered most vulnerable to the following activities: sewer collection systems, a fire station, high density housing, and transportation corridors or road right of ways. To review a copy of this report, contact Ron Proze, City of Hemet Water Superintendent at (951) 765-3712.

Why is there anything in drinking water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

In order to ensure that tap water is safe to drink, *USEPA and the State Water Resources Control Board* (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

PUBLIC PARTICIPATION OPPORTUNITY

The Hemet City Council meets twice each month on the second and fourth Tuesday at 6:00 PM in the Council Chambers located at 450 E. Latham Avenue. Public comment is accepted during "Communications from the Public" on the agenda.

How drinking water sources become polluted

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides that may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application, and septic systems.

Radioactive contaminants can be naturally-occurring or be the result of oil /gas production and mining activities.

❹ **Microbiological Sampling—**In 2014 the City of Hemet collected 572 bacteriological samples to test for bacteria, including total coliform bacteria and E. coli. One sample, taken on May 7, 2014, tested positive for total coliform, but negative for E. coli. Re-sampling was conducted and all samples were negative. As a precaution, chlorine is added to the water system to maintain a "residual" of 0.4 ppm to eliminate any bacteria that may enter the system.

Special precautions to those vulnerable to contaminants

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the **Safe Water Drinking Hotline (1-800-426-4791)**.

Important Health Information

Nitrate: Nitrate in drinking water at levels above 45 mg/L [milligrams per liter—equivalent to parts per million (ppm)] is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 ppm may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

UNREGULATED CONTAMINANT MONITORING RULE (UCMR 3) LIST 1 - CONTAMINANTS DETECTED

CONTAMINANT	UNIT	STANDARDS		CITY OF HEMET WELL WATER		EMWD CONNECTIONS		YEAR SAMPLED
		AVERAGE	RANGE	AVERAGE	RANGE	AVERAGE	RANGE	
Volatile Organic Compound								
1,2,3-Trichloropropane	ppb	N/A	N/A	0.099	0.048-0.13	ND	ND	2013-2014
Synthetic Organic Compound								
1,4-Dioxane-d8	percent	N/A	N/A	95.80%	86.07-103%	ND	ND	2013-2014
Metals								
Molybdenum	ppb	N/A	N/A	11.6	2.2-23	6	3-10	2013-2014
Strontium	ppb	N/A	N/A	612	250-990	310	230-380	2013-2014
Total Chromium Monitoring								
Total Chromium	ppb	N/A	N/A	1.5	ND-4.5	ND	ND	2013-2014
Oxyhalide Anion								
Chlorate	ppb	N/A	N/A	89	0.1-280	180	ND-760	2013-2014
Perfluorinated Compounds								
perfluorooctanesulfonic acid	ppb	N/A	N/A	0.091	0.034-0.111	ND	ND	2013-2014
perfluorooctanoic acid	ppb	N/A	N/A	0.1	0.035-0.037	ND	ND	2013-2014

Important drinking water definitions

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Regulatory Action Level (AL): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.

2014 WATER QUALITY DATA TABLE

KEY TO ABBREVIATIONS

AL	Action Level	**NTU**	Nephelometric Turbidity Unit (a measure of water cloudiness)
MCL	Maximum Contaminant Level	**pCi/L**	Picocuries per liter (a measure of radioactivity)
MCLG	Maximum Contaminant Level Goal	**PHG**	Public Health Goal
Micro ohms	A measure of conductivity (electric current in water)	**ppb**	Parts per billion
N/A	Not Applicable	**ppm**	Parts per million
ND	Non-Detected		

CONTAMINANT	UNIT	STANDARDS STATE MCL/AL	STANDARDS PHG (MCLG)	CITY OF HEMET WELL WATER AVERAGE	CITY OF HEMET WELL WATER RANGE	EMWD CONNECTIONS AVERAGE	EMWD CONNECTIONS RANGE	VIOLATION	YEAR SAMPLED	TYPICAL SOURCE OF CONTAMINANT
PRIMARY STANDARDS - Mandatory Health Related Standards by California Department of Health Services										
Microbiological Contaminants										
Total Coliform Bacteria	Sample	MCL = More than 5% of monthly samples positive		**572 samples collected; 1 sample positive ❹**		**Not Applicable**		**NO**	2014	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria my be present.
Radioactive Contaminants										
Gross Alpha	p/Ci/L	15	0	**3.2**	0.881-5.94	**ND**	ND-3.6	**NO**	2012-2014	Erosion of natural deposits
Gross Beta	p/Ci/L	50	4	**ND**	ND	**ND**	ND-8	**NO**	2014	Decay of natural and man-made deposits
Uranium	p/Ci/L	20	0.43	**2**	0.88-2.87	**ND**	ND-1.3	**NO**	2012-2014	Erosion of natural deposits
Inorganic Contaminants										
Arsenic	ppb	10	4	**1.1**	0-2.7	**2**	ND-9	**NO**	2012-2014	Erosion of natural deposits; runoff from orchards, glass/electronics production wastes
Barium	ppb	1000	2000	**ND**	ND-100	**ND**	ND-110	**NO**	2012-2014	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride	ppm	2	1	**0.6**	0.2-1.4	**0.3**	0.1-0.5	**NO**	2012-2014	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Hexavalent Chromium	ppb	10	0.02	**1.7**	1-4.5	**0.09**	ND-0.43	**NO**	2012-2014	Discharge from elctroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, textile manufacturing acilities; erosion of natural deposits
Nitrate (NO_3) ◆	ppm	45	45	**29**	5.7-48	**2.1**	ND-8.5	****YES**** Page 4 ❶❷	2012-2014	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits. HEALTH EFFECTS: Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capactiy of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women.
Nitrite as N	ppm	1	1	**ND**	ND-1	**0.5**	ND-1.9	**NO**	2012-2014	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.
Perchlorate ◆	ppb	6	6	**3.3**	0-6.1	**ND**	NO RANGE	**NO**	2012-2014	Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries. It usually gets into drinking water a a result of environmental contamination from historic aerospace or other industrial operations that used or use, store, or dispose of perchlorate and its salts.
Selenium	ppb	50	50	**6**	0-12	**ND**	NO RANGE	**NO**	2012-2014	Discharge from petroleum, glass, metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
Disinfection Byproducts, Disinfectant Residuals, and Disinfection Byproduct Precursors										
TTHMs (Total Trihalomethanes)	ppb	80	N/A	**2.8**	N/A	**N/A**	N/A	****YES**** Page 4 ❸	2015	By-product of drinking water disinfection.
Haloacetic Acids	ppb	60	N/A	**1.4**	N/A	**N/A**	N/A	****YES**** Page 4 ❸	2015	By-product of drinking water disinfection.
SECONDARY STANDARDS - Aesthectic Standards Established by California Department of Health Services										
Chloride	ppm	500	N/A	**272**	44-530	**21**	12-42	**NO**	2012-2014	Runoff/leaching from natural sources; seawater influence
Iron	ppb	300	N/A	**102**	0-120	**ND**	NO RANGE	**NO**	2012-2014	Leaching from natural sources; industrial wastes.
Manganese	ppb	50	N/A	**20**	0-23	**ND**	ND-47	**NO**	2012-2014	Leaching from natural deposits
Specific Conductance	micro ohms	1600	N/A	**1410**	770-2100	**450**	380-450	**NO**	2012-2014	Substances that form ions when in water; seawater influence.
Sulfate	ppm	500	N/A	**160**	110-260	**47**	22-70	**NO**	2012-2014	Runoff/leaching from natural deposits; industrial wastes.
Total Dissolved Solids	ppm	1000	N/A	**879**	480-1300	**260**	210-340	**NO**	2012-2014	Runoff/leaching from natural deposits.
Turbidity	units	5	N/A	**0.82**	0-0.84	**0.3**	0.1-0.4	**NO**	2012-2014	Soil runoff
METALS - As a by-product of corrosion of consumer's plumbing										
Copper	ppb	AL = 1300	300	90th percentile of 30 samples: 220 ppb		N/A	N/A	**NO**	2013	Lead and copper are regulated in a Treatment Technique under the Lead and Copper Rule. It requires systems to take water samples at the consumer's tap every three years. The federal action level (AL), which triggers water systems into taking treatment steps if exceeded in more than 10% of the tap water samples, is 1300 ppb for copper and 15 ppb for lead.
Lead	ppb	AL = 15	2	90th percentile of 30 samples: ND		N/A	N/A	**NO**	2013	
ADDITIONAL CONSTITUENTS ANALYZED										
Boron	ppm	N/A	N/A	**274**	83-350	**29**	17-49	N/A	2012-2014	
Hardness	ppm	N/A	N/A	**274**	83-350	**150**	100-200	N/A	2012-2014	
pH	pH units	N/A	N/A	**7.7**	7.5-8.2	**7.7**	7.6-7.9	N/A	2012-2014	
Potassium	ppm	N/A	N/A	**6.1**	3.1-8.5	**3.5**	2.3-4	N/A	2012-2014	
Sodium	ppm	N/A	N/A	**125**	84-270	**32**	26-46	N/A	2012-2014	

WATER QUALITY MEASUREMENTS

Trace chemicals in water are measured in parts per million (ppm) or parts per billion (ppb).

Parts per million = 1 drop in 10 gallons

Parts per billion = 1 drop in 10,000 gallons

◆ When well water contains high levels of contaminants it is blended with water from other wells to assure the water delivered to customers meets all health requirements.

City of Hemet 2014 Drinking Water Quality Report

City of Hemet Water Department
3777 Industrial Avenue
Hemet, CA 92545

Phone: 951-765-3711
Email: mosborn@cityofhemet.org
URL: www.cityofhemet.org

HAVE QUESTIONS ABOUT THIS REPORT?

CONTACT: MATT OSBORN—951-765-3109 MOSBORN@CITYOFHEMET.ORG

LET US KNOW HOW WE'RE DOING! COMPLETE A SURVEY—HTTP://CITYOFHEMET.INFO/

Public Notice of Citation for Noncompliance [2014] & Notice of Violation [2015]

Violation	Explanation	Length	Steps Taken to Correct the Violation	Health Effects Language
❶ **Failed to comply with primary drinking water standard for nitrate during the month of May 2014.**	Samples from two City wells in operation between May 1, 2014 and May 7, 2014 exceeded the MCL for nitrate of 45 ppm. The City was notified on May 7, 2014 by its contract laboratory that samples collected on April 30, 2014 and May 1, 2014 had nitrate concentrations of 47 ppm and 47 ppm, respectively.	May 1, 2014 to May 7, 2014	Both wells were shut down on May 7, 2014. The City prepared and delivered "Unsafe Water Alert" notices to 1,900 affected customers on May 8, 2014. The notice was also printed in the Press Enterprise newspaper on May 8, 2014. Nitrate samples collected throughout the distribution system on May 7 and May 8, 2014 had nitrate levels below the MCL. On May 9, 2014 the "Unsafe Water Alert" was lifted and the City notified customers that the water was once again safe to drink.	Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women.
❷ **Failed to operate blending program not to exceed a nitrate blend point goal of 35 ppm during the month of April 2014.**	In the two week period between April 15, 2014 and April 30, 2014, the nitrate concentration at one well increased from 28 ppm to 47 ppm, which caused the nitrate concentration to exceed the blend point goal of 35 ppm.	April 15, 2014 to April 30, 2014	The well with high nitrate concentrations was removed from operation.	Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women.
❸ **Failed to monitor for Stage 2 Disinfectants/ Disinfection Byproducts Rule contaminants during fourth quarter of 2014.**	The City failed to collect a quarterly sample in December 2014 for analysis of total trihalomethanes (TTHMs) and haloacetic acids (HAA5s). Presence of these contaminants are a by-product of drinking water disinfection.	October 1, 2014 to January 22, 2015	On January 22, 2015 the City collected samples from its designated Stage 2 DBPR sampling locations; samples were analyzed for TTHMs and HAA5s to replace the missing 2014 fourth quarter sample. Testing of samples showed our water meets the state's standards for disinfection to our customers.	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer. Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

Appendix F

SCAG Land Use Description

SOUTHERN CALIFORNIA 1990 AERIAL LAND USE STUDY

LAND USE CODE DESCRIPTIONS
AND KEY SIGNATURES
Level III/IV

The land use definitions and descriptions were developed by Aerial Information Systems, Inc. as a Modified Anderson Land Use Classification. This classification uses a hierarchical system, allowing easy aggregation and disaggregation of classes. Most uses in the 1990 Land Use Study of Southern California were mapped to the fourth level. The user may elect to use the second or third level, or any variation, in analyses or display. The descriptions below apply to land use characteristics in southern California, and may not apply to other geographic areas. Key signatures are described using natural color aerial photography.

1000 URBAN OR BUILT-UP

Areas of built-up land characterized by intensive land use, where most of the land is covered by man-made structures because of human activity.

1100 RESIDENTIAL

The residential category includes areas of single family residences, multi unit dwellings, and mobile homes. Also included is a mixed residential category that consists of two or more of the aforementioned groups. The units/acre listed can be used as an indicator of relative density to aid in analysis when using the land use study.

1110 SINGLE FAMILY RESIDENTIAL

These residential areas are typically made up of detached dwellings, where each structure houses a single family, located in an urban or suburban setting. (Single family residential units located in a rural setting are classified as code 1151 or code 1152 under Rural Residential.) These single family residences are usually served by all utilities, are on paved streets, and are provided with or have access to all urban facilities such as schools, parks, police, and fire stations.

Single family residential neighborhoods are normally large contiguous areas of residential lots. Some areas have subdivisions or tracts of homes with similar size or architectural design. In these areas the roofs may be similar in shape or color when viewed on the aerial photo. Typically, single family lots contain landscaped front and back yards, one driveway, and one walkway either to the sidewalk or to the driveway. The house usually contains one chimney, and one air-conditioning unit. Some lots may have swimming pools in the back yards. High or low density is determined by the size of the lot on which the residence is located. If an area is under construction, and the residential lots or pads are easily identifiable, then the unit may be coded with the appropriate density category.

Prepared by: Aerial Information Systems, Redlands, California 92373 (909)793-9493 FAX: (909) 798-4430

1111 High Density Single Family Residential

This category contains single family detached residential units with a unit density of >2 units/acre. These units are typically found in modern urban and suburban subdivisions.

1112 Low Density Single Family Residential

This category contains single family detached residential units with a unit density of <2 units/acre. These units may include areas of urban ranch homes or estates. Also included are urban areas where single family lots have been established but houses have not been built on all of them and are not likely to be built in the near future. The homes are spaced at a density of <2 units/acre. In some situations, a low density area may be rural in appearance because it was once a rural area but is now within the urban setting or a transitional area.

1120 MULTI-FAMILY RESIDENTIAL

Multi-family units are attached residences, apartments, condominiums, and townhouses. Multi-family residences are usually served by all utilities, are on paved streets, and are provided with or have access to all urban facilities such as schools, parks, police and fire stations. Senior citizen apartment buildings are included in these classes. Also included are off-campus university owned housing and off-campus fraternity/sorority houses.

1121 Mixed Multi-Family Residential

This category is used when there is a mixture of multi-family uses (duplexes, triplexes, apartments, condominiums, and/or townhouses of any type), none of which is over 2.5 acres in size, and no one type dominates. This situation may occur in older neighborhoods.

1122 Duplexes, Triplexes, and 2- or 3-Unit Condominiums and Townhouses

This category is composed of duplexes, triplexes, and 2- or 3-unit condominiums and townhouses that are attached multi-family structures.

Duplex and triplex residences may occur together or mixed with single family houses in some older neighborhoods (see code 1121 and 1140). Typically the multi-unit structure is one story located on a lot approximately the same size as nearby single family residential lots. There may be minimal landscaping or yard space. On the aerial photo, one may be able to count the driveways, sidewalks, entryway overhangs, chimneys, or air conditioning units corresponding to the number of units in the structure. Some newer duplexes and triplexes occur as 2- or 3-unit structures in complexes as condominiums and townhouses, with common grounds.

1123 Low-Rise Apartments, Condominiums, and Townhouses

This category includes multi-family structures of one to two stories and approximately 10 to 18 units/acre. The area consists of either a large single structure or a group of structures, of four or more units each, in a complex with associated common grounds, facilities and parking areas.

Typically low-rise apartments, condominiums, and townhouses occur together in large contiguous areas since land use is restricted to multi-family zoned areas. However, in some areas one to a few buildings may occur on individual lots in single family residential neighborhoods. In newer neighborhoods they may appear as a large complex composed of many structures of similar architecture with common grounds and facilities. Some older structures are U-shaped or O-shaped with a swimming pool in the middle. A parking level may be located underneath the living area, in which case it is not counted as a story. Parking for larger complexes may include garages or carports along the periphery of the complex. Low-rise apartments and condominiums are the most common types of multi-family structures in the study area. Also included are off-campus fraternity/sorority houses and senior citizen apartments. Residential units located above first floor commercial in buildings along a commercial strip are considered commercial use (1223, 1224). An area mapped as Low-Rise Apartments, Condominiums, and Townhouses may contain an occasional Medium-Rise building.

1124 Medium-Rise Apartments and Condominiums

This category includes multi-family structures of three to four stories and >18 units/acre. The area consists of a large single structure or a group of structures, of four or more units each, in a complex with associated common grounds, facilities and parking areas.

Many medium-rise apartments and condominiums occur in older areas as hotel/apartments. Several may be located next to each other in compact areas. Some may occur as large complexes, composed of many structures of similar architecture, with common grounds and facilities. Medium-rise apartments and condominiums are not as common as low-rise. Senior citizen apartments are included. If an area contains commercial use on the first floor and multi-family residential use on the upper floors, then the area is considered strip commercial (codes 1223, 1224). Some older urban core cities contain apartment and condominium buildings predominantly of three, four, or more stories. An area mapped as Medium-Rise may contain occasional Low-Rise or High-Rise buildings. Use of stereoscopic viewing of aerial photos is essential in determining relative height in relation to other structures in the area.

1125 High-Rise Apartments and Condominiums

This category includes multi-family structures of five stories or greater and >18 units/acre. The area consists of either a single large structure or a group of adjacent structures with common grounds, facilities

and parking areas.

Many high-rise apartments and condominiums occur as single or groups of high residential towers. Parking may be underground or in an adjacent parking structure. Smaller high-rise structures may contain only residential units with no other uses. High-rise residential structures are configured to maximize availability of window access to each individual residential unit. Thus the building may be long and narrow, or contain narrow lateral wings that provide window access. Senior citizen apartments are included. If an area contains commercial use on the first floor and multi-family residential use on the upper floors, then it is considered High-Rise Apartments and Condominiums.

1130 MOBILE HOMES AND TRAILER PARKS

These residential units are composed of mobile homes, trailers and pre-fabricated housing that are either stationary with foundations or that is on wheels and capable of being moved. Included are vacant and occupied spaces, and associated storage facilities for the complex. Mobile homes and trailer parks are usually served by all utilities, are on paved streets, and are provided with or have access to all urban facilities, such as schools, parks, police, and fire stations. This category does not include transient facilities such as recreational vehicle parks or campgrounds (see code 1880).

Mobile homes are typically long, narrow, and rectangular in shape. Most have a white signature when represented on an aerial photo, although some modern mobile homes may have a less reflective or colored roofing material. Some newer modular home or mobile home courts and subdivisions contain homes with false facades, giving the impression of an apartment or condominium complex, or single family houses.

1131 Trailer Parks and Mobile Home Courts, High Density

This category includes typical mobile home or trailer parks and pre-fabricated homes (>6 units per acre) that are in a contiguous area with trailer or mobile home spaces and associated facilities.

Trailer courts and mobile home parks normally have a high, closely spaced density of units within the lot with very limited landscaping. The mobile homes are parked side by side in parallel rows with an access drive along the front of the row. Also included are associated recreational vehicle storage lots within or next to the mobile home park.

1132 Mobile Home Courts and Subdivisions, Low Density

This category includes typical mobile and pre-fabricated homes located in lower density mobile home park or in a single family residential subdivision pattern on curbed named streets (<6 units per acre).

Individual mobile homes appear as in the description above (1131), although there may be additional architectural modification associated with it. Units are more widely spaced, with landscaping as in front and back yard areas of a normal subdivision. Each lot has its own driveway or walkway, similar to single family residential areas. Also included are associated recreational vehicle storage lots within or next to the mobile home park.

1140 MIXED RESIDENTIAL

1140 Mixed Residential

This category includes areas where there is a combination of single family detached and multi-family dwellings of any type occurring together. Each individual residential type does not meet the 2.5-acre minimum mapping resolution and neither dominates. Typically these are located in older neighborhoods, where duplexes, triplexes, and apartment buildings occur among single family houses.

1150 RURAL RESIDENTIAL

Rural Residential units include ranches, farmsteads, single mobile homes, and residences located in a rural setting. Typically these areas have limited urban services.

1151 Rural Residential High Density

This category is composed of a group of homes in a rural setting at a density of >2 units/acre. Units may contain backyard animal shelters or pens for non-commercial livestock. This class does not include commercial agricultural land, but does include backyard non-commercial agricultural activity, including field crops, groves, horse facilities, barns, and other agricultural uses. Backyard agricultural is mapped as part of the 1151 polygon.

1152 Rural Residential Low Density

This category includes homes located in a rural setting at a density of <2 units/acre. Included are backyard animal shelters or pens for non-commercial livestock. This class does not include commercial agricultural land, but does include backyard non-commercial agricultural type activity including improved pastureland, field crops, groves, horse facilities, barns, and other agricultural uses. If the back-lot agricultural use meets the MMU (2.5 acres), it will be mapped as a separate polygon and coded with the appropriate land use class.

1200 COMMERCIAL AND SERVICES

Commercial and Services includes areas used predominantly for business or the sale of products and their associated services. Also included are some non-commercial uses such as government and public service offices.

This class does not include industrial activities.

1210 GENERAL OFFICE USE

Included are areas of office buildings usually used for financial, personnel, business, medical and other professional services. The unit includes associated facilities and parking areas.

1211 Low- to Medium-Rise Major Office Use

This category includes office buildings of one to ten stories in height.

Office buildings are usually located on or adjacent to major streets, depending on the need for high visibility. Offices have parking areas either behind or around the buildings. Typically there are two styles of building structures. Normally, the low-rise office buildings (one to four stories in height) try to maximize window access, resulting in buildings that are long and narrow, containing a central courtyard, or have lateral wings. Medium-rise office buildings (five to ten stories in height) tend to be square, or rectangular in shape. Landscaping can vary from minimal to extensive, although modern larger office buildings do have considerable surrounding landscaped areas. Utility administrative offices are included in this category. Some corporate or business parks may be entirely made up of, or predominantly contain office space, although they may be similar to light industrial complexes (1311) or mixed commercial and industrial complexes (1500).

If an area contains commercial strip use on the first floor and offices on the upper floors (3 - 10 stories), then the area is considered Low- to Medium-Rise Major Office Use. A commercial strip of two-story structures containing offices on the upper floors is considered strip commercial (1223, 1224).

1212 High-Rise Major Office Use

This category includes office buildings that are eleven to forty stories in height.

The characteristics of the smaller high-rise office buildings are similar to medium-rise office buildings as described above. The taller office buildings are typically rectangular, with no particular regard for window accessibility. Older office buildings may be located side by side with retail commercial on the first floor. Modern suburban office buildings may have their own parking areas or landscaped surroundings. Many taller office buildings will have underground parking, or parking on the first few levels.

1213 Skyscrapers

This category includes office buildings greater than forty stories in height.

Skyscrapers are the tallest buildings built, normally occurring in downtown areas of larger cities, although they can also be located in business districts not associated with a downtown area. Retail commercial use usually occurs on the ground floor, with office use on the upper floors. Their relative height compared to surrounding areas is evident when the photos are viewed in stereo. Parking may be underground, on the first few levels, or in adjacent parking structures.

1220 RETAIL STORES AND COMMERCIAL SERVICES

Areas composed primarily of retail stores, restaurants, offices, and personal services, including associated facilities and parking areas.

1221 Regional Shopping Center

This category includes large retail centers composed of one or more major department stores and a full range of smaller shops, restaurants, offices and commercial services.

Most regional centers are enclosed malls, which are typically one to three stories in height, elongate in shape, with large square protrusions formed by the large department stores, the areas between being the smaller retail stores, services, and restaurants. Usually parking areas totally surround the building, some of which may be parking structures. Businesses located within the contiguous parking area are included with the regional shopping center. In urban areas, where open space may be limited, the mall building may be located over an entire block, with parking underground, and no visible surface parking. Factory outlet centers are included in this category.

1222 Retail Centers (Non-Strip with Contiguous Interconnected Off-Street Parking)

This category includes a large magnet store, with smaller retail stores, restaurants, service shops, and offices located in shopping centers with contiguous interconnected off-street parking. These centers are normally located along major highways and traffic corridors to take advantage of the increased customer exposure. Included are gasoline stations, restaurants and other stores whose parking area is contiguous with the center. Included are some grocery store, drug store, and department store shopping centers.

Retail or shopping centers contain buildings that are typically rectangular in shape with some architectural protrusions spaced at intervals when viewed on an aerial photo. The smaller stores are housed in long, narrow portions of the building, the larger stores are in the larger square portions. The building is usually situated toward the rear of the lot, with parking on the street side. There may be smaller commercial buildings within the parking area. Usually there is minimal to no landscaping.

Also included in this category are thematic commercial centers that function as a tourist attraction with specialty shops and restaurants.

1223 Modern Strip Development

This category includes retail stores, restaurants, service shops, and offices aligned along major highways and traffic corridors to take advantage of the increased customer exposure. Included are gasoline stations, auto repair shops, convenience stores, liquor stores, small bank branch offices, clothing stores, restaurants, furniture stores, discount stores, novelty stores, car dealerships or auto centers, drug stores, small corner markets, auctions, and mini-malls. In addition to on-street parking, there is easy access to off-street parking areas, that can be found in the front, on the side, as well as behind the commercial establishments. This category includes most newer style business corridors built since the 1950's.

Included are modern commercial corridors, usually containing a mixture of commercial uses along major highways. Some lots contain one building toward the back of the lot with no major store, and a small parking lot on the street side. Strip Development areas are typically located on major streets to take advantage of the high visibility. Usually there is minimal to no landscaping. Mini-malls are similar to shopping centers except they contain no large or magnet store. In two- or three-story structures, if offices or apartments are located over first floor commercial in a commercial strip, then the site is considered strip commercial also. Older style strip development areas are included in class 1224.

1224 Older Strip Development

This category includes strip development areas of little or no parking, such as the older business districts of small suburban cities. Any available parking is normally on the street, or in non-attended public parking areas. This category includes most older style business corridors built prior to the 1960's.

Older strip development areas contain storefronts and restaurants that directly abut the street or sidewalk, with very limited parking on the street or in back. Commercial units are positioned one immediately adjacent to another along the street. The strip development is composed mostly of specialty stores, offices, service shops, and restaurants. Adjacent parking areas that are less than the 2.5-acre minimum mapping resolution are included. In two- or three-story structures, if offices or apartments are located over first floor commercial in a commercial strip, then the site is considered strip commercial also. Adjacent non-attended public parking areas that are greater than 2.5 acres are mapped as class 1247.

1230 OTHER COMMERCIAL

Commercial uses other than general office, typical retail stores, and/or personal services. Included in this category are associated facilities and parking areas.

1231 Commercial Storage

This category includes public mini storage unit facilities and small commercial storage yards. This class does not include large storage warehouses (see code 1340).

Mini storage facilities are normally composed of a series of long, narrow parallel rectangular buildings, sometimes encompassed by a U-shaped or L-shaped building. Also included in this category are RV or large vehicle storage lots which, in some cases, are adjacent to mini storage unit facilities.

1232 Commercial Recreation

This category includes areas of commercial recreational use, such as sports stadiums (not associated with schools), car and horse race tracks, indoor shooting ranges, amusement parks, fairgrounds, gambling facilities (card halls and Indian bingo), and movie theaters (all drive-in and some walk-in types). Zoos are not included in this class, but are mapped as class 1850.

School sports facilities are mapped with the appropriate school category (e.g. a high school track would be called "High School"). Race tracks in this category do not include isolated or rural horse exercise or training tracks (see code 2700). Drive-in theaters are pie slice-shaped areas with concentric arcs within, as seen on aerial photos. Other examples include walk-in theaters not located in a mall or retail center, bowling alleys, ice and roller skating rinks, miniature golf courses, and small amusement facilities. Facilities such as bowling alleys and skating rinks may need to be verified and coded in the field since, on the photo, they resemble other types of land uses. Some categories, such as race tracks, some amusement parks, and fairgrounds, may already be identified on the collateral maps.

1233 Hotels and Motels

This category includes all major hotels and motels. Small or inactive motels which may be less than 2.5 acres may be classified as strip commercial. Large hotels usually contain varied commercial activity on-site (e.g. restaurant, barber/beauty salons, bar, gift shops, etc.). Motels, however, tend to be limited to an office and individual units.

Hotels, motels, suites, inns, and motor lodges tend to be located along major transportation corridors, near airports, large amusement parks, convention centers, civic centers, and/or downtown areas to take advantage of the potential market of transient overnight or extended-stay travellers. Smaller facilities normally contain a series of one- or two-story buildings with parking within the complex, or surrounding the buildings. Landscaping may be minimal. Usually there is a swimming pool toward the front or middle of the lot. Restaurants and gas stations are located in the immediate area. Large hotels tend to be

greater than three stories in height. In order to maximize window access the building configurations are long and narrow in shape, or contain narrow lateral wings. Parking may be underground, in parking structures, or in open areas around the hotel complex. Older hotels and motel may be located along what once was a major transportation corridor, but the major corridor has since been moved to a freeway in another location.

1234 Attended Pay Public Parking Facilities

This category includes stand alone public parking areas and parking structures that have an attendant-cashier present, and is not associated with another use.

Collateral data is required to map attended pay public parking areas. Parking structures will appear as a multi-story structure when the photos are viewed in stereo. Other areas appear as open ground level parking areas. Heavily commercial or downtown areas typically contain pay parking facilities, especially in the larger city core areas.

1240 PUBLIC FACILITIES

Public Facilities include government offices and other public service facilities, major health care facilities, religious facilities, and public and private educational facilities. This class also includes associated facilities and parking areas. Collateral data aids in the identification of these facilities.

1241 Government Offices

This category includes federal, state, regional, county or municipal administrative office buildings. Also included in this category are post offices, courthouses, and school district offices.

The aerial photo signature will appear similar to Commercial General Office Use (see code 1211). In the suburban areas the offices will usually be one to two stories in height, with landscaping and parking.

1242 Police and Sheriff Stations**

This category includes all municipal, county sheriff, and state highway patrol police stations. Police stations in a military installation are not included.

Collateral data is required to map these facilities. Normally these facilities are below the 2.5-acre minimum mapping resolution. As a critical land use, these facilities will be mapped at a minimum as a one acre polygon so that they can be included in this data base.

1243 Fire Stations**

This category includes all state, county and municipal fire stations. Seasonal fire stations are also included. Fire stations in a military installation are not included.

Collateral data is required to map these facilities. Normally these facilities are below the 2.5-acre minimum mapping resolution. As a critical land use, these facilities will be mapped at a minimum as a one acre polygon so that they can be included in this data base.

1244 Major Medical Health Care Facilities

This category includes public and private general medical health care facilities (hospitals) that give short-term care.

Larger hospitals are normally multi-storied, with split-level recessed/tiered upper floors that may form long and narrow lateral wings in order to maximize availability of window access for patient rooms. The area may contain other associated buildings, parking structures, parking areas, and landscaping. Smaller hospitals are one to two stories in height, with parking areas and landscaping. In both cases there may be circular drives with covered main entrances. Some facilities contain a number of buildings forming a complex. Medical offices are often located in close proximity to medical health care facilities. Some medical school facilities may be included as part of a major medical health care facility complex.

1245 Religious Facilities

This category includes churches, mosques, synagogues, temples, tabernacles, and other places of worship or religious pursuit. Religious monasteries, convents, etc. are also included in this category. Not included are schools (see 1262 through 1264), communication (see code 1420) and mass media facilities (see code 1211 and 1212) associated with a religious denomination.

Worship facilities are normally below the 2.5-acre minimum mapping resolution. They appear as one main building with landscaping and parking areas. Some facilities have a grass play area, or other smaller buildings. Monasteries and convents may appear as large office-type or apartment-type buildings in a closed compound with parking areas and substantial landscaping. Religious facilities may be identified on the topographic base maps, but that source may not be current. Small cemeteries, less than 2.5 acres, that are associated with an adjacent church are included with the church. Religious camps are mapped as code 1880. Retreat or conference centers are mapped as code 1253.

1246 Other Public Facilities

This category includes convention centers, and other public facilities, such as libraries, community centers, auditoriums, live indoor and outdoor theater facilities, observatories and museums, which are not

covered by other categories.

Convention centers may appear as very large rectangular to square building complexes with some architectural design. There is much landscaping and surface parking, parking structures, or underground parking. Convention centers are usually located in downtown civic center areas, central business districts, or near major airports.

Many public facilities in this category resemble office buildings in appearance. Outdoor theaters appear as large amphitheater areas with concentric seating pattern. Libraries, auditoriums, observatories, museums, and community centers are usually identified on collateral sources.

1247 Non-Attended Public Parking Facilities

This category includes free or metered public parking areas where no attendant-cashier is present. Only parking facilities greater than the 2.5-acre minimum mapping resolution are included. Facilities smaller than minimum mapping resolution are mapped with the adjacent use.

Most non-attended public parking facilities occur in older strip development areas (code 1224). Most of these parking facilities are located in the central business districts of suburban cities or community centers. The parking facility is usually located behind or across the street from the old commercial strip.

1250 SPECIAL USE FACILITIES

Special Use Facilities include institutional type facilities such as correctional institutions, mental health institutions, convalescent health care facilities, non-profit institutions, and fraternal organizations.

1251 Correctional Facilities

This category includes large facilities providing institutional services, such as juvenile halls, youth correctional facilities, county jailhouses, federal and state prisons, and state correctional mental hospitals (also see code 1252).

These institutions may be several acres in size, with many "office-type" or "apartment-type" buildings, landscaping, and parking areas, all confined to a closed complex. Other uses, such as agriculture, occurring within the correctional facility grounds are mapped separately.

1252 Special Care Facilities

This category includes public and private institutional care, such as convalescent and rehabilitation facilities, nursing homes, mental health facilities, sanitariums and state non-correctional mental hospitals.

Also included are reform schools, orphanages, and homes for abused, neglected, or other special needs children. This class does not include senior citizen apartments (see codes 1121, 1122, 1123, 1124, and 1125).

Larger facilities are normally multi-storied, with split level recess-tiered upper floors that may form long and narrow lateral wings in order to maximize availability of window access for patient or resident rooms. The area may contain other associated buildings, parking structures, parking areas, and landscaping. Smaller facilities are one to two stories in height, with parking areas and landscaping. In both cases there may be circular drives with covered main entrances. Residential and mental health facilities may contain "office-type" or "apartment-type" buildings, landscaping, and parking areas in a closed complex.

1253 Other Special Use Facilities

This category includes fraternal and other non-profit organizations, such as Salvation Army, Goodwill Industries, YMCA, youth organizations, homeless shelters, etc. Also included are retreat or conference centers.

This category includes a wide range of photo signatures. Many of the facilities in this category are similar to office buildings in appearance. Some may occur in retail commercial areas. Some fraternal organizations, however, may take on the appearance of churches or other religious facilities. YMCA and YWCA facilities may contain recreational facilities such as swimming pools, gymnasiums, baseball fields, etc. Some facilities may appear in industrial areas, such as Goodwill Industries.

1260 EDUCATIONAL INSTITUTIONS

All levels of public and private schools, colleges, universities, seminaries, and training centers are covered by this category. Includes buildings, open space, dormitories, and parking areas. Also included are all athletic facilities, such as ball fields, stadiums, soccer fields, swimming pools, and tennis courts.

1261 Pre-Schools/Day Care Centers

This category includes public and private pre-schools, nursery schools, and day care centers. Facilities associated with other educational institutions or religious facilities are not included in this category.

Most pre-schools/day care centers are below the 2.5-acre minimum mapping resolution. Typically, pre-schools and day care centers are located in commercial areas within close proximity to residential neighborhoods. The facility can appear similar to any commercial type use, however, it will usually contain playground equipment within a fenced lot.

1262 Elementary Schools**

This category includes public and private schools, kindergarten through sixth grade, kindergarten through eighth grade, or other beginning grade levels, depending on local school board or administration policy.

Normally buildings are one or two stories in height, though some higher storied buildings may be present. The area contains landscaping and walkways. Buildings are either long and rectangular or have long narrow wings to maximize availability of window access. The play area can be a gray photo signature of asphalt, or a green signature of grass, or both. Elementary schools are usually much smaller than the other types of schools, normally less than 10 acres in size. The parking lot is very small, and may contain a bus loading curb or area. Because this class is a critical land use, any schools that are below the 2.5-acre minimum mapping resolution will be mapped at their actual size, or at a one-acre minimum. If a school serves a narrower or wider range of grade levels, then the school is assigned the class that the facility typically resembles.

1263 Junior High Schools**

This category includes public and private schools for grades seven through eight, seven through nine, or other intermediate grade levels, depending on local school board or administration policy. Intermediate and Middle Schools may be included in this category.

Normally buildings are one or two stories in height, though some higher storied buildings may be present. The area contains landscaping and walkways. The buildings are either long and rectangular or have long narrow wings to maximize availability of window access. The athletic area may have a gray photo signature representing asphalt and a larger area of grass which is used as the soccer field/baseball diamond/track. Some schools will have a swimming pool or tennis courts. A parking lot with bus loading curb area may be visible. Junior high schools appear similar to high schools, but have smaller parking and athletic facilities. A junior high school lot is normally about 10 to 20 acres in size. Because this class is a critical land use, any schools that are below the 2.5-acre minimum mapping resolution will be mapped at their actual size or at a one acre minimum. If a school serves a narrower or wider range of grade levels, then the school is assigned the class that the facility typically resembles.

1264 Senior High Schools**

This category includes public or private schools for grades ten through twelve, nine through twelve, or other upper grade levels, which are authorized to grant a high school diploma. Both regular, alternative, and extended day or adult education campuses are included. Seminary high schools are also included.

Normally buildings are one or two stories in height, though three- or four-story buildings may be present.

The area contains landscaping, walkways, and glades. Buildings are either long and rectangular or have long narrow wings to maximize availability of window access. The athletic area may be a gray signature of asphalt, with a larger area of grass for a soccer field. There are also separate baseball diamond/fields, football fields/stadiums, and track ovals.

Some schools will have a swimming pool and tennis courts. A parking lot with bus loading curb area may be visible. One may find a series of buses parked there. A senior high school lot is normally about 20 to 50 acres in size. However some private high schools may be below the 2.5-acre minimum mapping resolution and will be mapped as a one acre polygon at minimum in order to be included in the data base. If the school serves a narrower or wider range of grade levels, then the school is assigned the class that the facility typically resembles.

1265 Colleges and Universities

This category includes all public or private schools that offer courses at grade level 13 or higher, conferring either professional or academic degrees. Post-high school seminaries are also included.

Normally buildings are one to four stories in height, though higher storied buildings may be present. Buildings are either long and rectangular or have long narrow lateral wings to maximize availability of window access. Some buildings, such as libraries, auditoriums, and gymnasiums, may be rectangular in shape. Many buildings have architectural design in their shapes and features. Areas within the school may be well landscaped, containing walkways, glades, quads, squares, large lawn areas, greens, or malls. Athletic areas may be separate from the main school area. Asphalt areas for basketball may be present. There are also separate baseball fields, football stadiums, track ovals, tennis courts, and swimming pools. Small streets and parking areas may be located throughout the complex. Dormitories and on-campus fraternity/sorority houses are included. Off-campus university-owned housing and off-campus fraternity/sorority houses may be mapped as a multi-family or single-family residential category.

1266 Trade Schools

This category includes all schools which provide technical, vocational, occupational, or professional training (e.g. vocational schools, occupational training centers, police academies, secretarial schools, nursing academies, technical institutes, or art institutes).

These facilities are normally smaller than and may identify themselves as, a college or university. Most facilities will be smaller than a high school and without the athletic facilities normally associated with other schools. Buildings may be any size, but normally one to two stories in height, resembling office buildings. Some buildings may be long and narrow to maximize availability of window access. The

facility will have an adjacent parking area.

1270 MILITARY INSTALLATION

Areas of military installations and associated facilities administered by the United States Armed Forces or the California National Guard. Water bodies within a military installation are coded as 4400.

1271 Base (Built-Up Area)

This category includes all developed lands (except agriculture (1272), airfields (1273), and water (4400)) within a military installation. Includes bases, camps, armories, ordnance depots, and missile sites.

Built up area may contain office buildings, residential units, industrial areas, equipment storage facilities, administrative buildings, other support facilities, parking areas, landscaping, glades, walkways, and athletic facilities. Small areas of vacant land within this category are considered part of the built-up area. Some government contracted research or industrial facilities may be located within a military reserve. Collateral data is necessary to delineate the boundaries of the military reservations.

1272 Vacant Area

This category includes all large areas of undeveloped lands within a military installation.

Includes large areas of vacant land within the military installation boundary. Small areas of vacant land within the built-up base area are considered part of the base (1271). Also included in this category are agricultural areas within the military reservation. Collateral data is necessary to delineate the boundaries of the military reservations.

1273 Air Field

This category includes air fields and associated facilities within a military installation.

Includes the landing strip, tarmac, taxiways, aircraft storage areas, hangars, and repair areas. Vacant areas within the airfield complex are included. On the aerial photos the hangars appear as large square buildings, two to three stories in height with aircraft parked nearby, with direct access to the air strip and taxiways.

1274 Former Military Base (Built-Up Area)

This category includes all developed lands (except agriculture (1272), airfields (1273), and water (4400)) within a former military installation. Includes bases, camps, armories, ordnance depots, and missile sites.

Built up area may contain office buildings, residential units, industrial areas, equipment storage facilities,

administrative buildings, other support facilities, parking areas, landscaping, glades, walkways, and athletic facilities. Small areas of vacant land within this category are considered part of the built-up area. Some government contracted research or industrial facilities may be located within a military reserve. Collateral data is necessary to delineate the boundaries of the military reservations.

1275 Former Military Vacant Area

This category includes all large areas of undeveloped lands within a former military installation.

Includes large areas of vacant land within the military installation boundary. Small areas of vacant land within the built-up base area are considered part of the base (1271). Also included in this category are agricultural areas within the military reservation. Collateral data is necessary to delineate the boundaries of the military reservations.

1276 Former Military Air Field

This category includes airfields and associated facilities within a former military installation.

Includes the landing strip, tarmac, taxiways, aircraft storage areas, hangars, and repair areas. Vacant areas within the airfield complex are included. On the aerial photos the hangars appear as large square buildings, two to three stories in height with aircraft parked nearby, with direct access to the air strip and taxiways.

1300 INDUSTRIAL

Areas where manufacturing, assembly, processing, packaging, or storage of products takes place.

1310 LIGHT INDUSTRIAL

Design, assembly, finishing, packaging, and storage of products or materials which have been processed at least once. These activities are characterized as "clean", since they produce a relatively small amount of smoke or other effluents, noise, and dust. Includes associated facilities and parking.

1311 Manufacturing, Assembly, and Industrial Services

This category includes all types of light industrial activity except those associated with the motion picture industry. Associated areas used for open storage of heavy equipment are mapped as 1323.

Most light industrial manufacturing and assembly buildings appear as large square or rectangular structures, all located in an contiguous area usually zoned for such operations. Some buildings may be long and narrow; most buildings are one story and may have very high ceilings. On the aerial photo one

can note a series of evenly spaced air conditioning units or air turbines on the roof. Many newer industrial buildings will have a white roof photo signature. The buildings are usually located in the middle of the lot, though that is not an essential requirement. There will be parking areas surrounding the building for employee parking. There is also minimal to no landscaping. Some light industrial manufacturing establishments occur together in a business, corporate, or industrial park. Others may occur in an industrial or commercial park mixed with commercial uses or offices (see code 1500). Included in this category are wholesale lumber yards and lumber milling and cutting operations. Lumber operations are distinguishable on the photo by the many large stacks of wood, pallets, and trusses. Also included are breweries, wineries, and food processing facilities. Small extractive sand and gravel operations as part of a small brick making operation are included in this category unless the extractive (code 1331) area is large enough to map as a unit by itself. Metal reprocessing facilities and recycling centers are also included. Industrial facilities located within a military reserve are mapped as military (code 1271).

1312 Motion Picture and Television Studio Lots

This category includes motion picture company and television production studios as well lots or open areas used for outdoor sets. Also included are permanent remote lots used for production.

Various types of structures may appear on the lot. Offices would appear as long narrow buildings, possibly with wings. Sound stages may appear as very larger square or rectangular buildings. The buildings may appear in a series or in rows. The back lot areas may appear as non-descript open areas with various smaller structures and vegetation.

1313 Packing Houses and Grain Elevators

This category includes facilities used for the packing and storage of produce for shipment to markets or processing plants.

Packing houses and grain elevators are usually located adjacent to railway lines. They can occur in urban industrial areas, although they are normally located in rural agricultural areas. Packing houses are large, rectangular warehouse type buildings. Grain elevators consist of one to several adjacent, tall, cylindrical metallic structures. The elevators may be adjacent to associated buildings.

1314 Research and Development

This category includes industrial complexes where product, technology, or idea development and research is the primary function.

Normally research and development is part of a commercial or industrial business and is housed within structures of that primary use. However, some research and development takes place in separate areas or structures apart from or adjacent to its associated parent facility. Research and development facilities contain office buildings and laboratories. Some light industrial-type structures may also be present. Off-campus university field laboratories are included. Academic institutions, however, are not included in this class. Research and development facilities located within a military reserve are mapped as military (code 1271).

1320 HEAVY INDUSTRIAL

Industrial and manufacturing facilities of a large magnitude involving the processing of raw materials. It is considered relatively "dirty" since wastes such as smoke, slag, dust, and liquid effluent, as well as noise, are often generated. Includes associated facilities and parking areas.

1321 Manufacturing

This category includes large operations of manufacturing activities such as large brick, cement, and asphalt production facilities. This category does not include Petroleum Refining and Processing (see code 1322), Open Storage (see code 1323), Major Metal Processing (see code 1323), and Chemical Processing (see code 1325).

These facilities may appear as several large buildings or as a complex on a large lot, with parking. The layout of the complex buildings may not be orderly. The facility may have access to several spurs of a railroad system taking advantage of the transportation network. Raw materials may be stored in the open or in large silos. The area appears to be very "dirty" from the fallout of raw materials or industrial waste products.

Manufacturing plants are usually located in an area of other similar operations or with light industrial areas.

1322 Petroleum Refining and Processing

This category includes major oil refineries, as well as associated petrochemical plants.

Petroleum operation photo signatures have a "dirty" gray to black appearance over the entire facility. Large pipes, vats and storage tanks are compactly situated over the entire area. Typically there are acres of storage tanks situated in a matrix formation. Petroleum refining facilities are located adjacent to major harbor facilities, or may be located on the coast where tankers may unload their crude oil from offshore intake pipes. This category does not include oil well or exploration areas (see code

1332).

1323 Open Storage

This category includes wrecking yards, junk yards, storage of heavy equipment not related to maintenance, and other salvage and recycling operations. Also included are outdoor areas used for storage of light or heavy industrial products. This class does not include open storage of new cargo at harbor facilities (see code 1411).

The photo signature for wrecking and junk-yards appears as a lot containing many cars in high concentration lined up in columns or rows with dirt access "lanes" in between. Other junk-yards may appear as non-descript areas of large metallic material lying in an area in no particular order or arrangement. Open storage of light or heavy industrial products appear as large yards in an industrial area with a relatively neat organization of heavy equipment. Also included are non-commercial lots containing what appears to be abandoned equipment, usually stored in a disorderly fashion. Cargo storage areas located in railroad yards are coded as Railroad (code 1412).

1324 Major Metal Processing

This category includes all foundries, smelters, stamp mills, and other heavy metal manufacturing or processing plants, with the exception of recycling centers or wrecking yards.

The photo signature appears as an area, many acres in size, containing many square to rectangular or long narrow buildings, with air turbines or air conditioning units on the roofs. Situated within the area are numerous smoke stacks and pipes. The area is also tinged with a "dirty" gray color. Also included are associated "slag heaps".

1325 Chemical Processing

This category includes major chemical refining plants and their associated facilities.

Chemical processing plants may appear as office type buildings used for administrative purposes, with larger industrial type buildings, large pipes, and tanks for movement and storage of necessary liquids or gases.

1330 EXTRACTION

Areas whose use is devoted to the extraction of mineral and rock products. Includes associated mining area, facility structures, and parking areas.

1331 Mineral Extraction - Other Than Oil and Gas

This category includes surficial extraction of minerals and rock products, including sand, gravel, clay, diatomaceous earth, metals and other non-metals. Includes quarries, open pit mines, and borrow pits. Also included are surficial structures related to below ground mine activities. This class does not include oil and gas extraction (see code 1332).

Most quarries will appear as a giant hole dug in the earth, with steep-sided edges. On the top surface and down in the pit there will be little or no vegetation due to the disturbance of the ground by earth movers. Ponds of water may be located in the pit or on the upper ground surface. Tailing piles may be located nearby, adjacent to, or on the mining site. Sand and gravel operations are usually located in or near river floodplains. Sand and gravel pits may have the extracted material piled in the pit or adjacent to the pit on the upper ground surface, with storage bins and long linear conveyor belts crossing the piles. Borrow pits may appear only as small one- to 3-acre areas of graded land with little or no vegetation located near a highway or built up area. The borrow pit was extracted for fill dirt. Some short escarpments may be found at the edges of the borrow pit. Most underground mining operations have limited surface exposure. Some shaft or mining operation out-buildings may be located in a mappable cluster, with some adjacent tailings.

1332 Mineral Extraction - Oil and Gas

This category includes oil and gas extraction and associated surface storage facilities. Subsurface known or suspected reserves are not included. Offshore oil and gas extraction is not included.

Oil and gas extraction fields can be distinguished by the presence of a series of tall oil derrick towers or oil pumps. The derricks appear as a group of concentrated long shadows on the aerial photo. Some areas have only the oil pumps, without derricks, scattered within a field area. Some oil field pumps may be located in a built-up area. By itself, a pump is below mapping resolution, but when situated in a group, the area may be mappable. An oil field area appears on the aerial photo as an extensive network of roads and small clearings usually located on a hill or mountain slope. Most fields are identified on the basemap. Built-up uses take precedence over the mapping of pumps.

1340 WHOLESALING AND WAREHOUSING

1340 Wholesaling and Warehousing

This category includes storage, supply, or distribution warehousing or wholesale shipping centers other than those which are integral parts of airports, transportation centers, and harbor facilities.

The warehouse structures appear similar to light industrial manufacturing buildings in that most are large squares or rectangular in size and shape, with few or no air turbines or air conditioning units on the roof. The building is typically located near the middle of the lot, with very little employee parking. On the aerial photo one may be able to see long narrow truck trailers lining the edges at the loading docks. Other truck trailers may be parked within the lot. Usually there is little or no landscaping, and very little parking. Only large high volume operations may have larger employee parking areas. This category does not include Truck Terminals (1416). Open storage of heavy equipment is coded 1323.

1400 TRANSPORTATION, COMMUNICATION, AND UTILITIES

Major structures and facilities associated with forms of transportation, communication, and utilities.

1410 TRANSPORTATION

Areas devoted to major transportation, such as airports, freeways, roads, railways, and harbors facilities.

1411 Airports

This category includes all airports, air fields, and air strips, heliports, and their associated parking and storage facilities.

The airport area includes repair and storage hangars, aircraft parking areas, taxiways, and the vacant areas at the ends of and between runways. On the aerial photo the hangars will appear as large rectangular or square structures adjacent to the runway/taxiway and aircraft parking area. In major airports, passenger terminals and automobile parking areas are also included, as well as air freight facilities. Also included in this class are heliports and land associated with seaplane bases. Also included are car rental establishments located within the airport complex. Off-site car rental locations are mapped as modern strip development (code 1223). Vacant and agricultural areas within the airport boundary are coded 3100 and 2110 or 2120 respectively.

1412 Railroads

This category includes train terminals, stations, associated parking areas, roundhouses, repair and switching yards, and railbed rights-of-way, including spurs and sidings. Also included are cargo storage and transfer areas located within the railroad yards. The width of the rights-of-way must be at least half the width of a 2.5-acre square to be included.

Railroad beds appear on the aerial photo as a continuous dark, narrow line with an adjacent band of off-white on each side. The railroad beds appear very similar to minor roadway beds, except they are

narrower and are continuous for miles. Terminals and switching yards appear as an abrupt multi-branching of the line, becoming polygonal areas, rather than linear. One may be able to see the railroad cars on the photo. Spurs and sidings may be below resolution. They appear as two or three tracks branching off side by side next to the main track or as a branch of the track veering off in another direction. Railroad rights-of-way are normally below minimum mapping resolution, so only those areas meeting the minimum resolution are mapped. Major railroad stations will appear as a large facility with parking and a large building adjacent to the railroad tracks. The tracks may be under a large covering, or have covered platforms adjacent to each track.

1413 Freeways and Major Roads

This category includes freeways, interchanges, major roadways, and their adjacent rights-of-way. The delineations include the roadbed, landscaped areas, access routes, and associated adjacent drainage ways. Also included are rest areas, weigh stations, and toll booths.

All freeways are to be mapped, as well as major roadways that are at least half the width of a 2.5-acre square. Freeways appear as two to six lane roadways with adjacent landscaping and center divider, with interchanges, overpasses, and underpasses. The freeway lane signature is gray to white. Rest areas appear as landscaped areas with small structures (bathrooms and picnic overhangs) and parking areas. On the photo one may be able to see cars and large trucks parked. Normally there is a rest area located on each side of a freeway at the same location. There is an off-ramp and an on-ramp from the freeway to each rest area. Toll booth plazas appear as a sudden widening of the roadway into many lanes that run into a long, narrow covered area dissecting the roadway. On the other side of the booths, the lanes converge again to form the freeway lanes. Road cuts are mapped as vacant land (3100), not as part of the 1413.

1414 Park and Ride Lots

This category includes Cal Trans park and ride lots provided for commuter ridesharing, buspooling, vanpooling, and carpooling purposes.

Park and ride facilities appear similar to parking lots and are located near major freeways or highways. Some park and ride lots are located in retail center parking lots. Collateral data is necessary to map these facilities.

1415 Bus Terminals and Yards

This category includes areas used as bus terminal facilities, including bus storage and maintenance.

Major bus terminals and storage/maintenance yards appear as large parking areas for buses. On the aerial photo one may be able to see a number of buses parked side by side or one behind the other. School bus yards are also included. School buses will appear as yellow in color, with a white roof and, in some cases, large black numbers painted on top.

1416 Truck Terminals

This category includes areas used as truck or highway freight terminals, freight transfer, or large truck stops where there is a high level of truck activity.

Truck terminals and freight transfer structures will appear as small rectangular buildings with the large truck trailers parked all around at the loading docks. Additional trailers may be parked on the lot. There is not very much employee parking. Warehousing is not included in this category (1340). Large truck stops are located adjacent to freeways and contain services such as gas stations, restaurants, motels, and truck repair. On the aerial photo one can see a large truck trailer parking area, with trucks. Small truck stops are mapped as part of modern strip development (code 1223).

1417 Harbor Facilities

This category includes port and dock facilities and associated storage areas. Includes shipyards, dry-docks, locks, waterway control structures, buildings and associated parking areas. Marinas are included in Other Open Space and Recreation (see codes 1880 and 4300). Harbor-use in the adjacent water body are included in Water (code 4200).

Major harbor facilities are located at the ocean, within close proximity to or within a large metropolitan area. Numerous wide channels and "sea lanes" are available for ships to pass in, out and through the facility. There are numerous slips and berths for loading and unloading of cargo, as well as large areas for container or cargo storage. Other facilities include ship repair and ship building areas. There may also be tanks for storage of petroleum products not associated with a refinery. Other adjacent facilities, such as heavy or light industrial are mapped into their respective categories. All water associated with the harbor facilities is included in class 4200, Harbor Water Facilities.

1418 Navigation Aids

This category includes areas occupied by facilities necessary to aid navigation, such as lighthouses.

Lighthouses will appear on the coast at prominent points where sea navigation may be hazardous. There is usually an area set aside for the light itself, keepers quarters, other navigation and

communication antennas, as well as some landscaping. When viewed in stereo one may be able to discern the lighthouse tower. Other navigation aids such as beacons, horns, and communication antennae, and VORTACs may be below minimum mapping resolution.

1420 COMMUNICATION FACILITIES

1420 Communication Facilities

This category includes areas used for airwave communications, including radio, radar, television, telephone, and microwave facilities.

Most communication facilities are below minimum mapping resolution, unless many antennae towers and structures are located together. These facilities are normally made up of one or more antennae or towers, sometimes including one to a few small square or rectangular buildings. Radio towers occur as a set of 3 tall towers on a lot, whereas TV towers occur as one large, tall tower. Microwave towers are usually individual, shorter towers. Telephone central offices are normally enclosed in a one- or two-story, square or rectangular building in a built-up area.

1430 UTILITY FACILITIES

Areas which are used for the production and transmission of electricity, and the treatment or transportation of water, sewage, and fuels.

1431 Electrical Power Facilities

This category includes facilities engaged directly in the generation and distribution of electricity. Included are power generating stations (thermal, nuclear, hydroelectric, coal, steam, wind energy farms), substations, and transmission line rights-of-way. Transmission line rights-of-way are mapped if the width of the corridor is at least half the width of a 2.5-acre square. This class does not include administrative offices.

Electrical power plants appear similar to heavy industrial operations. The facility contains smoke or steam stacks with vents, piping, tanks, towers, and racks containing transformers and other electrical equipment. Several transmission line corridors converge at power plant sites. Substations appear as metal racks containing the transformers and other electrical equipment. They may be as small as 1/4 acre to as large as several acres. The racks are normally located near the center of the lot, with the ground surfaced in gravel. One to several transmission line corridors converge at the substation. The transmission line corridor appears as a linear swath of land traversing the landscape. The corridor may be located along the side of a street and be very narrow or located in vacant areas and be as wide

as 1/4 mile if the corridor contains several transmission line towers. On the aerial photo one may be able to see the individual tower areas as a white dot immediately surrounded by a small graded area. Leaning away from each dot one may be able to see the black shadow of the tower or power pole. One can follow these dots from tower to tower along the corridor, from substation to substation or power plant. Some corridors contain other uses such as nurseries, orchards, cropland, or pastures within the right-of-way. The other uses underlying a transmission line take precedence. If the underlying use is vacant, the electric transmission line corridor takes precedence. Only corridors that are above the minimum mapping resolution are mapped.

1432 Solid Waste Disposal Facilities

This category is used for active dumps and sanitary landfill operations, and their associated facilities.

Most landfills in southern California are located in old excavated gravel pits or in canyons. They will appear as large extents of graded area, or if located on a plain, will appear as an extensive graded mound. The pit or canyon may appear to be partially or significantly filled, with tractors or other heavy excavating equipment on its surface. These facilities are normally located away from areas of human habitation or areas of high human concentration or activity. Other uses overlying a closed, abandoned, or inactive landfill take precedence.

1433 Liquid Waste Disposal Facilities

This category includes sewage treatment and liquid waste treatment plants and associated spreading grounds, aeration fields, and water injection plants. Also included are associated facilities and parking areas.

The aerial photo signature will normally show about four circular tanks, each with a linear pipe forming a radius within the tank. Surrounding the tanks may be some small ponds, site office, and parking facilities.

1434 Water Storage Facilities

This category includes most small water reservoirs and water tanks used for domestic water supply. Included are any associated facilities and dams.

The reservoirs include all covered water storage facilities and water tanks. Open water bodies used for water storage are included if they are below 5 acres in area, otherwise they are mapped as Water (see code 4100). Water tanks appear on the photo as a small round light colored structure. Covered reservoirs may be circular, oval, or rectangular in shape. Dams associated with water storage

reservoirs are included. Dams associated with flood control are mapped as code 1437.

1435 Natural Gas and Petroleum Facilities

This category includes major natural gas and petroleum distribution systems. Included are pumping facilities, and storage facilities not associated with a refinery. Not included are underground storage facilities.

Pipeline rights-of-way at least half the width of a 2.5-acre square are mapped. Most of the facilities require collateral data in order to be mapped. Large tank farms not associate with a refinery are included.

1436 Water Transfer Facilities

This category includes major above-ground water distribution channels, aqueducts, water treatment, filtration (non-sewage), reclamation (non-sewage), and pumping facilities.

Examples of water transfer are the California Aqueduct and Coachella Canal which appear on the aerial photo as a linear open water, concrete lined canal; and the Los Angeles Aqueduct which appears as a linear, large, above-ground pipeline. Most of the facilities can be identified on the collateral data. This category does not include improved flood channels and structures (see code 1437).

1437 Improved Flood Waterways and Structures

This category includes flood control channels and dams, detention ponds, percolation basins, and debris dams.

Most improved flood control channels are channelized and/or lined with concrete. The photo signature shows a white to off-white color representing the concrete lining. Percolation basins are a series of basins adjacent to a flood control channel where flood water is allowed to recharge the groundwater. Debris dams are normally earthen, but may contain a concrete spillway. They are located at the mouth of canyons or downstream of the canyon, and contain a vegetated, though dry to intermittent back pond. Dams associated with water storage are mapped as code 1434. The improved flood waterways and structures are usually identified on the collateral data.

1438 Mixed Wind Energy Generation and Percolation Basin

This category is used where electrical power facilities such as wind energy generation farms and improved flood structures, such as percolation basins occur together in a double use fashion. The

wind energy towers are located on the levees between the basins.

1440 MAINTENANCE YARDS

1440 Maintenance Yards

This category includes maintenance facilities owned and operated by a major utility or government agency. Included are repair and storage yards.

Maintenance yards normally contain an L-shaped or long, narrow rectangular, single story building. The lot contains a number of parked company vehicles and heavy equipment or machinery. Also stored on the lot is other maintenance or replacement equipment. Construction materials may also be stored on the lot. Collateral data and field verification are required for mapping.

1450 MIXED TRANSPORTATION

1450 Mixed Transportation

This category includes areas where more than one transportation use is present and neither dominates.

This class may be used when a highway occurs adjacent to a railroad and together the width of the right-of-way is above the 2.5-acre minimum mapping resolution. Each individual right-of-way may be below resolution. Where a 1450 is crossed by a freeway (1413), the freeway takes precedence in the overlap area.

1460 MIXED TRANSPORTATION AND UTILITY

1460 Mixed Transportation and Utility

This category includes areas where a transportation and utility right-of-way occur together or side by side and neither use dominates.

This class may be used when a highway or railroad occurs adjacent to a transmission line corridor or an improved flood control channel. Together the combined right-of-way is above the 2.5-acre minimum mapping resolution. Each individual right-of-way may be below resolution.

1500 MIXED COMMERCIAL AND INDUSTRIAL

1500 Mixed Commercial and Industrial

This category includes both commercial and industrial land uses occurring together, or in close

proximity. Each individual land use unit is below the 2.5-acre minimum mapping resolution and neither use dominates.

Typically this class occurs at some "industrial", "commercial" or "business" parks that contain a mixture of light industrial use, offices, warehouse/distribution use, retailing, and personal services. These complexes usually contain one or more buildings rectangular in shape, with minimal landscaping. Each building is similar to a typical light industrial building. Buildings composed predominantly of retail businesses are coded 1223, and those composed predominantly of light industrial are coded 1311. This class is also used in areas not located in a complex, but the industrial and commercial classes do follow the definition above. Also included are areas where a combination of commercial and industrial use occur within the same building.

1600 MIXED URBAN

1600 Mixed Urban

This category includes built-up areas where there is a mixture of uses occurring within a specific area, and no one class dominates.

In these areas no one class can be mapped above the 2.5-acre minimum mapping resolution. This class typically occurs in smaller towns or villages where there are various uses in a small area. It may also occur in older areas where consistent zoning was not in force at the time of construction of structures. Also included are areas where a mixture of uses occur within the same building. For example, an older commercial strip may contain adjacent buildings where commercial use occurs on the first floor and, in all buildings, either residential or offices occur in the upper floors.

1700 UNDER CONSTRUCTION

1700 Under Construction

This category includes facilities that were under construction at the time aerial photography was taken, or at the time of field verification. Structure use and/or extent cannot be or is difficult to determine.

The aerial photo signature shows a newly graded area with no vegetation. Pad platforms or foundations may be visible. Partly constructed structures may also be visible. If the use and its extent can be determined, then the polygon is categorized with its known use.

Developed open areas within urban settings, and urban and non-urban open areas developed for recreational activities.

1810 Golf Courses

This category includes public and private courses including driving ranges, greens, fairways, links, hazards, buildings, and parking areas.

Golf courses appear on the photo as areas containing long green grass areas lined with trees. The greens have hazard ponds and white sand traps adjacent to them. There can be nine or eighteen fairways/greens. Typically there is a main building serving as the clubhouse/office/restaurant. Driving ranges not associated with a golf course are mapped as Other Open Space and Recreation (code 1880). Most golf courses are identified on the collateral data. Residential areas within golf courses are mapped separately as their residential type. Water bodies that are greater than 2.5 acres are mapped as 4100.

1820 Local Parks and Recreation

This category includes neighborhood, city, town, or community parks, and sports fields, and their associated parking facilities. Beach parks are not included (see code 1870).

Local parks are typically small, up to several city blocks in size, but basically serve the immediately surrounding community. The photo signature shows a green grass area with trees scattered throughout, though trees are not a requirement of this class. The park may contain limited sports facilities. Parking is usually on the street, though there may be one or more parking lots. The sports fields are usually softball fields, basketball courts, tennis courts, or soccer fields, though some parks also contain swimming pools. Some parks also contain a recreational building or multi-purpose building, with offices and indoor sports facilities. Private parks serving a development or subdivision are included. Most parks are identified from collateral sources. In some cities, school athletic field/playground areas are also considered parks, therefore these areas were mapped as parks.

1830 Regional Parks and Recreation

This category includes developed land within parks designed to serve a regional area. All facilities within the park, such as campgrounds, marinas, or boat launching facilities, are included in this class.

Regional parks are typically large, and may include undeveloped areas. The undeveloped portions of parks are mapped as vacant (see code 3100). The photo signature shows green grass areas, as well as

tree-covered areas. The park may have one or more roads winding through it, depending on the size of the park. The park usually contains a number of sports facilities, such as basketball courts, tennis courts, softball fields, soccer fields, and swimming facilities. Water bodies within regional parks that are above mapping resolution are coded 4100. Beach parks are not included (see code 1870). Where multiple uses occur within a regional park, for example golf course, agriculture, flood control, etc., the use other than Regional Park takes precedence. Most regional parks are identified on collateral sources.

1840 Cemeteries

This category includes public and private cemeteries, memorial parks, mausoleums, and other burial grounds. Included are associated facilities and parking areas.

Cemeteries appear on the photo as green grass areas, similar to local parks. Cemeteries, however, contain roads configured as a grid network or with a center oval. The interpreter may be able to see subtle lineation representing the tombstones, plaques, and flowers at each grave. One or more buildings are found on the lot which may include a mortuary, chapel, office, or crematory. A line of cars may be seen on the photo if a funeral was in progress at the time of exposure.

1850 Wildlife Preserves and Sanctuaries

This category includes public and private facilities, and developed areas devoted to the preservation of wildlife species and habitats. This class includes such uses as zoos, wild animal parks, duck ponds, exotic animal farms, etc.

Zoos appear as large areas with many buildings and much vegetation in a confined area, with numerous walkways. A large parking lot is adjacent to the facility. Other wild animal facilities are typically located outside the urban area in canyons and are not open to the general public. Most wildlife preserves and sanctuaries will be identified on collateral data. Undeveloped areas within national and state preserves and sanctuaries are mapped as 3100.

1860 Specimen Gardens and Arboreta

This category includes botanical gardens or arboreta devoted to preserving living specimens of vegetation for scientific or cultural purposes.

These facilities are identified on collateral data. The photo signature will show a well manicured, highly vegetated area, with numerous walkways, buildings, and greenhouses, with an adjacent parking area. Arboreta associated with colleges or universities are mapped as 1860.

1870 Beach Parks

This category includes all public and private beach parks. The facilities include bathhouses, barbecue pits, parking areas, sports areas, as well as the beach area.

Beach parks are identified on the collateral data. The aerial photo signature shows a white to tan color for the sand area, and a gray signature for parking areas. Some buildings may be located adjacent to the parking lots.

1880 Other Open Space and Recreation

This category includes developed portions of public and private recreational facilities that are not described in the other open space and recreational categories above. Included are camps, campgrounds (unless within a regional park (1830)), outdoor shooting ranges, ski areas, marinas, and driving ranges not associated with a golf course. Also included are maintained grass areas not used or designated as a local park.

Most of these facilities are identified on the collateral data. Marinas are located adjacent to harbors, and contain small piers, with numerous boats. The water portion of a marina, where the boats are moored, is mapped in the Water category (see code 4300). Ski areas are typically located in mountains above 5000 feet. The area contains a series of wide linear clearings that may braid with each other. A series of towers representing the chairlift system can be seen on the aerial photo. Campgrounds appear as an area with narrow roads circling within, with offshoot segments representing each campsite area. Campgrounds are also identified on collateral sources.

1900 URBAN VACANT

1900 Urban Vacant

This category includes open undeveloped land within urban areas that are not associated with a particular facility.

Typically these areas are vacant lots. They normally contain no structures but may have such improvements as curbs and sidewalks. The land may be in a graded condition showing little or no vegetation, or may be in a successional vegetated state, with numerous shrubs and grasses, in a non-uniform, unkept condition. Not included in this class are terraced erosion control embankments (see 3100).

2000 AGRICULTURE

Agriculture includes land used primarily for the production of food, fiber, and livestock. Included in these classes are associated structures and facilities.

2100 CROPLAND AND IMPROVED PASTURE LAND

Included here are active field and row cropland areas and improved pasture lands. The croplands include cultivated, in crop, harvested, fallow or temporarily idle land. The improved pasture land may be in pasture year-around or be in the cropland seasonal rotation. Improved pasture land does not include rangeland (see code 3100).

2110 Irrigated Cropland and Improved Pasture Land

This category includes all irrigated field and row cropland areas, and irrigated improved pasture land.

The majority of row crops in southern California is irrigated. The photo signature for active cropland will show one of several signatures. If the land is in field crop, the signature will show a uniform, smooth texture area, with a green color. Land that is in row crop will appear similar to field crop, except the individual rows can be distinguished as narrow parallel lineations. Land that is being made ready for crop or has been harvested will appear as a uniform, smooth texture of off-white to tan color representing the just graded or plowed field. Fallow fields will appear similar to vacant lots or disturbed vacant land. The area will appear unkept, with a non-uniform texture representing a mixture of shrubs and grasses in a successional state. Fallow land will occur in close proximity to in-crop areas. The improved pasture land photo signature may appear similar to the cropland signature. Most improved pasture lands are mapped as non-irrigated (2120). In many cases post-harvest field crop, row crop, or fallow area will be used for pasture of livestock. Cropland and improved pastures may occur within electrical transmission line rights-of-way.

2120 Non-Irrigated Cropland and Improved Pasture Land

This category includes all non-irrigated cropland, including dry-farmed field crops.

Most non-irrigated cropland is represented by dry-farmed field crops such as peas, beans, barley, oats, and hay. The photo signature for field crop will show a dull green to mottled brown color with smooth, uniform texture. Furrows or plow marks may also be visible. Dry farmed areas may appear very similar to natural grass vegetation. Land that is being made ready for crop or has been harvested will appear as a uniform, smooth texture of off-white to tan color representing the just graded or plowed field. Fallow fields will appear similar to vacant lots or disturbed vacant land. The area will appear unkempt, with a non-uniform texture representing a mixture of shrubs and grasses in a

successional state. Fallow land will occur in close proximity to in-crop areas.

2200 ORCHARDS AND VINEYARDS

2200 Orchards and Vineyards

This category includes commercially productive tree, bush, and vine crops.

Orchards include fruit and nut trees, and bush crops. The photo signature for citrus orchards appear as dark green, coarse textured areas, where the individual trees are distinguishable. The trees are aligned in a matrix form, with crowns appearing to abut each other. Nut and other fruit trees are similar, however, the color will be a lighter shade of green. The trees are aligned in a matrix form, with crowns abutting each other. Bush crops are similar to orchards, however, they may be configured in rows rather than a matrix, and are much shorter in height. The photo signature for vineyards will appear as dark green, coarse-textured, thin linear rows that, when measured, will be approximately five to ten feet apart. The height of vineyards is shorter than orchards. The orchard and vineyard areas will be neat and uniform. Orchard areas typically are formed as square plots of land, whereas vineyard plots typically form two sections on a similar-sized plot of land. In many cases orchards occur within electrical transmission line rights-of way. It is important to use stereo viewing, to avoid confusing vineyards with row crops.

2300 NURSERIES

2300 Nurseries

This category includes land managed for the production of ornamental trees, plants and flowers, vegetable seedlings, seed farms, sod farms, and wholesale greenhouses.

Nurseries typically appear similar to row crops in configuration. The photo signature, however, reveals that it is an area of non-uniformity, where a few rows appear similar, then the next few rows are of a different type of plant, and so on. Trees may occur in some rows, then plants in the next section. Greenhouses or hot houses may also occur in some row areas, or in separate areas altogether. Greenhouses typically appear as long narrow structures abutting each other with steeply pitched roofs.
Together the roofs give an accordion effect.

In many cases nurseries occur within electrical transmission line rights-of-way. Also included in this

category are Christmas tree farms, which appear on the photo as groves with uneven spacing, smaller crown cover, and open space between the trees. On the aerial photo, sod farms appear similar to pasture or field crop; therefore, some field verification is necessary. Abandoned greenhouse structures are mapped as 2300.

2400 DAIRY AND INTENSIVE LIVESTOCK, AND ASSOCIATED FACILITIES

2400 Dairy and Intensive Livestock, and Associated Facilities

This category includes large, specialized livestock and other specialty farms. These areas have a high concentration of animal population in a relatively small area. This class includes beef cattle feed lots, dairies, hog farms, and goat farms.

Livestock feedlots and dairies appear similar in that both contain a series of small fenced areas with a very high concentration of animals. Dairies contain simple rectangular shade structures that are evenly and widely spaced over the area. Structures for protecting stored hay bales may be present. Dairies also contain structures used for milking.

Both feedlot and dairies contain fenced areas with a very dark to black photo signature representing dung piles. Large fertilizer mounds associated with dairies are mapped as 2600. Pasture and field crop adjacent to and associated with dairies are mapped as 2110. Abandoned dairy structures are mapped as 2400.

2500 POULTRY OPERATIONS

2500 Poultry Operations

This category includes poultry operations such as chicken, turkey, and egg farms.

Poultry farms typically contain a series of long, narrow enclosed structures in a parallel, side-by-side configuration. The photo signature shows each structure as having a white pitched roof, typically with air conditioning units. Grain feed storage structures may be located at the ends of the building. One to ten structures may occur in each group. Major poultry manure spreading grounds are coded 2600.

2600 OTHER AGRICULTURE

2600 Other Agriculture

This category includes other miscellaneous agricultural facilities not described in the agricultural categories above. These facilities include storage facilities, dairy fertilizer piles, poultry manure spreading grounds, hydroponic farms, fish hatcheries, apiaries, and worm farms. Also included are backyard lots of mixed agricultural/non-agricultural use that meet the MMU.

Storage facilities can include isolated barns, or other structures located in, or adjacent to an agricultural area. Also included are small plots of land where heavy equipment or machinery is stored within the agricultural field area. Fish hatcheries may be identified on the basemap or on the collateral maps. Typically they appear as a series of small square or rectangular ponds adjacent to several small buildings. Track ovals not associated with a horse ranch are coded 2600. Backyard agriculture may include improved pastures, barns, and/or corrals. These areas are mapped as part of the residential class if the land use is less than 2.5 acres in size.

2700 HORSE RANCHES

2700 Horse Ranches

This category includes commercial and non-commercial horse ranches, stables, tracks, barns, and corral areas, and improved pastureland. The 2700 class also includes backyard horse facilities, i.e. track ovals, walking rings, stables, barns, etc., that meet the MMU. Horse racing track facilities are mapped as Commercial Recreation (code 1232).

Stables appear as one or more long, narrow buildings within a farm complex, adjacent to pastures (irrigated pastures are coded as 2110). Horse tracks are large dirt oval tracks located at the horse ranches. Track ovals not associated with a horse ranch are coded 2600. Corral areas, included horse corrals associated with residential areas, are coded 2700. Improved pasture areas are fenced, containing water troughs, and possibly shade structures or enclosures. Improved pastures differ from fenced rangeland in that pasture contains smaller fenced areas, typically with individual enclosures of less than one hundred acres. Horse ranches may also occur within electrical transmission line rights-of-way.

3000 VACANT

Vacant areas include land that has not been built-up with man-made structures, and contains no agriculture or

waterbody. The area is open, containing natural or disturbed natural vegetation. Rangeland is included in this category. Areas containing abandoned structures are mapped as their previous use.

3100 Vacant Undifferentiated

This category represents most occurrences of vacant land.

This class does not include vacant lots in urbanized areas (see code 1900), although terraced erosion control embankments are included. Also included in this category are road cuts. Undeveloped areas of parks are also included. Most vacant land is in a natural state, containing tree, brush/shrub, and/or grassland vegetation. No or few significant structures or improvements are present. Rangeland may be open land or fenced over large areas. Rangeland vegetation may be no different than open vacant land, or may contain grassland for grazing livestock. Eucalyptus groves are also included.

3200 Abandoned Orchards and Vineyards

This category includes orchards and vineyards, formerly productive, now abandoned and not in commercial production.

Abandoned orchards and vineyards may contain successional or weedy vegetation between the rows. The photo signature may show and the field check may verify an unkept condition. Many trees or vine plants may be dead, or totally removed. If a significant number of trees remain on the lot, then the polygon is coded 3200. If most trees have been removed, then the polygon is mapped as Urban Vacant (code 1900) or Vacant Undifferentiated (code 3100).

3300 Vacant With Limited Improvements

This category includes areas where streets have been laid in a subdivision pattern, but no further building or improvements have occurred over time.

Typically, the photo will show a network of streets, dirt or paved, but with no structures. The lots will be vacant, with natural vegetation.

3400 Beaches (Vacant)

This category is used for vacant coastal beach areas not associated with a national, state, county, or municipal beach park.

The photo shows a white to tan signature of the sand area. The collateral data does not show these areas to be beach parks.

4000 WATER

Water includes open water bodies which are greater than 2.5 acres in size.

4100 Water, Undifferentiated

This category includes all open water bodies greater than 2.5 acres in area not associated with water storage; and all water bodies associated with water storage that are greater than 5 acres in size. Included in this class are oceans, lakes, reservoirs, golf course ponds, rivers, estuaries, and channels. The water must occur perennially.

Water body delineations follow those depicted on the 7.5 minute U.S.G.S. topographic quadrangles, unless the configuration of the water body has changed significantly. Water bodies at low water levels are mapped at their normal levels to account for drought years. The photo signature for water is blue to dark blue.

4200 Harbor Water Facilities

This category includes the water portion of harbor facilities. These include the slips and berths where the ships load and unload, the shipping channels, and outer harbor area within the outer jetty.

4300 Marina Water Facilities

This category includes the water portion of marina facilities composed primarily of the boat mooring areas. The aerial photo will show an area of buoys or anchorages where the small pleasure boats moor or "park".

4400 Water Within a Military Installation

This category includes all water bodies within a Military Installation of 2.5 acres or larger in size.

4500 Area of Inundation (High Water)

This category includes the areas of water inundation. This occurs at the Salton Sea and includes the area from the basemap's designated shoreline to the 1990 shoreline as shown on the aerial photo. This situation also occurs at Lake Skinner where the 1990 shoreline is greater than the basemap shoreline.

9999 No Photo Coverage

Areas in which no photo coverage was available for land use mapping in the study. Lack of coverage

was usually due to air space restrictions near military reservations.

Appendix G

SCAG Demographic Profile of the City of Hemet

SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS
50 YEARS

Profile of the City of Hemet

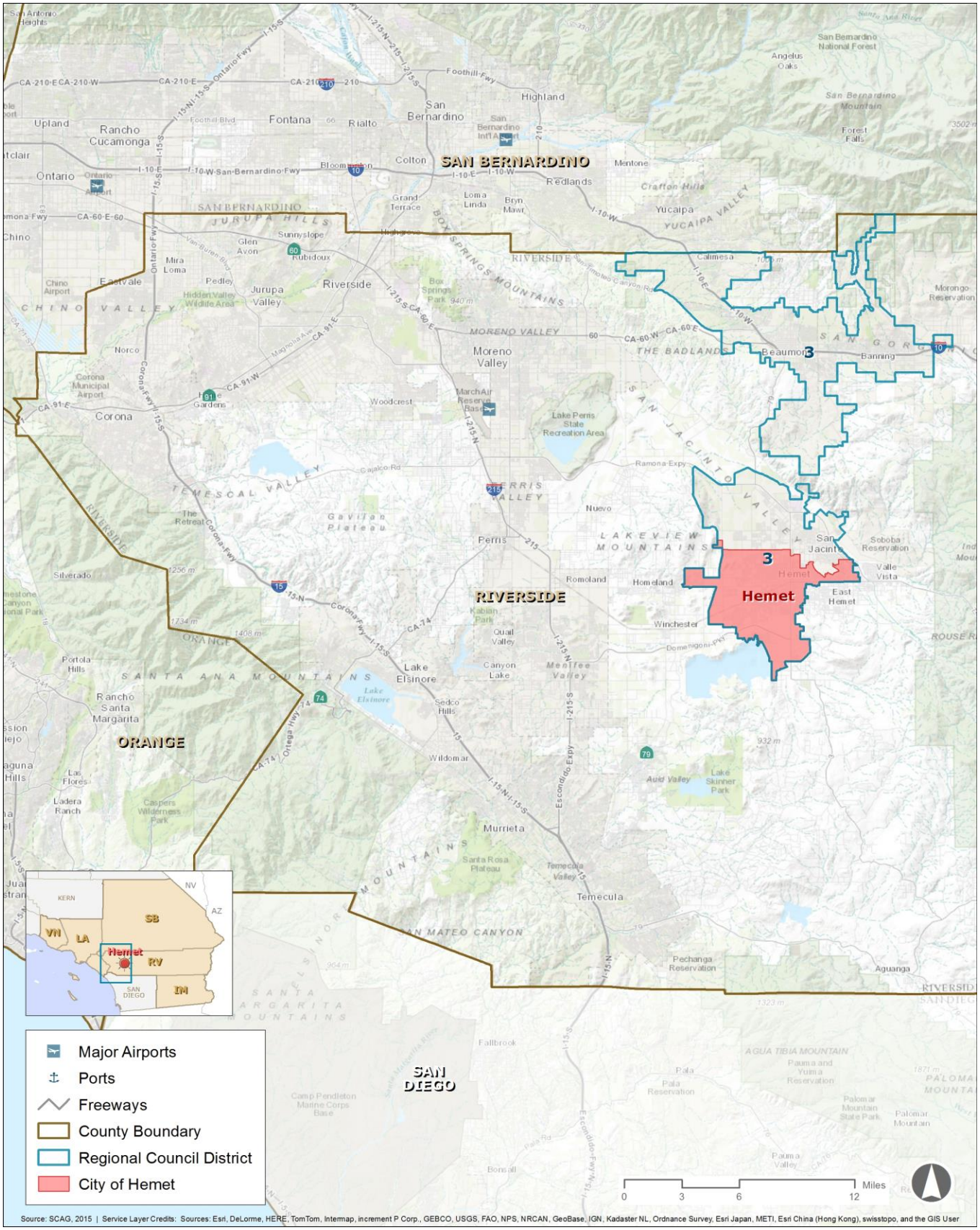
Southern California Association of Governments' (SCAG) Regional Council includes 69 districts which represent 191 cities in the SCAG region.

SCAG Regional Council District 3 includes Banning, Beaumont, Calimesa, and Hemet
Represented by: Hon. Jim Hyatt

LOCAL PROFILES REPORT 2015

This profile report was prepared by the Southern California Association of Governments and shared with the City of Hemet. SCAG provides local governments with a variety of benefits and services including, for example, data and information, GIS training, planning and technical assistance, and sustainability planning grants.

May 2015
Southern California Association of Governments



Source: 2012 SCAG city boundary data, which is provided by the county Local Agency Formation Commissions.

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I. Introduction

The purpose of this report is to provide current information and data for the City of Hemet for planning and outreach efforts. Information on population, housing, transportation, employment, retail sales, and education can be utilized by the city to make informed planning decisions. The profile provides a portrait of the city and its changes since 2000, using average figures for Riverside County as a comparative baseline. In addition, the most current data available for the region is also included in the Statistical Summary (page 3). This profile demonstrates the current trends occurring in the City of Hemet.

The Southern California Association of Governments (SCAG) is the largest Metropolitan Planning Organization (MPO) in the nation. The SCAG region includes six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura) and 191 cities. As the designated MPO, SCAG is mandated by federal law to research and develop a Regional Transportation Plan (RTP), which incorporates a Sustainable Communities Strategy (SCS) per California state law. SCAG is currently undertaking a variety of planning and policy initiatives to foster a more sustainable Southern California.

In 2008, SCAG initiated the Local Profiles Project as a part of a larger initiative to provide a variety of services to its member cities and counties. Through extensive input from member jurisdictions, the inaugural Local Profiles Reports were released at the General Assembly in May 2009. The Profiles have been updated every two years.

Local Profiles provide basic information about each member jurisdiction including, but not limited to, the following:

- How much growth in population has taken place since 2000?
- Has the local jurisdiction been growing faster or slower than the county or regional average?
- Have there been more or fewer school-age children?
- Have homeownership rates been increasing or decreasing?
- How and where do residents travel to work?
- How has the local economy been changing in terms of employment share by sectors?
- Have the local retail sales revenues recovered to pre-recession levels?

Answers to questions such as these provide a snapshot of the dynamic changes affecting each local jurisdiction.

Factors Affecting Local Changes Reflected in the 2015 Report

Overall, member jurisdictions since 2000 were impacted by a variety of factors at the national, regional, and local levels. For example, the vast majority of member jurisdictions included in the 2015 Local Profiles reflect the national demographic trends toward an older and a more diverse population. Evidence of the slow process towards economic recovery is also apparent through gradual increases in employment, retail sales, building permits, and home prices. Work destinations and commute times correlate with regional development patterns and the geographical location of local jurisdictions, particularly in relation to the regional transportation system.

Uses of the Local Profiles

Following release at the SCAG General Assembly, the Local Profiles are posted on the SCAG website and are used for a variety of purposes including, but not limited to, the following:

- Data and communication resources for elected officials, businesses, and residents
- Community planning and outreach
- Economic development
- Visioning initiatives
- Grant application support
- Performance monitoring

The primary user groups of the Profiles include member jurisdictions and state and federal legislative delegates of Southern California. This profile report is a SCAG member benefit and the use of the data contained within this report is voluntary.

Report Organization

This profile report has three sections. The first section presents a Statistical Summary for the City of Hemet. The second section provides detailed information organized by subject areas and includes brief highlights on the impacts of the recent economic recession and recovery at the regional level. The third section, Methodology, describes technical considerations related to data definitions, measurement, and data sources.

2014 STATISTICAL SUMMARY

Category	Hemet	Riverside County	Hemet relative to Riverside County*	SCAG Region
2014 Total Population	81,537	2,279,967	[3.6%]	18,645,437
2014 Median Age (Years)	38.1	34.2	3.9	35.5
2014 Hispanic	39.8%	47.4%	-7.6%	46.8%
2014 Non-Hispanic White	46.5%	37.3%	9.2%	31.8%
2014 Non-Hispanic Asian	3.2%	6.3%	-3.1%	12.4%
2014 Non-Hispanic Black	6.7%	5.9%	0.8%	6.3%
2014 Non-Hispanic American Indian	0.7%	0.5%	0.2%	0.3%
2014 All Other Non-Hispanic	3.0%	2.6%	.4%	2.5%
2014 Number of Households	30,437	700,413	[4.3%]	6,029,326
2014 Average Household Size	2.7	3.2	-0.5	3.1
2014 Median Household Income ($)	31,890	52,648	-20,758	56,737
2014 Number of Housing Units	35,710	817,008	[4.4%]	6,524,730
2014 Homeownership Rate	62.2%	54.5%	7.7%	54.5%
2014 Median Existing Home Sales Price ($)	180,000	290,000	-110,000	426,000
2013 - 2014 Median Home Sales Price Change	13.4%	12%	1.4%	10.1%
2014 Drive Alone to Work	82.1%	81.9%	0.2%	78.2%
2014 Mean Travel Time to Work (minutes)	34	34.5	-0.5	31.7
2013 Number of Jobs	22,331	654,436	[3.4%]	7,660,489
2012 - 2013 Total Jobs Change	1,347	37,749	[3.6%]	231,953
2013 Average Salary per Job ($)	32,010	37,827	-5,817	48,213
2014 K-12 Public School Student Enrollment	13,090	425,442	3.1%	3,058,957

Sources: U.S. Census Bureau American Community Survey, 2014; Nielsen Co.; California Department of Finance E-5, May 2014; MDA Data Quick; California Department of Education; and SCAG

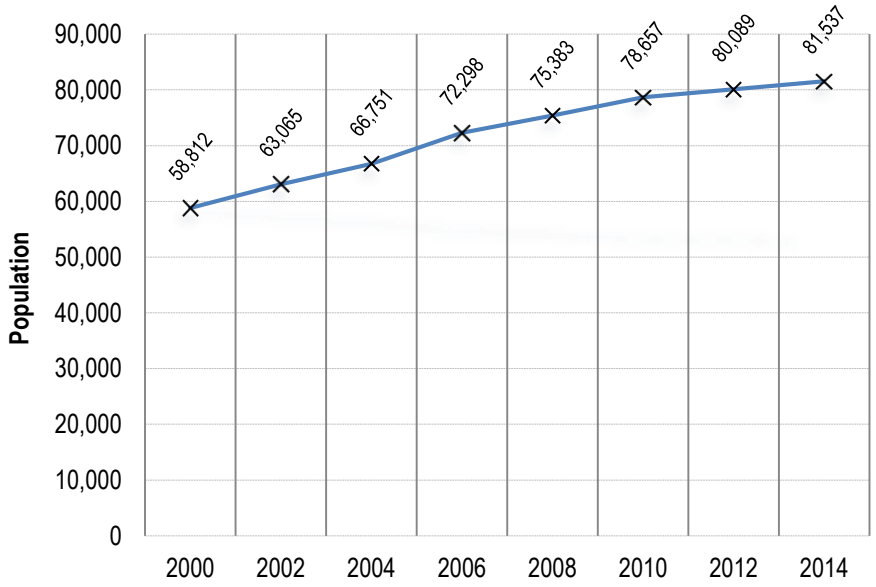
* Numbers with [ ] represent Hemet's share of Riverside County. The other numbers represent the difference between Hemet and Riverside County.

Mapped jurisdictional boundaries are as of July 1, 2012 and are for visual purposes only. Report data, however, are updated according to their respective sources.

II. Population

Population Growth

Population: 2000 - 2014

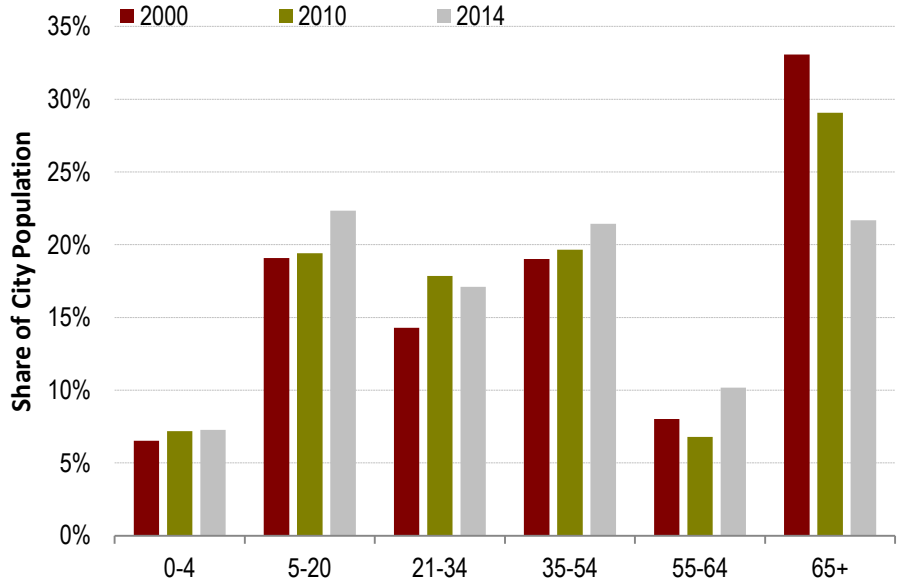


Source: California Department of Finance, E-5, 2014

- Between 2000 and 2014, the total population of the City of Hemet increased by 22,725 to 81,537 in 2014.
- During this 14-year period, the city's population growth rate of 38.6 percent was lower than the Riverside County rate of 47.5 percent.
- 3.6% of the total population of Riverside County is in the City of Hemet.

Population by Age

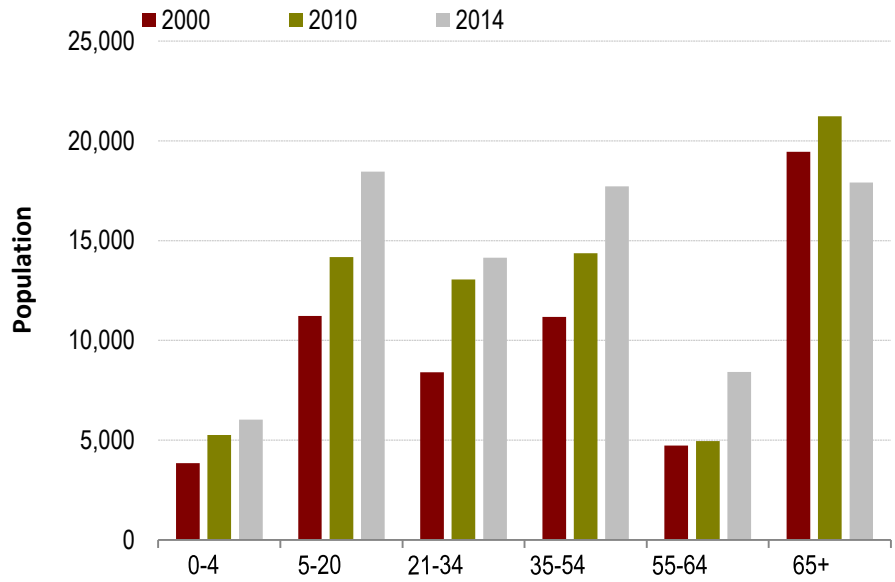
Population Share by Age: 2000, 2010, and 2014



Sources: 2000 and 2010 U.S. Decennial Census; Nielsen Co., 2014

- Between 2000 and 2014, the age group 5-20 experienced the largest increase in share, growing from 19.1 to 22.3 percent.
- The age group that experienced the greatest decline, by share, was age group 65+, decreasing from 33.1 to 21.7 percent.

Population by Age: 2000, 2010, and 2014

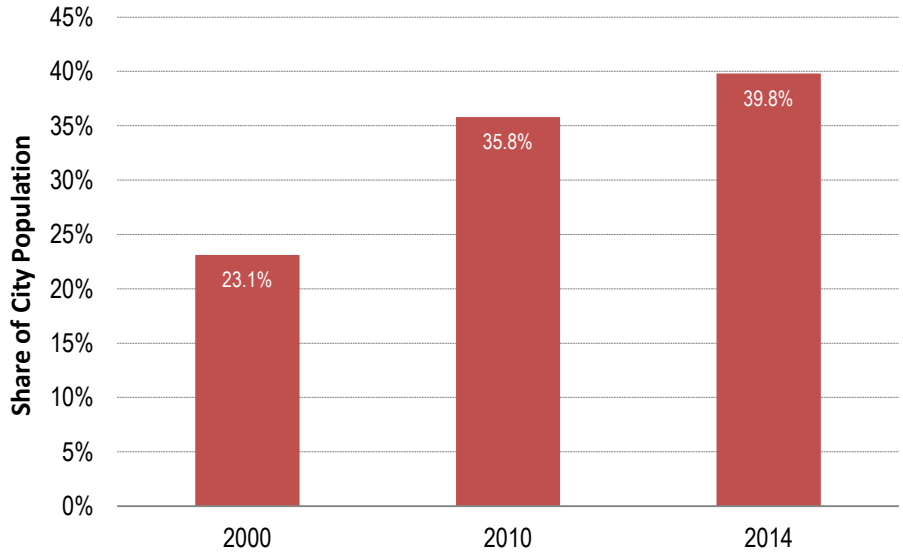


Sources: 2000 and 2010 U.S. Decennial Census; Nielsen Co., 2014

- The age group 5-20 added the most population, with an increase of 7,244 people between 2000 and 2014.

Population by Race/Ethnicity

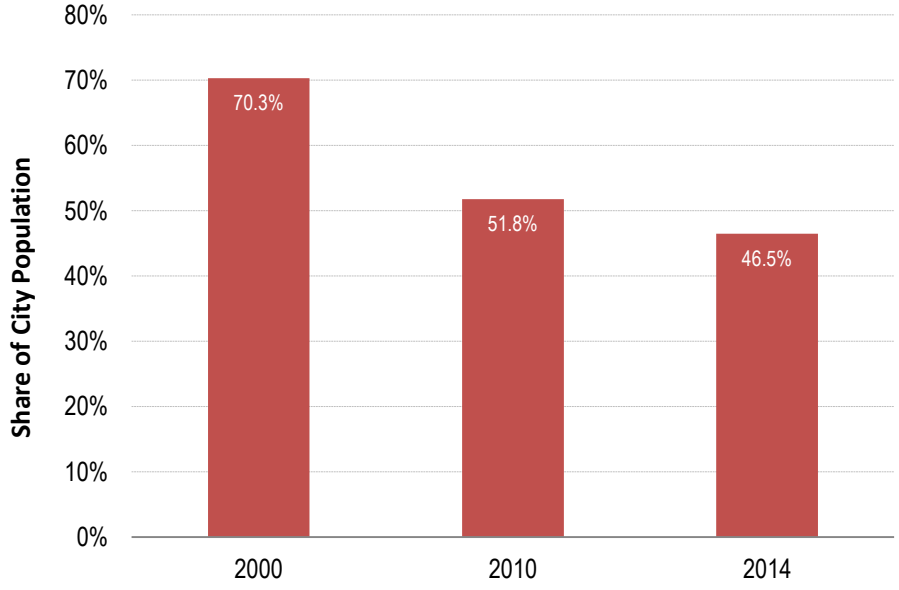
Hispanic or Latino of Any Race: 2000, 2010, and 2014



Sources: 2000 and 2010 U.S. Decennial Census; Nielsen Co., 2014

- Between 2000 and 2014, the share of Hispanic population in the city increased from 23.1 percent to 39.8 percent.

Non-Hispanic White: 2000, 2010, and 2014

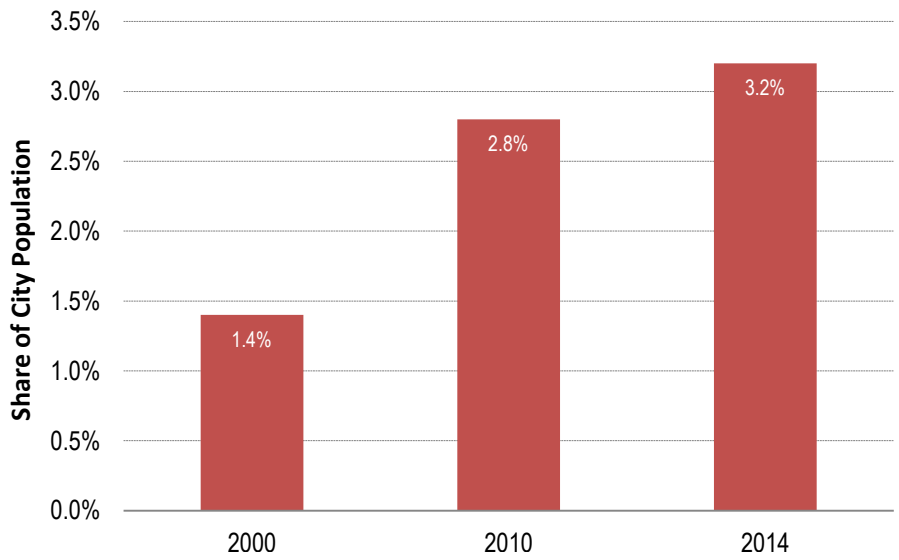


Sources: 2000 and 2010 U.S. Decennial Census; Nielsen Co., 2014

- Between 2000 and 2014, the share of Non-Hispanic White population in the city decreased from 70.3 percent to 46.5 percent.

- Please refer to the Methodology section for definitions of the racial/ethnic categories.

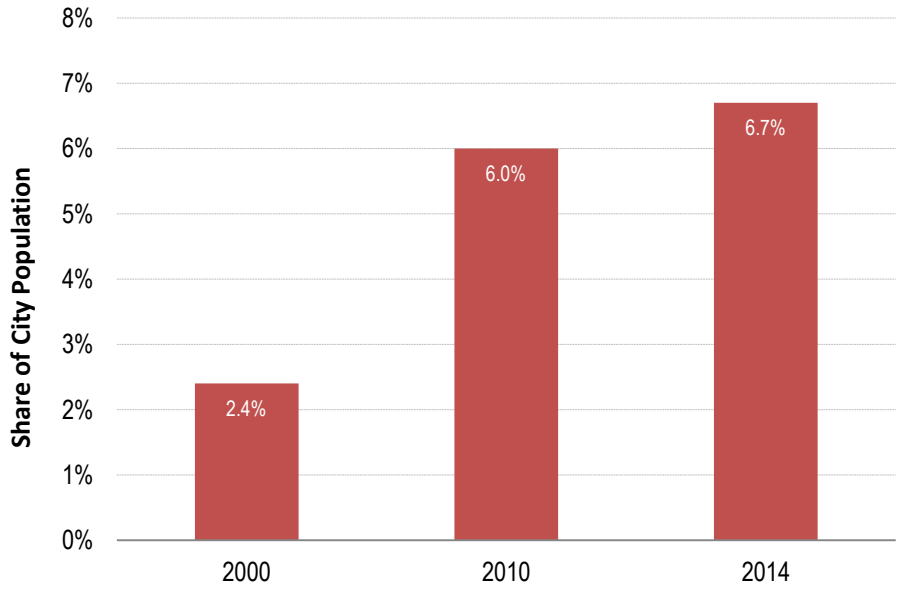
Non-Hispanic Asian: 2000, 2010, and 2014



Sources: 2000 and 2010 U.S. Decennial Census; Nielsen Co., 2014

- Between 2000 and 2014, the share of Non-Hispanic Asian population in the city increased from 1.4 percent to 3.2 percent.

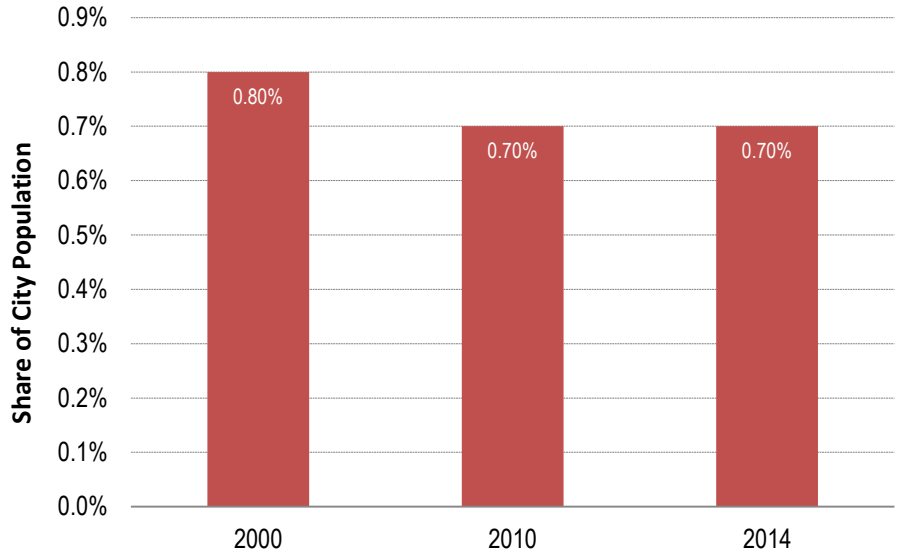
Non-Hispanic Black: 2000, 2010, and 2014



Sources: 2000 and 2010 U.S. Decennial Census; Nielsen Co., 2014

- Between 2000 and 2014, the share of Non-Hispanic Black population in the city increased from 2.4 percent to 6.7 percent.

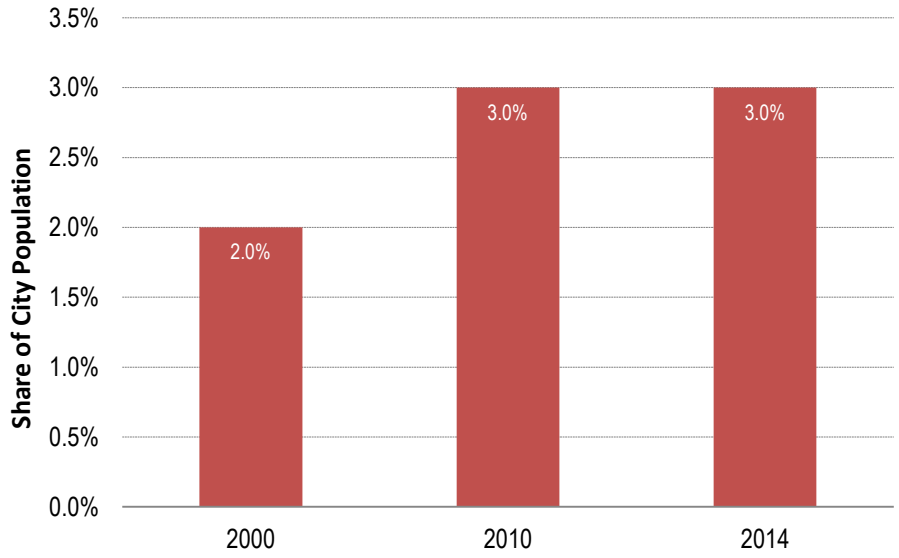
Non-Hispanic American Indian: 2000, 2010, and 2014



Sources: 2000 and 2010 U.S. Decennial Census; Nielsen Co., 2014

- Between 2000 and 2014, the share of Non-Hispanic American Indian population in the city decreased from 0.8 percent to 0.7 percent.

All Other Non-Hispanic: 2000, 2010, and 2014



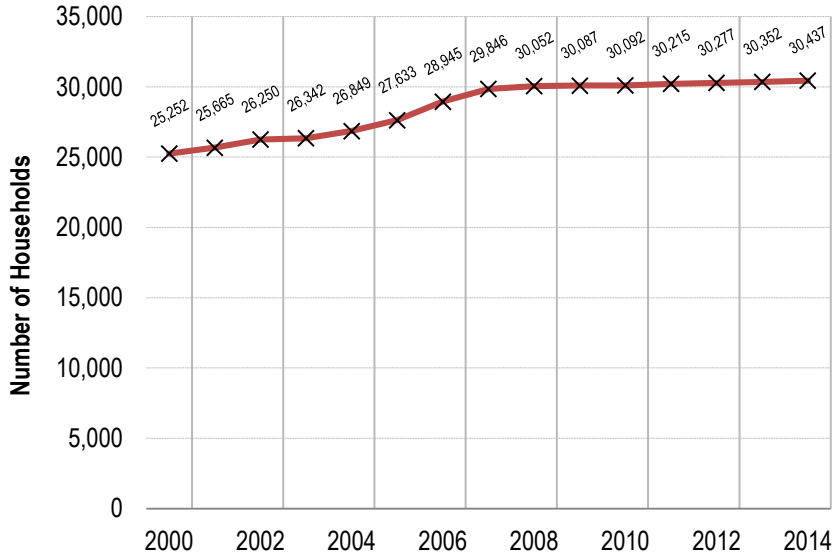
Sources: 2000 and 2010 U.S. Decennial Census; Nielsen Co., 2014

- Between 2000 and 2014, the share of All Other Non-Hispanic population group in the city increased from 2.0 percent to 3.0 percent.

III. Households

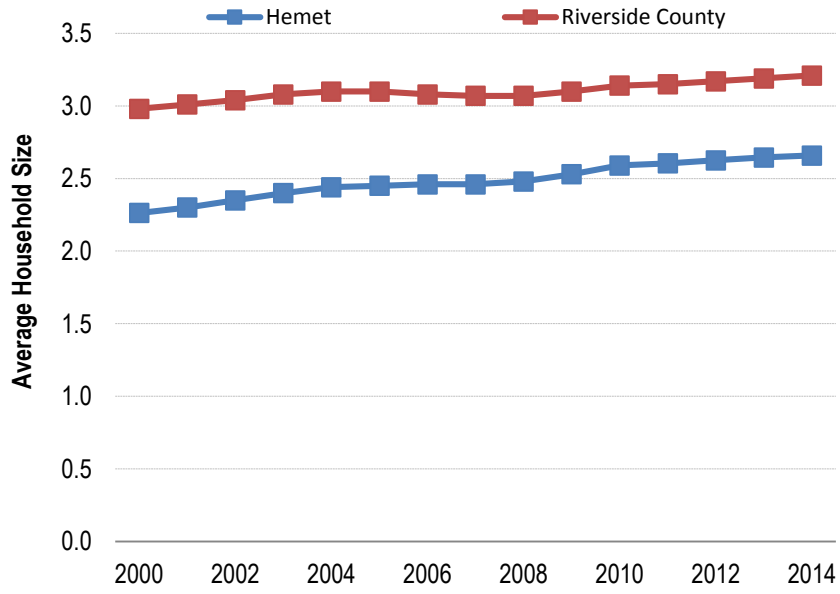
Number of Households (Occupied Housing Units)

Number of Households: 2000 - 2014



Sources: 2000 and 2010 U.S. Decennial Census; California Department of Finance, E-5, 2014

Average Household Size: 2000 - 2014

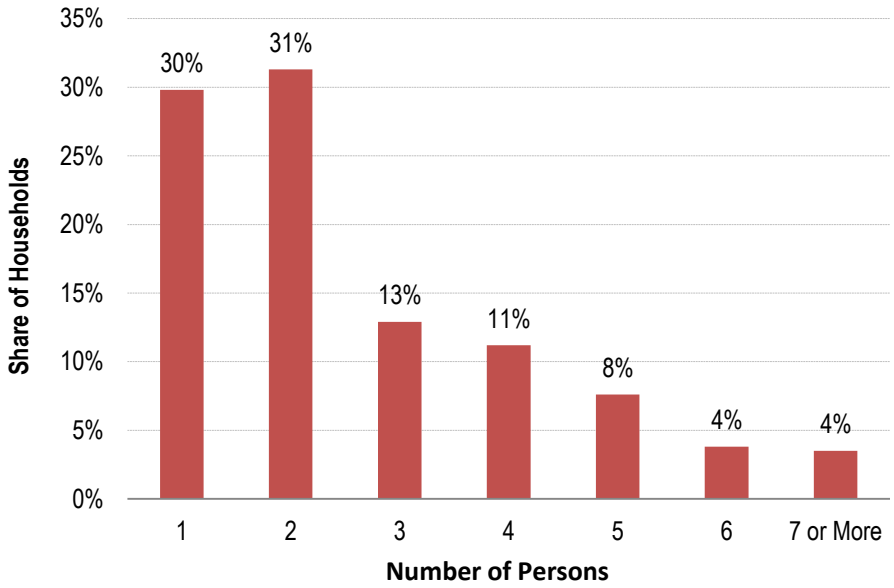


Source: California Department of Finance, E-5, 2014

- Between 2000 and 2014, the total number of households in the City of Hemet increased by 5,185 units, or 20.5 percent.
- During this 14-year period, the city's household growth rate of 20.5 percent was lower than the county growth rate of 38.4 percent.
- 4.3 percent of Riverside County's total number of households are in the City of Hemet.
- In 2014, the city's average household size was 2.7, lower than the county average of 3.2.

Households by Size

Percent of Households by Household Size: 2014

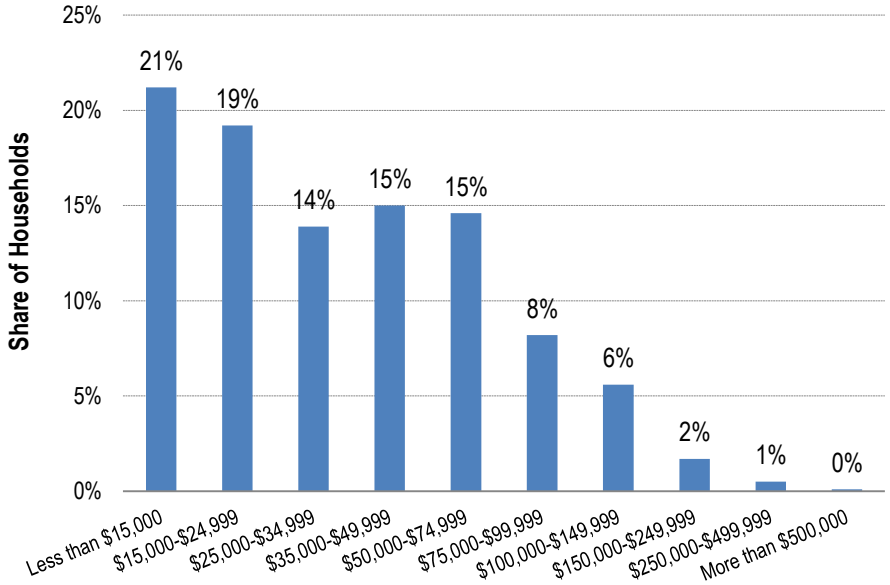


Source: Nielsen Co., 2014

- In 2014, 74 percent of all city households had 3 people or fewer.
- About 29.8 percent of the households were single-person households.
- Approximately 14.9 percent of all households in the city had 5 people or more.

Households by Income

Percent of Households by Household Income: 2014

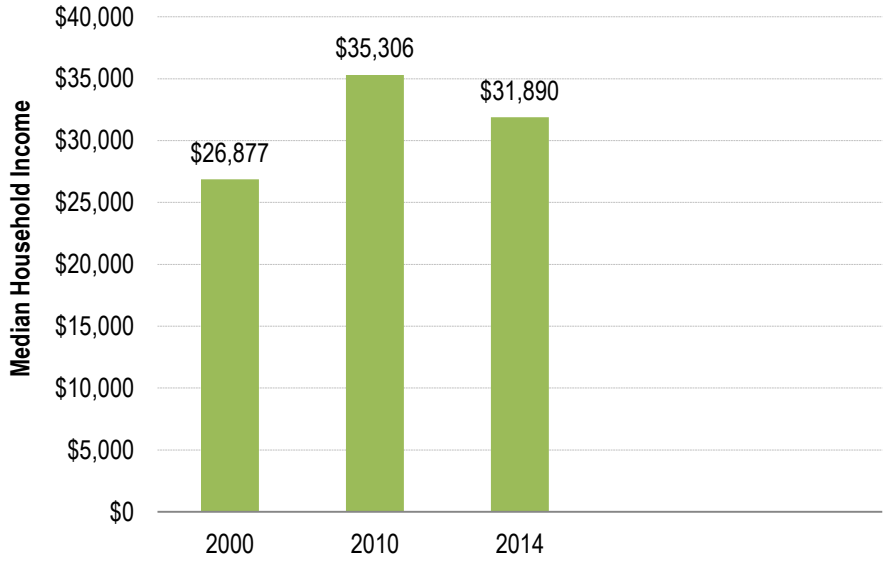


Source: Nielsen Co., 2014

- In 2014, about 69 percent of households earned less than $50,000 annually.
- Approximately 8 percent of households earned $100,000 or more.

Household Income

Median Household Income: 2000, 2010, & 2014

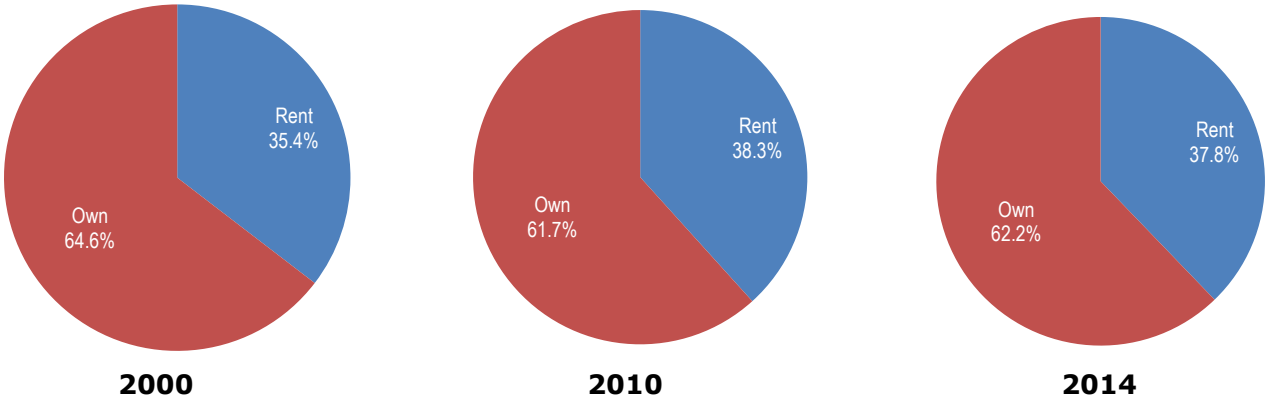


- From 2000 to 2014, median household income increased by $5,013.
- Note: Dollars are not adjusted for annual inflation.

Source: Nielsen Co., 2014

Renters and Homeowners

Percentage of Renters and Homeowners: 2000, 2010, & 2014



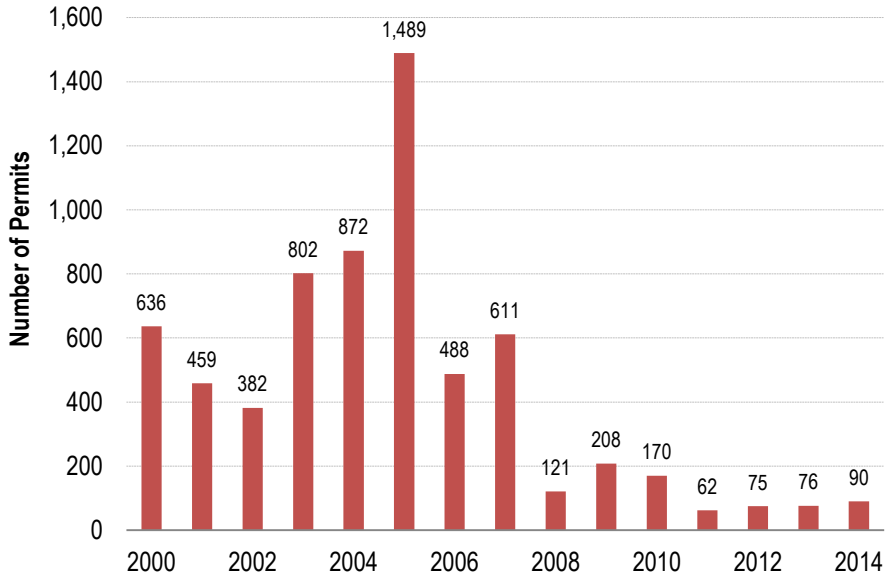
Sources: 2000 and 2010 U.S. Decennial Census; Nielsen Co., 2014

Between 2000 and 2014, homeownership rates decreased and the share of renters increased.

IV. Housing

Total Housing Production

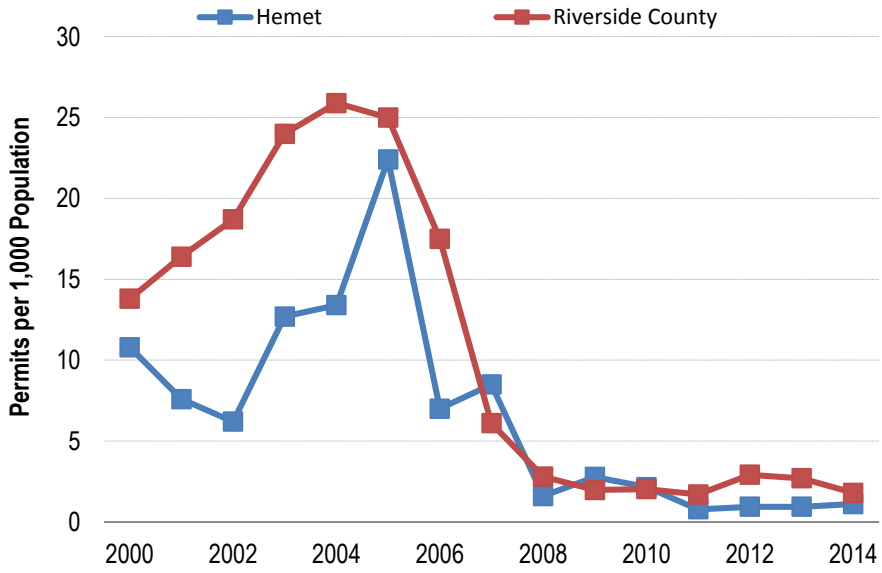
Total Permits Issued for all Residential Units: 2000 - 2014



Source: Construction Industry Research Board, 2000 - 2014

- Between 2000 and 2014, permits were issued for 6,541 residential units.

Permits Issued for all Residential Units per 1,000 Residents: 2000 - 2014

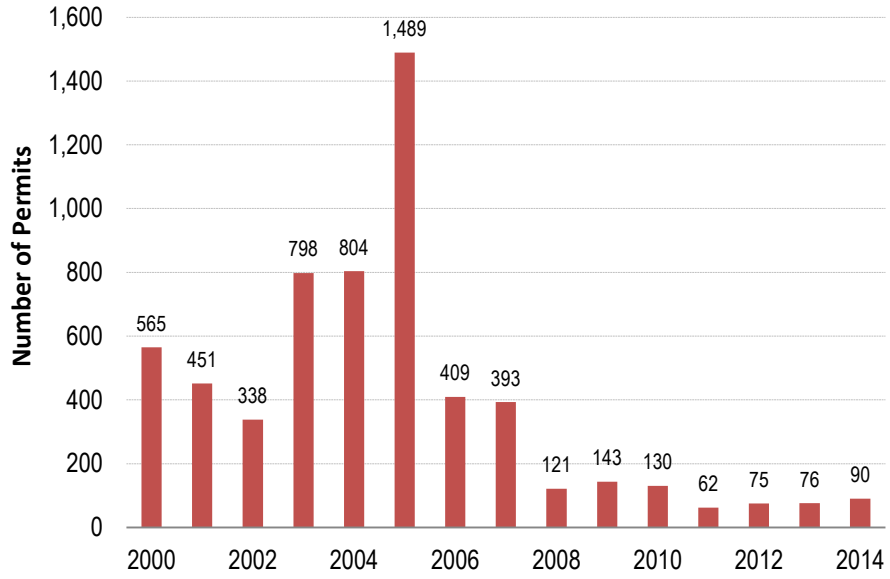


Source: Construction Industry Research Board, 2000 - 2014

- In 2000, the City of Hemet had 10.8 permits per 1,000 residents compared to the overall county figure of 13.8 permits per 1,000 residents.
- For the city in 2014, the number of permits per 1,000 residents decreased to 1.1 permits. For the county overall, it decreased to 1.8 permits per 1,000 residents.

Single-Family Housing Production

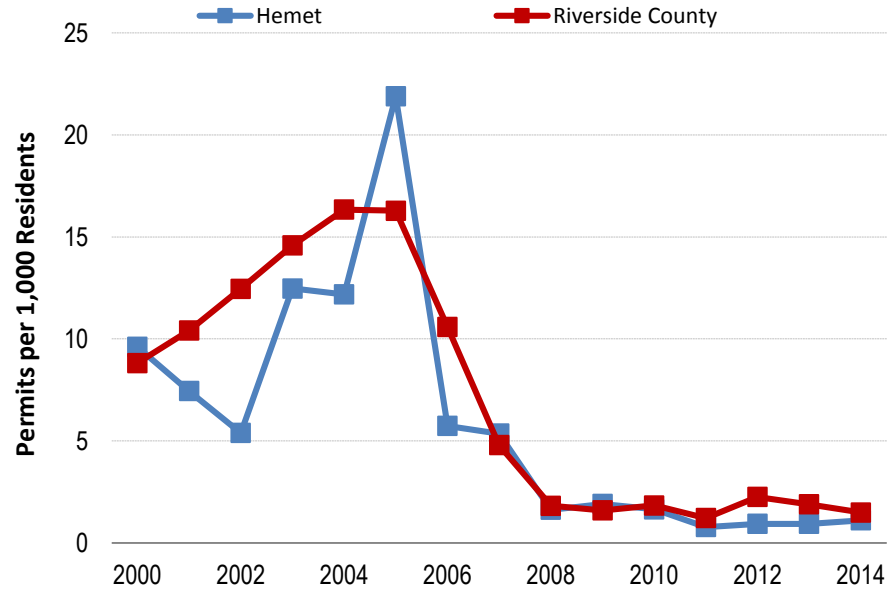
Permits Issued for Single-Family Units: 2000 - 2014



Source: Construction Industry Research Board, 2000 - 2014

- Between 2000 and 2014, permits were issued for 5,944 single family homes.
- 4.1 percent of these were issued in the last 3 years.

Single-Family Permits Issued per 1,000 Residents: 2000 - 2014

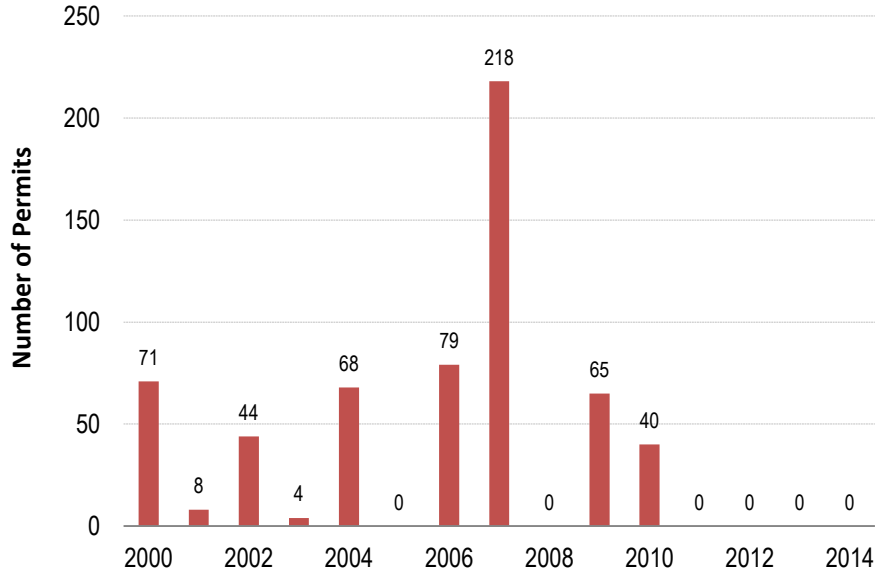


Source: Construction Industry Research Board, 2000 - 2014

- In 2000, the City of Hemet issued 9.6 permits per 1,000 residents compared to the overall county figure of 8.8 permits per 1,000 residents.
- For the city in 2014, the number of permits issued per 1,000 residents decreased to 1.1 permits. For the county overall, it decreased to 1.5 permits per 1,000 residents.

Multi-Family Housing Production

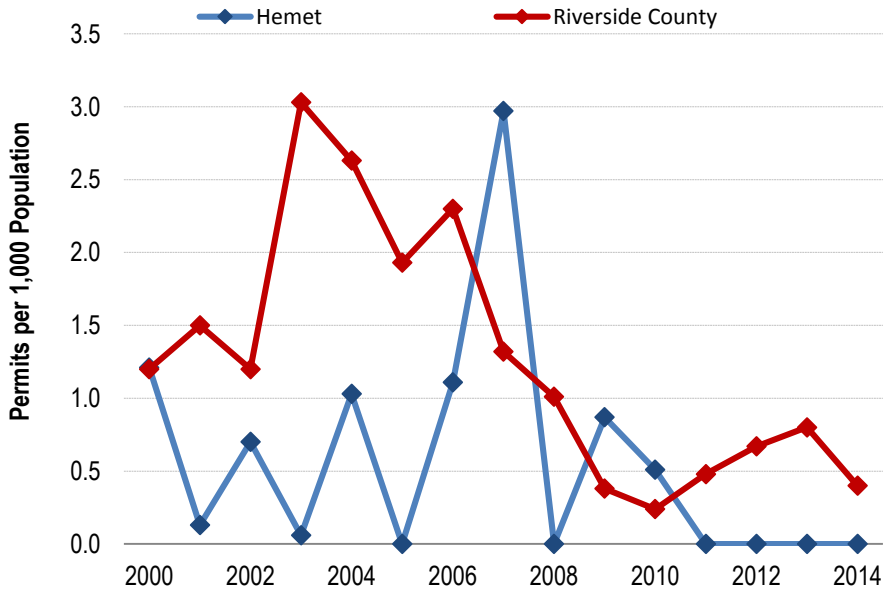
Permits Issued for Multi-Family Units: 2000 - 2014



Source: Construction Industry Research Board, 2000-2014

- Between 2000 and 2014, there were permits issued for 597 multi-family residential units.

Multi-Family Permits Issued per 1,000 Residents: 2000 - 2014

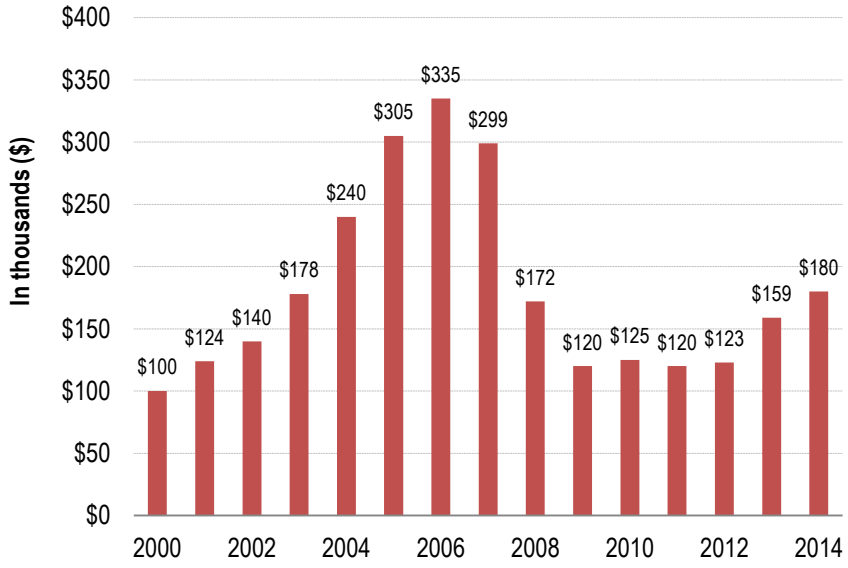


Source: Construction Industry Research Board, 2000-2014

- For the city in 2014, the number of permits per 1,000 residents decreased to 0 permits. For the county overall, it decreased to 0.4 permits per 1,000 residents.

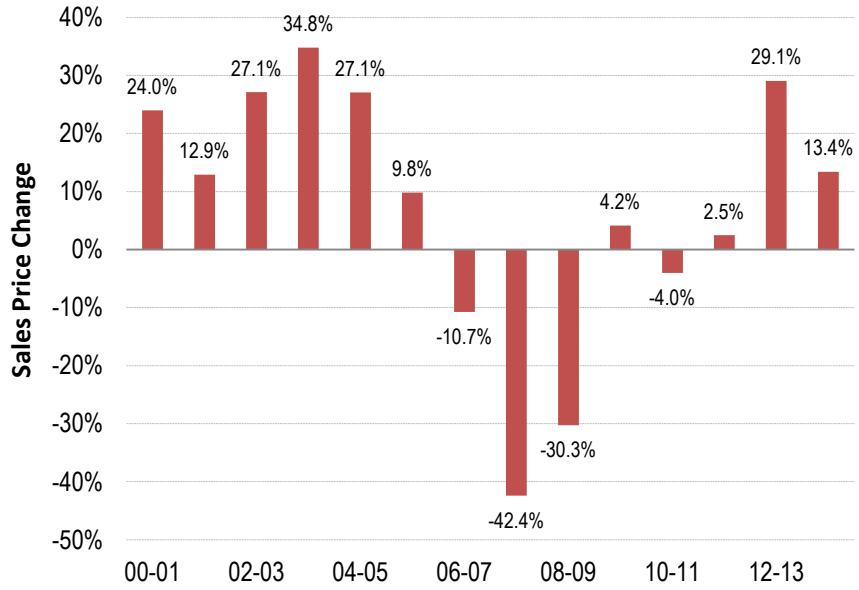
Home Sales Prices

Median Home Sales Price for Existing Homes: 2000 - 2014 (in $ thousands)



Source: MDA Data Quick, 2014

Annual Median Home Sales Price Change for Existing Homes: 2000 - 2014



Source: MDA Data Quick, 2014

- Between 2000 and 2014, the median home sales price increased 80 percent from $100,000 to $180,000.
- Median home sales price increased by 44 percent between 2010 and 2014.
- In 2014, the median home sales price in the city was $180,000, $110,000 lower than that in the county overall.
- Note: Median home sales price reflects resale of existing homes and provides guidance on the market values of homes sold.
- Between 2000 and 2014, the largest single year increase was 34.8 percent.

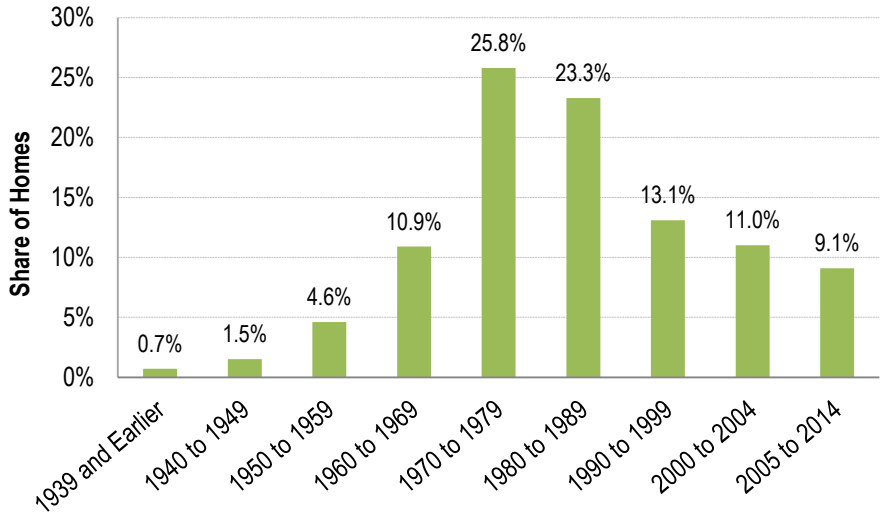
Housing Units by Housing Type: 2014

Housing Type	Number of Units	Percent of Total Units
Single Family Detached	17,228	48.2 %
Single Family Attached	1,549	4.3 %
Multi-family: 2 to 4 units	2,226	6.2 %
Multi-family: 5 units plus	4,870	13.6 %
Mobile Home	9,837	27.5 %
Total	**35,710**	**100 %**

Source: California Department of Finance, E-5, 2014

- The most common housing type is Single Family Detached.
- Approximately 52.6 percent were single family homes and 19.9 percent were multi-family homes.

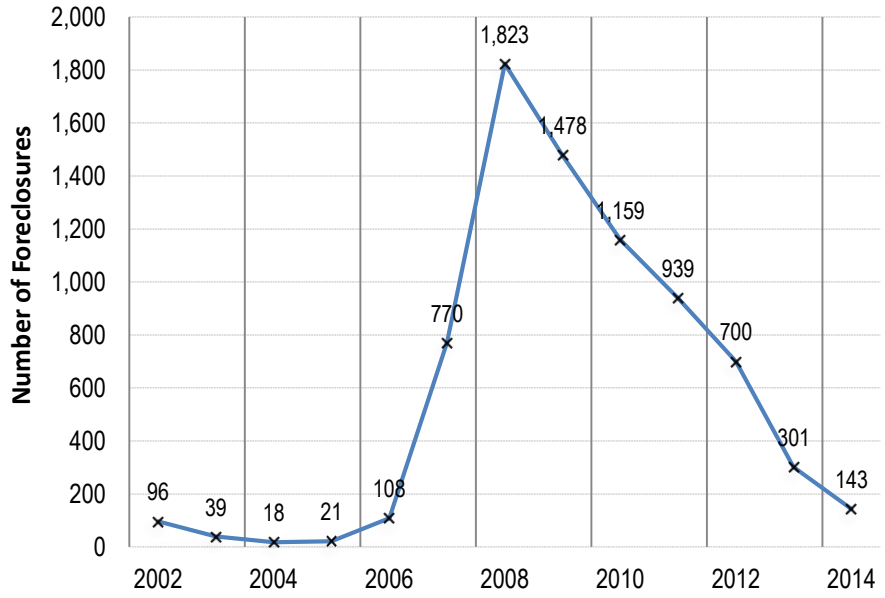
Age of Housing Stock



Source: Nielsen Co., 2014

- About 18 percent of the housing stock was built before 1970.
- Approximately 82 percent of the housing stock was built after 1970.

Foreclosures



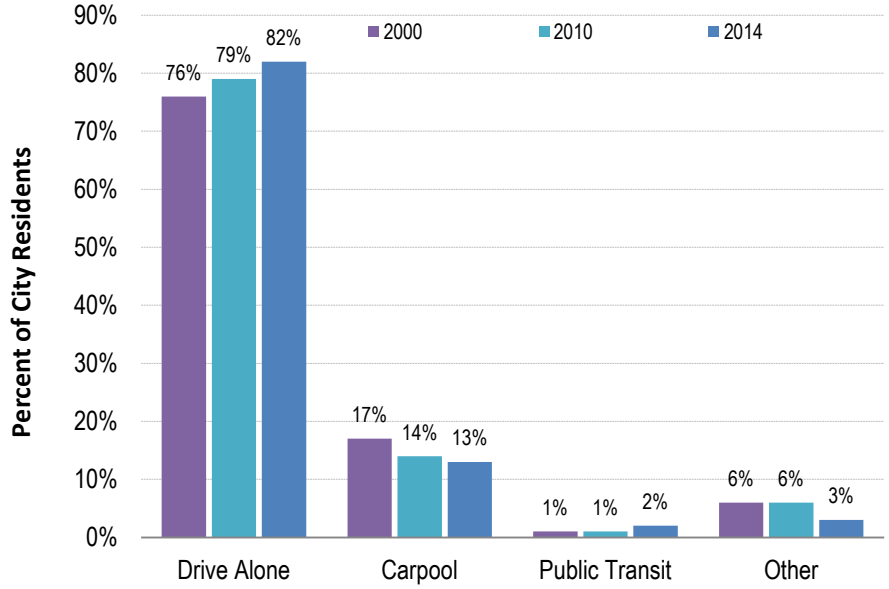
Source: MDA Data Quick, 2014

- There were a total of 143 foreclosures in 2014.
- Between 2007 and 2014, there were a total of 7,313 foreclosures.

V. Transportation

Journey to Work for Residents

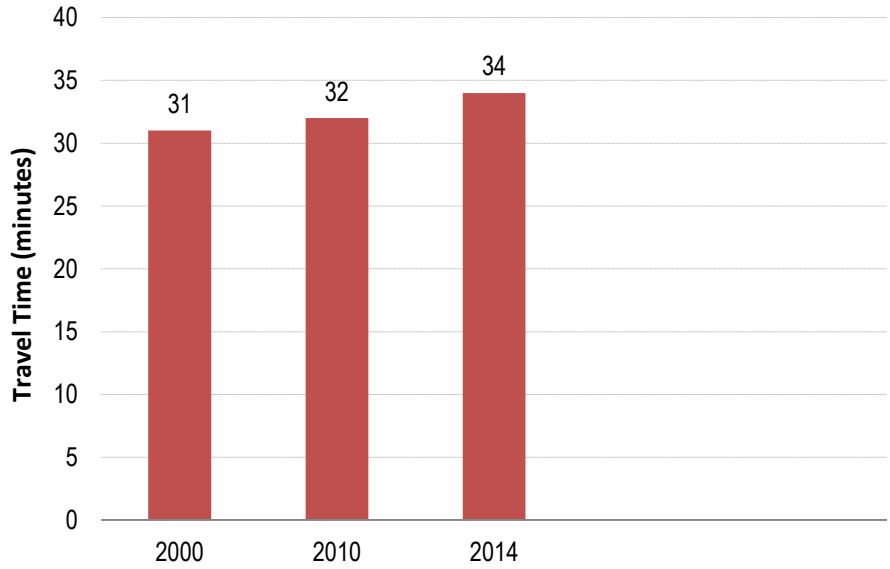
Transportation Mode Choice: 2000, 2010, & 2014



Sources: 2000 U.S. Decennial Census; 2010 U.S. Census American Community Survey; and Nielsen Co., 2014

- Between 2000 and 2014, the greatest change occurred in the percentage of individuals who traveled to work by driving; this share increased by 6.4 percentage points.
- 'Other' refers to bicycle, pedestrian, and home-based employment.

Average Travel Time (minutes): 2000, 2010, & 2014



Sources: 2000 U.S. Decennial Census; 2010 U.S. Census American Community Survey; and Nielsen Co., 2014

- Between 2000 and 2014, the average travel time to work increased by approximately 3 minutes.

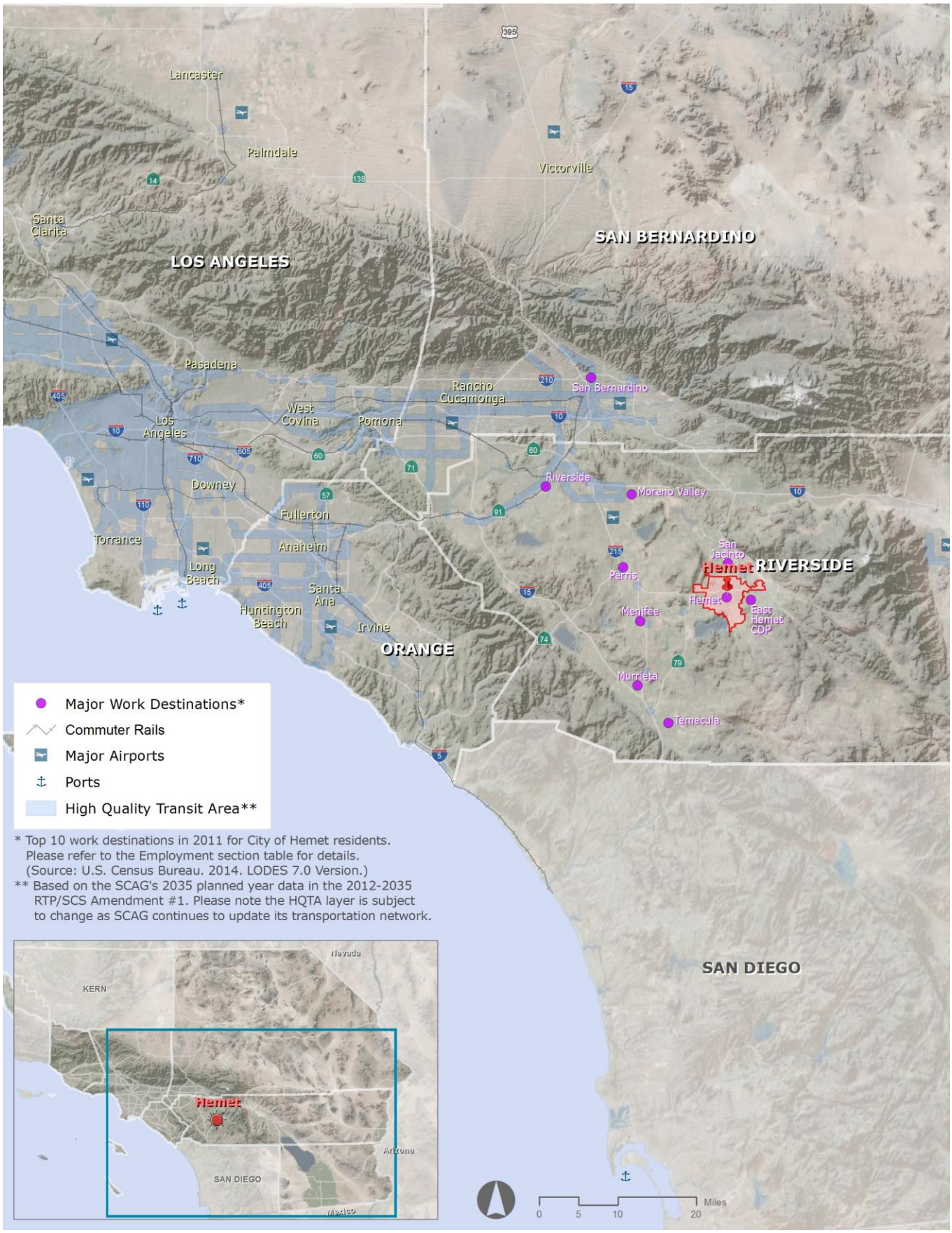
VI. Employment

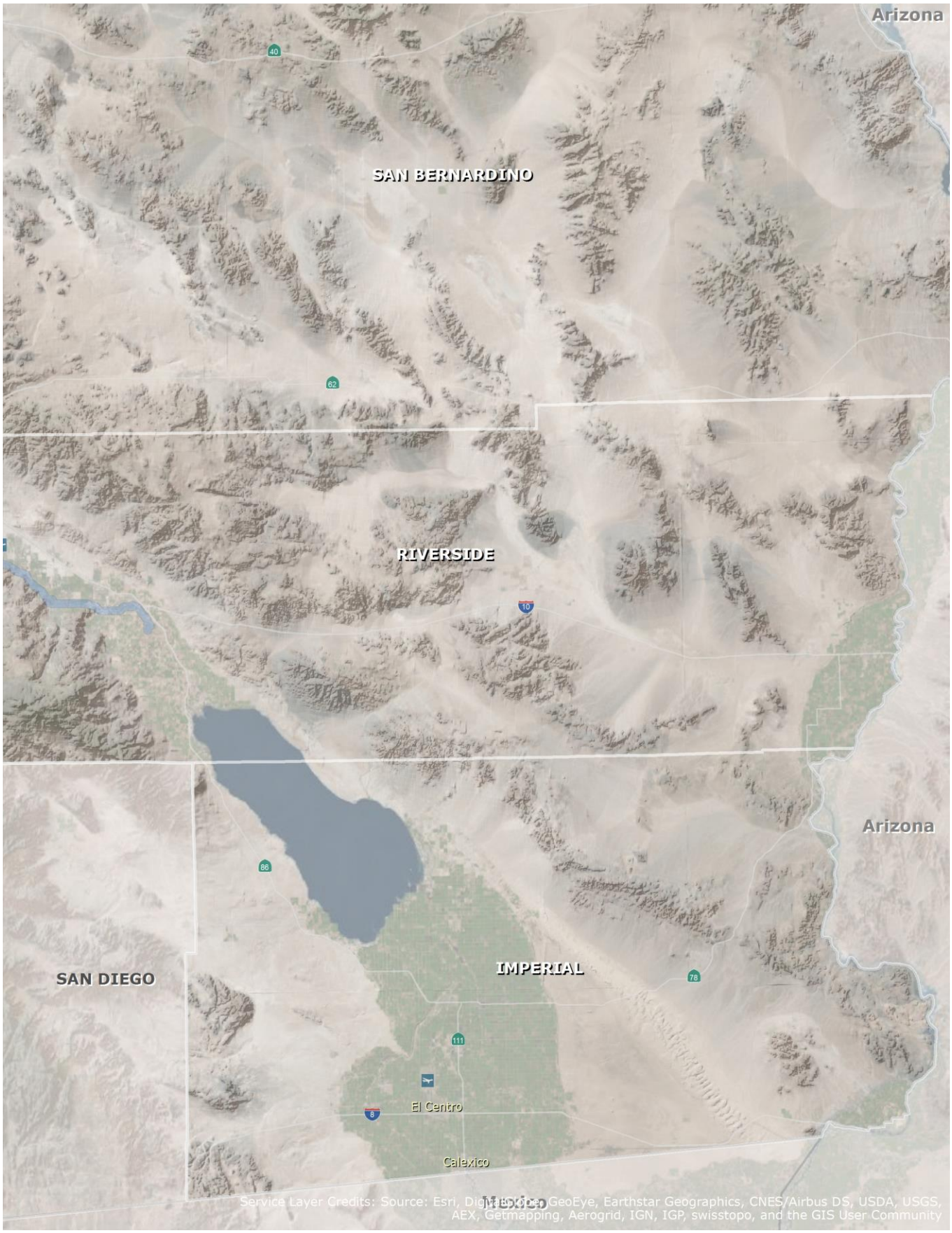
Top 10 Places Where Residents Commute to Work

Local Jurisdiction		Number of Commuters	Percent of Total Commuters
1.	Hemet	3,875	24.82 %
2.	Riverside	1,437	9.20 %
3.	San Jacinto	1,209	7.74 %
4.	Temecula	1,203	7.71 %
5.	San Bernardino	503	3.22 %
6.	Murrieta	399	2.56 %
7.	Perris	391	2.50 %
8.	Menifee	356	2.28 %
9.	Moreno Valley	353	2.26 %
10.	Unincorporated	287	1.84 %
All Other Destinations		5,599	35.86 %

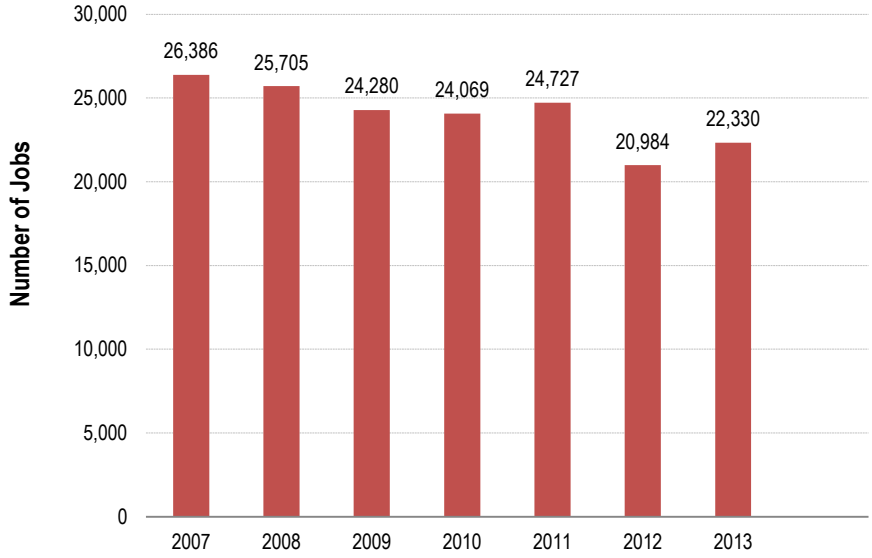
Source: U.S. Census Bureau, 2014, LODES Data; Longitudinal-Employer Household Dynamics Program, 2011

- This table identifies the top 10 locations where residents from the City of Hemet commute to work.
- 24.8% work in the city where they live, while 75.2% commute to other places.


Lancaster
Palmdale
Victorville
Santa Clarita
LOS ANGELES
SAN BERNARDINO
Pasadena
Rancho Cucamonga
San Bernardino
West Covina
Pomona
Los Angeles
Riverside
Moreno Valley
Downey
Fullerton
Torrance
Anaheim
Long Beach
Santa Ana
Huntington Beach
Irvine
ORANGE
Perris
San Jacinto
Hemet
RIVERSIDE
Menifee
East Hemet CDP
Murrieta
Temecula
SAN DIEGO
Major Work Destinations*
Commuter Rails
Major Airports
Ports
High Quality Transit Area**
* Top 10 work destinations in 2011 for City of Hemet residents. Please refer to the Employment section table for details. (Source: U.S. Census Bureau. 2014. LODES 7.0 Version.)
** Based on the SCAG's 2035 planned year data in the 2012-2035 RTP/SCS Amendment #1. Please note the HQTA layer is subject to change as SCAG continues to update its transportation network.
Nevada
KERN
Hemet
Arizona
SAN DIEGO
Mexico
0 5 10 20 Miles

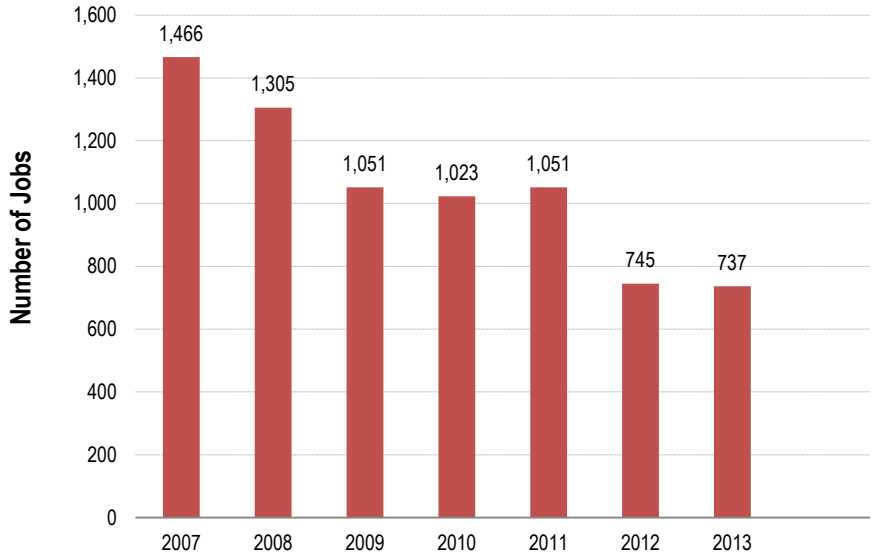

Arizona
SAN BERNARDINO
RIVERSIDE
Arizona
SAN DIEGO
IMPERIAL
El Centro
Calexico
Mexico
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Total Jobs: 2007 - 2013



Sources: California Employment Development Department, 2007 - 2013; InfoGroup; and SCAG

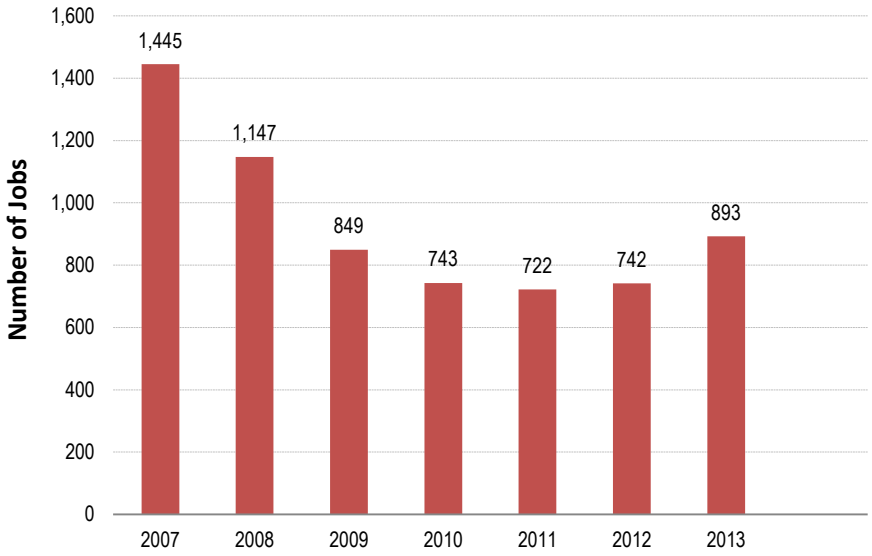
Jobs in Manufacturing: 2007 - 2013



Sources: California Employment Development Department, 2007 - 2013; InfoGroup; and SCAG

- Total jobs include wage and salary jobs and jobs held by business owners and self-employed persons. The total job count does not include unpaid volunteers or family workers, and private household workers.
- In 2013, total jobs in the City of Hemet numbered 22,331, a decrease of 15.4 percent from 2007.
- Manufacturing jobs include those employed in various sectors including food; apparel; metal; petroleum and coal; machinery; computer and electronic products; and transportation equipment.
- In 2013, there were 737 manufacturing jobs in the city.

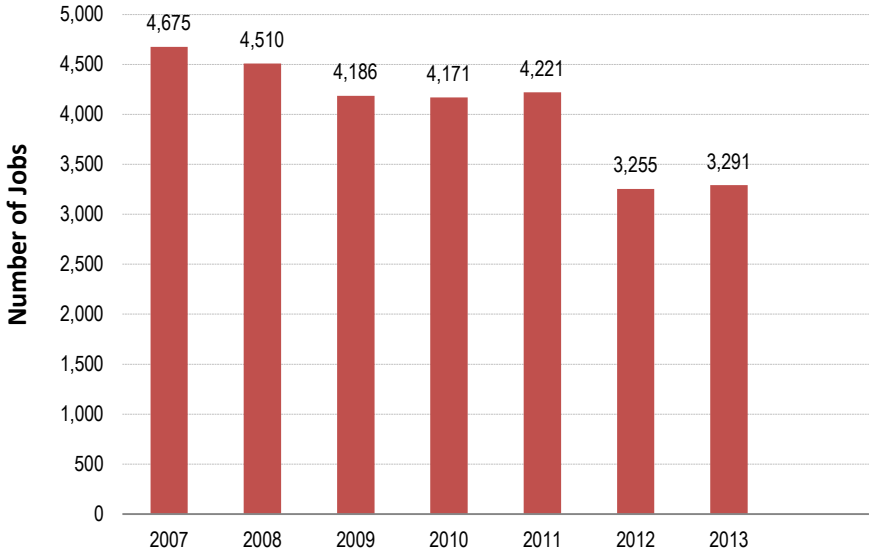
Jobs in Construction: 2007 - 2013



Sources: California Employment Development Department, 2007 - 2013; InfoGroup; and SCAG

- Construction jobs include those engaged in both residential and non-residential construction.
- Between 2007 and 2013, construction jobs in the city decreased by 38.1 percent.

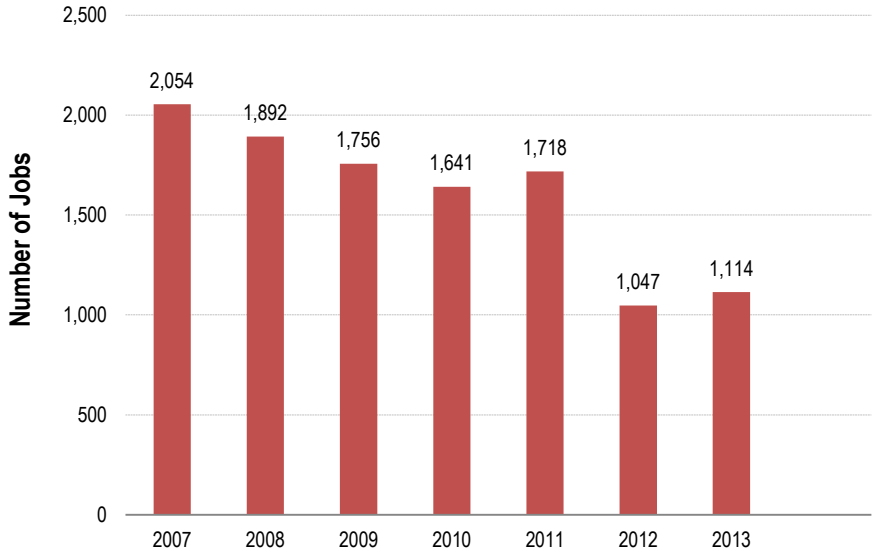
Jobs in Retail Trade: 2007 - 2013



Sources: California Employment Development Department, 2007 - 2013; InfoGroup; and SCAG

- Retail trade jobs include those at various retailers including motor vehicle and parts dealers, furniture, electronics and appliances, building materials, food and beverage, clothing, sporting goods, books, and office supplies.
- Between 2007 and 2013, the number of retail trade jobs in the city decreased by 29.6 percent.

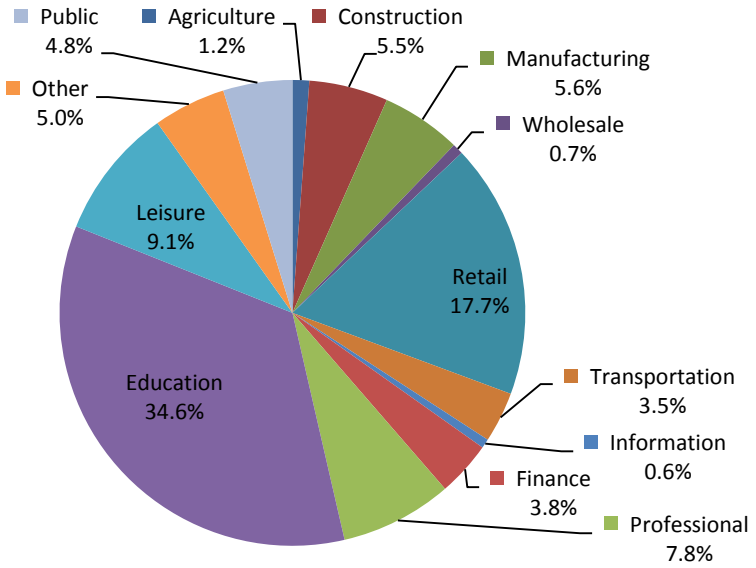
Jobs in Professional and Management: 2007 - 2013



Sources: California Employment Development Department, 2007 - 2013; InfoGroup; and SCAG

- Jobs in the professional and management sector include those employed in professional and technical services, management of companies, and administration and support.
- Between 2007 and 2013, the number of professional and management jobs in the city decreased by 45.7 percent.

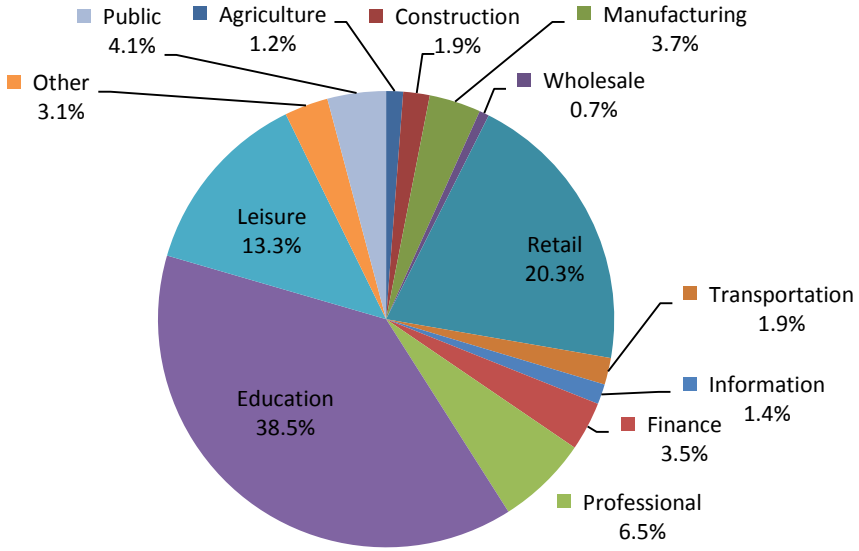
Jobs by Sector: 2007



Sources: California Employment Development Department, 2007; InfoGroup; and SCAG.

- From 2007 to 2013, the share of Leisure jobs increased from 9.1 percent to 13.3 percent.
- See Methodology Section for industry sector definitions.

Jobs by Sector: 2013

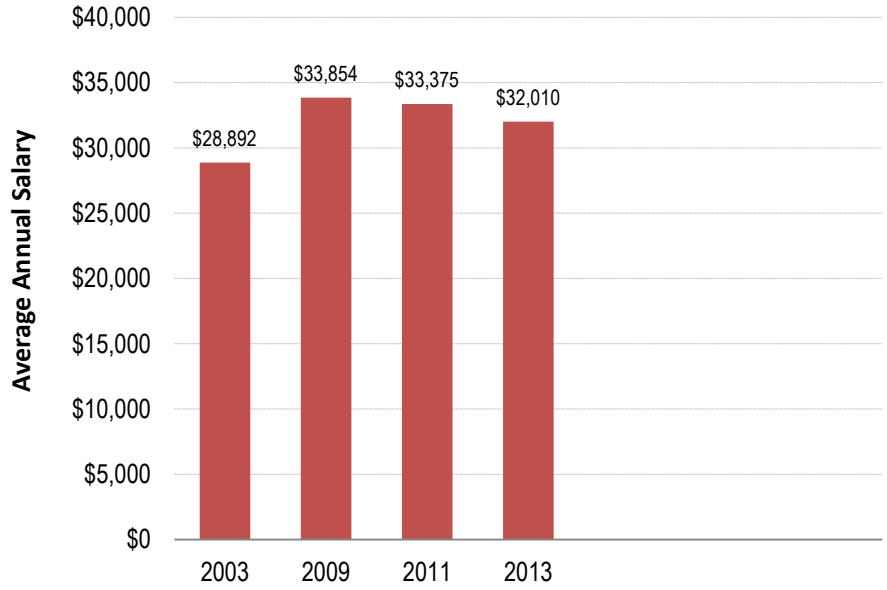


Sources: California Employment Development Department, 2014; InfoGroup; and SCAG.

- In 2013, the Education sector was the largest job sector, accounting for 38.5 percent of total jobs in the city.
- Other large sectors included Retail (20.3 percent), Leisure (13.3 percent), and Professional (6.5 percent).

Average Salaries

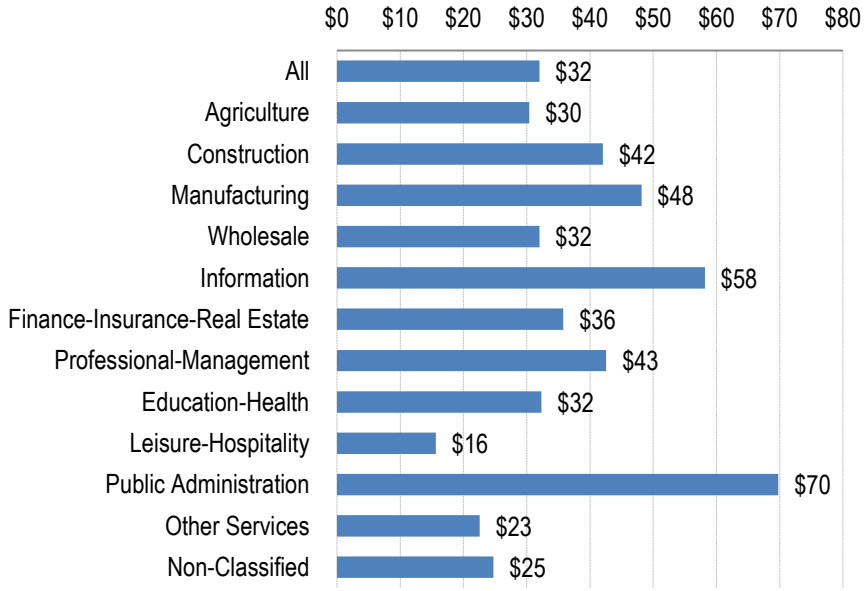
Average Annual Salary: 2003, 2009, 2011, & 2013



Source: California Employment Development Department, 2003, 2009, 2011, 2013

- Average salaries for jobs located in the city increased from $28,892 in 2003 to $32,010 in 2013, a 10.8 percent change.
- Note: Dollars are not adjusted for annual inflation.

Average Annual Salary by Sector: 2013 ($ thousands)

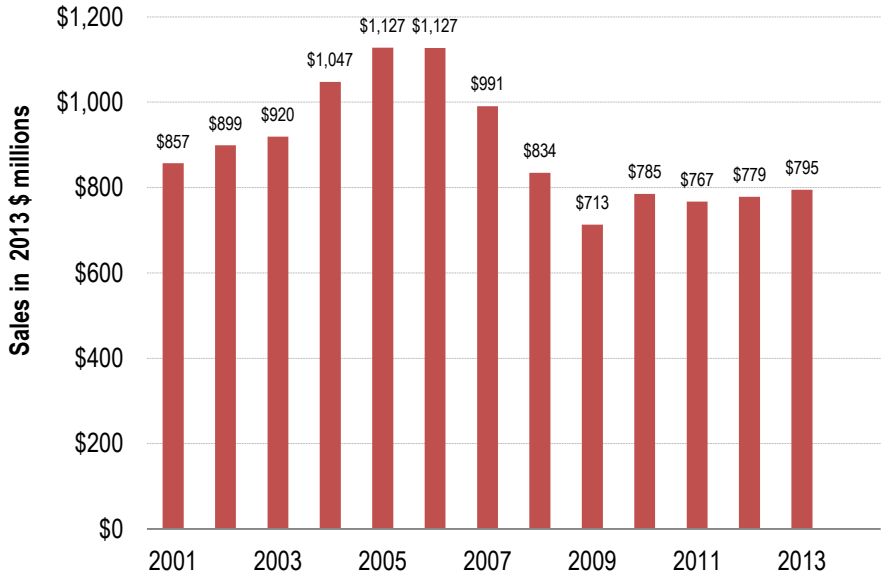


Source: California Employment Development Department, 2013

- In 2013, the employment sector providing the highest salary per job in the city was Public Administration ($69,777).
- The Leisure-Hospitality sector provided the lowest annual salary per job ($15,644).

VII. Retail Sales

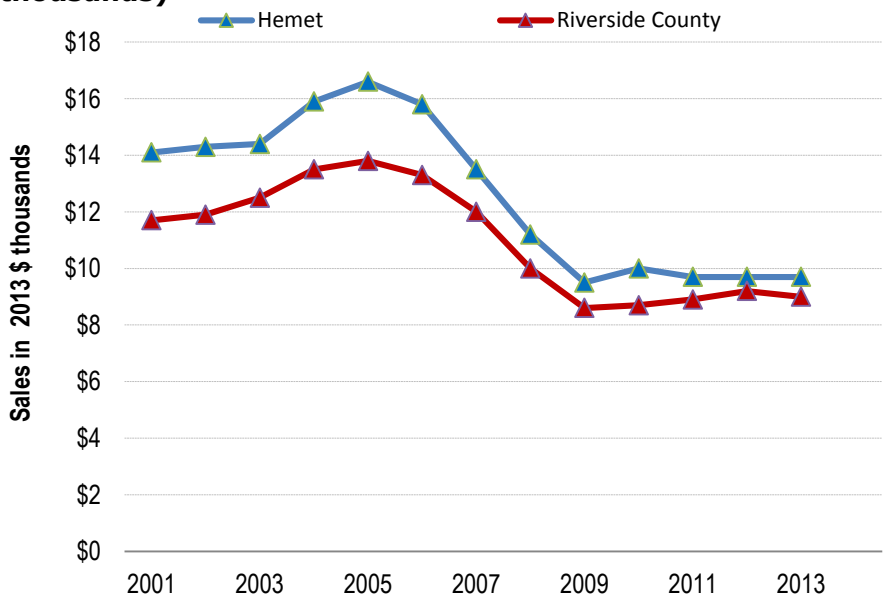
Real Retail Sales: 2001 - 2013 (in 2013 $ millions)



Source: California Board of Equalization, 2001-2013

- Real (inflation adjusted) retail sales in the City of Hemet increased by 27.1 percent between 2000 and 2005.
- Real retail sales decreased by 29.5 percent between 2005 and 2013.

Real Retail Sales per Person: 2001 - 2013 (in 2013 $ thousands)

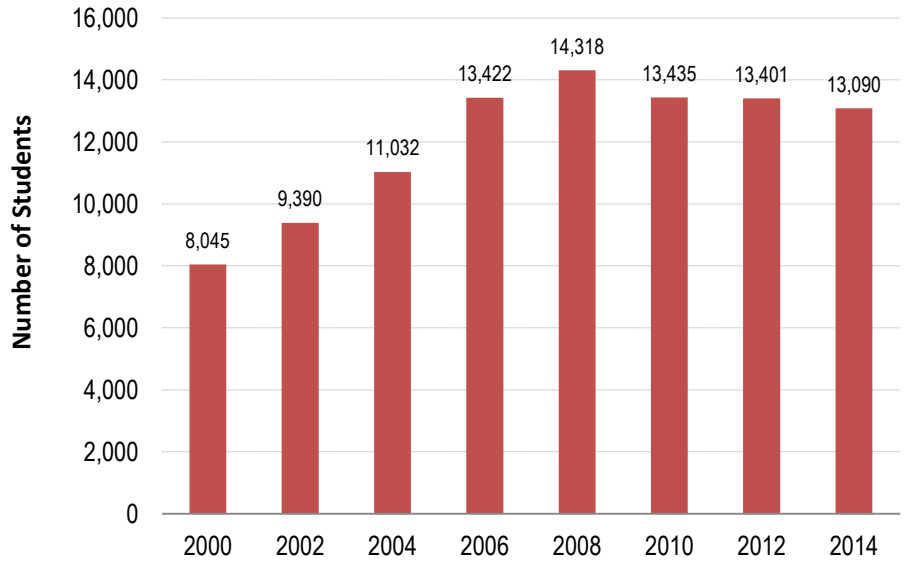


Source: California Board of Equalization, 2001-2013

- Between 2001 and 2013, retail sales per person for the city decreased from $15,078 to $9,824.

VIII. Education

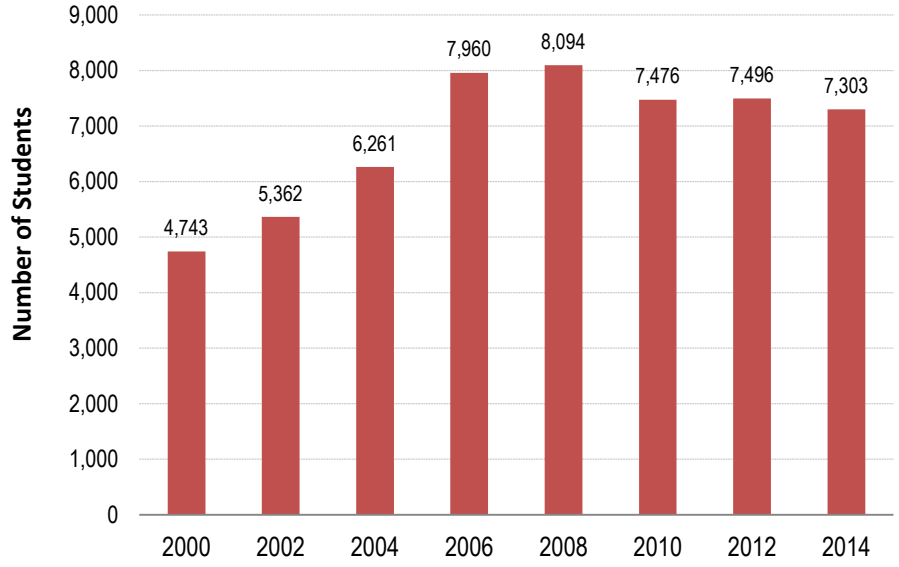
K-12 Public School Student Enrollment: 2000 - 2014



Source: California Department of Education, 2000 - 2014

- Between 2000 and 2014, total K-12 public school enrollment for schools within the City of Hemet increased by 5,045 students, or about 62.7 percent.

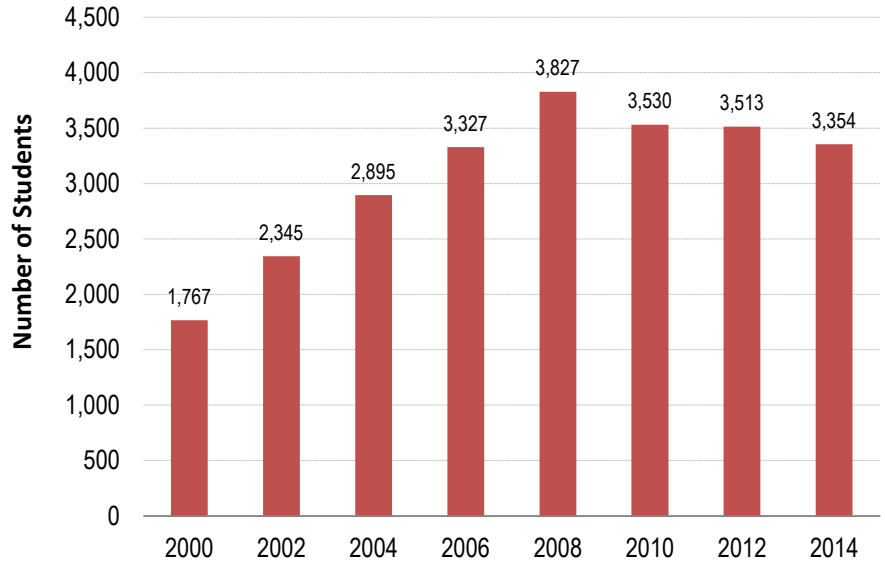
K-6 Public School Student Enrollment: 2000 - 2014



Source: California Department of Education, 2000 - 2014

- Between 2000 and 2014, total public elementary school enrollment increased by 2,560 students or 54 percent.

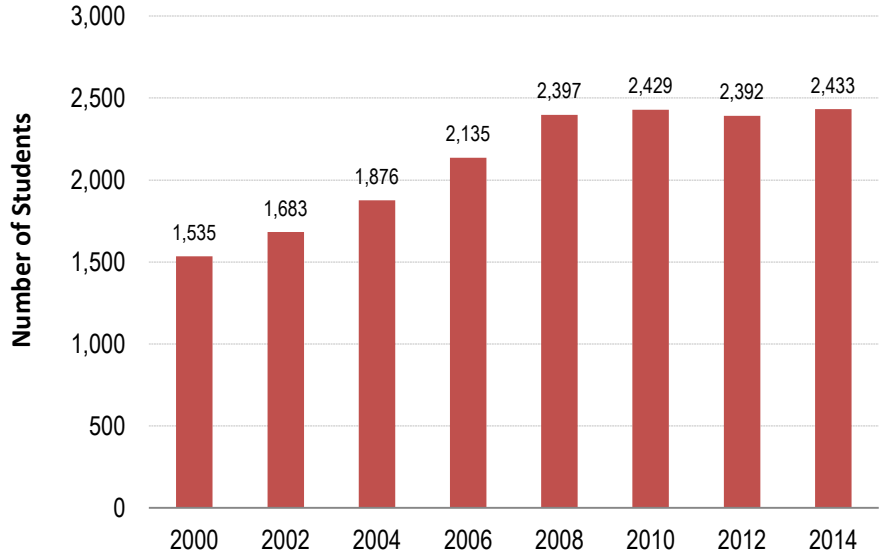
Grades 7-9 Public School Student Enrollment: 2000 - 2014



Source: California Department of Education, 2000 - 2014

- Between 2000 and 2014, total public school enrollment for grades 7-9 increased by 1,587 students or 89.8 percent.

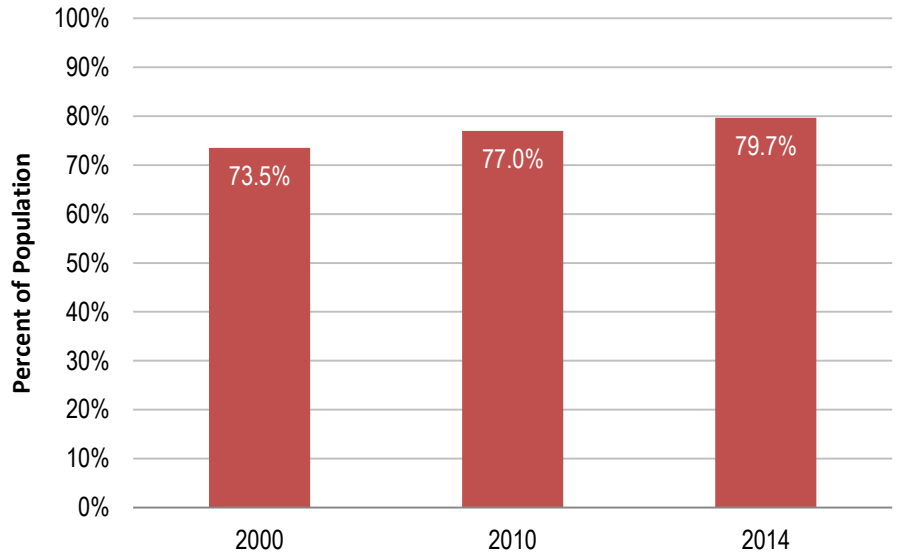
Grades 10-12 Public School Student Enrollment: 2000 - 2014



Source: California Department of Education, 2000 - 2014

- Between 2000 and 2014, total public school enrollment for grades 10-12 increased by 898 students, about 58.5 percent.

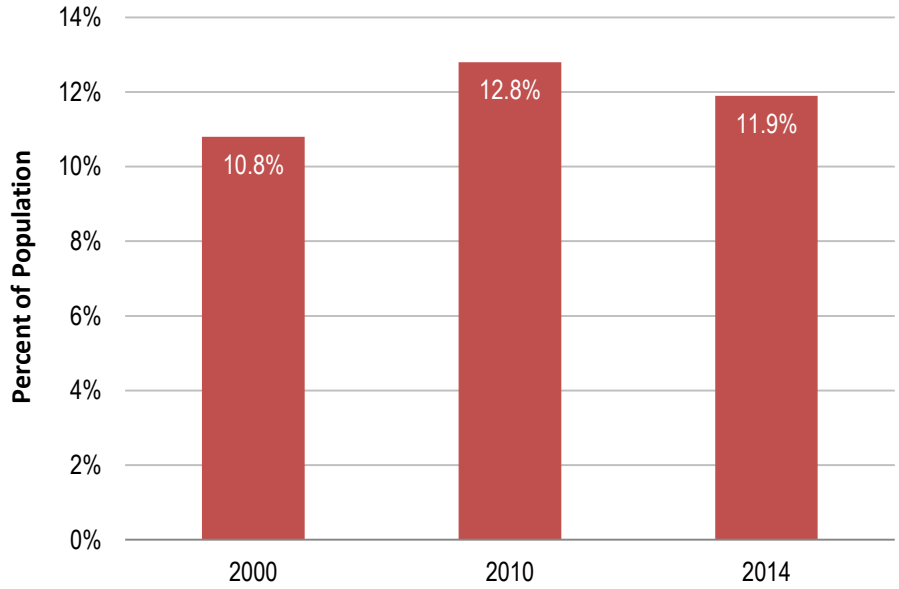
Percent of City Population 25 Years & Over Completing High School or Higher



Sources: 2000 and 2010 Census; Nielsen Co., 2014

- In 2014, 79.7 percent of the population 25 years and over completed high school or higher, which is higher than the 2000 level.

Percent of City Population 25 Years & Over Completing a Bachelor's Degree or Higher

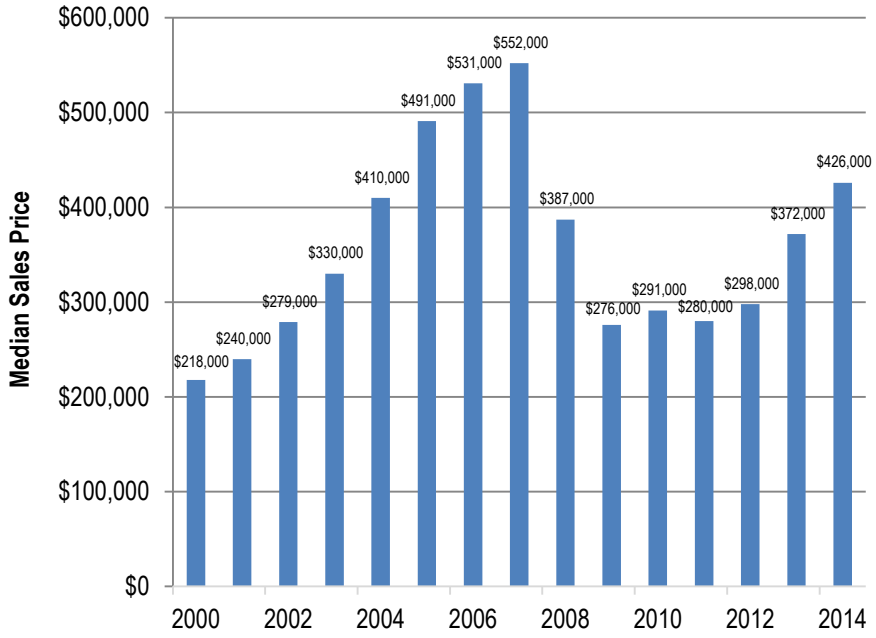


Sources: 2000 and 2010 Census; Nielsen Co., 2014

- In 2014, 11.9 percent of the population 25 years and over completed a Bachelor's degree or higher, which is higher than the 2000 level.

IX. SCAG Regional Highlights

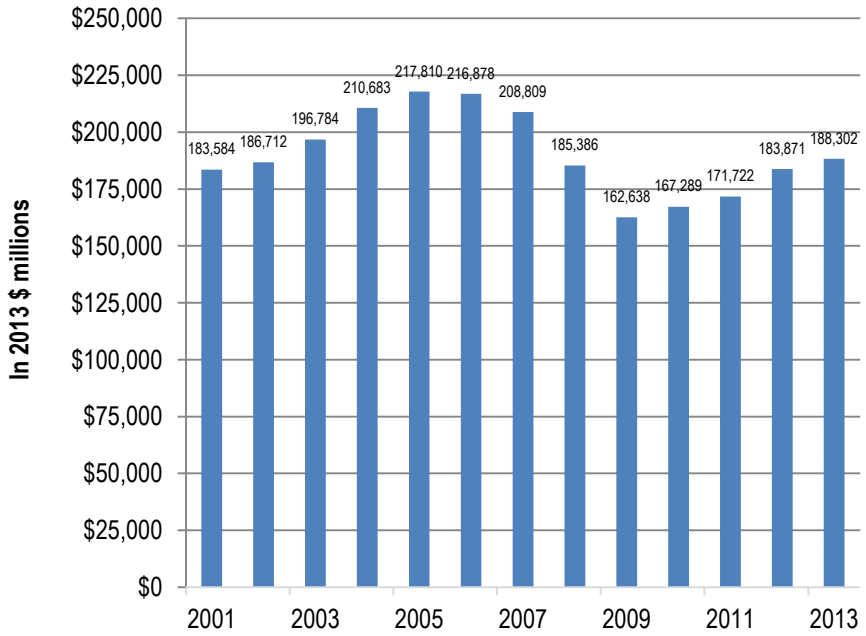
Regional Median Sales Price for Existing Homes: 2000 - 2014



Source: MDA Data Quick, 2014

- After reaching its peak in 2007, the median sales price for existing homes in the SCAG region dropped by almost half by 2011 from its 2007 level and rebounded from 2012 to 2014.
- Median home sales price was calculated based on total existing home sales in the SCAG region.

Regional Real Retail Sales: 2001 - 2013



Source: California Board of Equalization, 2001-2013

- Retail sales tend to follow closely with trends in personal income, employment rates, and consumer confidence.
- Between 2001 and 2005, real (inflation adjusted) retail sales increased steadily by 19 percent but then dropped between 2005 and 2009 by $52 billion, or 25 percent.
- In 2013, total real retail sales were three percent higher than the 2001 level.

X. Data Sources

California Department of Education

California Department of Finance, Demographic Research Unit

California Employment Development Department, Labor Market Information Division

California State Board of Equalization

Construction Industry Research Board

InfoGroup

MDA Data Quick

Nielsen Company

U.S. Census Bureau

XI. Methodology

SCAG's Local Profiles utilizes the most up-to-date information from a number of publically available sources, including the U.S. Census Bureau, California Department of Finance, and the California Department of Education. In the event that public information is not available or is not the most recent, SCAG contracts with a number of private entities to obtain regional data. The following sections describe how each data source was compiled to produce the information displayed in this report.

Statistical Summary Table

In the Statistical Summary Table (page 3), the values in the field "Jurisdiction Relative to County/Region" represent the difference between the jurisdiction's value and the county/region value, except for the following categories which represent the jurisdiction's value as a share of the county (or in the case of an entire county as a share of the region): Population, Number of Households, Number of Housing Units, Number of Jobs, Total Jobs Change, and K-12 Student Enrollment.

Median Age, Homeownership Rate, and Median Household Income are based on Nielsen Company data. Number of Housing Units is based on the 2010 Census and estimates from the California Department of Finance. Data for all other categories are referenced throughout the report.

Population Section

Where referenced, data from 2000 to 2014 was taken from the California Department of Finance's (DOF) E-5 estimates, which were published in May 2014. This dataset was benchmarked to population figures from the 2000 and 2010 U.S. Decennial Censuses. Data relating to population by age group and by race/ethnicity was derived from the 2000 and 2010 U.S. Decennial Censuses, and Nielsen Co. The 2000 figure was based on U.S. Decennial Census figures for April 1, 2000 and the 2010 figure was based on U.S. Decennial Census figures for April 1, 2010.

Below are definitions for race and ethnicity, taken from the U.S. Census Bureau.

The Hispanic or Latino origin category is:

- A person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.

The race categories are:

- American Indian or Alaska Native – A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment.
- Asian – A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.
- Black or African American – A person having origins in any of the black racial groups of Africa, including those who consider themselves to be "Haitian."

- White – A person having origins in any of the original peoples of Europe, North Africa, or the Middle East.

- Some other race – This category includes Native Hawaiian or Other Pacific Islander (a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands) and all other responses not included in the "American Indian or Alaska Native," "Asian," "Black or African American," and "White" race categories described above.

Charts for population based on age were tabulated using 2000 and 2010 U.S. Decennial Census data and Nielsen Company data for 2014. Charts for race/ethnicity were tabulated using 2000 and 2010 U.S. Decennial Census data and Nielsen Company data for 2014.

Households Section

The 2000 figure was based on U.S. Decennial Census figures for April 1, 2000 and the 2010 figure was based on U.S. Decennial Census figures for April 1, 2010. Information for 2014 was supplied by the Nielsen Company. Average household size was developed using information from the California Department of Finance (DOF). Households by Size was calculated based on Nielsen Company data. Households refer to the number of occupied housing units.

Housing Section

Housing units are the total number of both vacant and occupied units. Housing units by housing type information was developed using data from the California Department of Finance (DOF). Age of housing stock information is from the Nielsen Company.

The number of residential units with permits issued was obtained using Construction Industry Research Board data, which are collected by counties and are self-reported by individual jurisdictions. It represents both new single family and new multifamily housing units that were permitted to be built, along with building permits that were issued for improvements to existing residential structures (e.g., re-roofs, remodels). Please note that SCAG opted to report the annual number of permits issued by each jurisdiction which may be different than the number of housing units completed or constructed annually. This was done using a single data source which provides consistent data for all jurisdictions. The Construction Industry Research Board defines "multi-family housing" to include duplexes, apartments, and condominiums in structures of more than one living unit.

The median home sales price, compiled from MDA Data Quick, was calculated based on total resales of existing homes in the jurisdiction, including single family units and condominiums. The median price does not reflect the entire universe of housing in the jurisdiction, only those that were sold within the calendar year.

Transportation Section

The journey to work data for the year 2000 was obtained by using the 2000 U.S. Decennial Census Summary File 3. Data for 2010 is based on the 2010 U.S. Census American Community Survey. Information for 2014 was provided by the Nielsen Company.

Employment Section

Data sources for estimating jurisdiction employment and wage information include the 2010 U.S. Census Bureau Local Employment Dynamics Survey, and information from the California Employment Development Department, InfoGroup, and SCAG for years 2007-2013. In many instances, employment totals from individual businesses were geocoded and aggregated to the jurisdictional level.

Employment information by industry type is defined by the North American Industry Classification System (NAICS). Although the NAICS provides a great level of detail on industry definitions for all types of businesses in North America, for the purposes of this report, this list of industries has been summarized into the following major areas: agriculture, construction, manufacturing, wholesale, retail, information, finance/insurance/real estate, professional/management, education/health, leisure/hospitality, public administration, other services, and non-classified industries.

A brief description of each major industry area is provided below:

- Agriculture – This industry includes crop production, animal production and aquaculture, forestry and logging, fishing hunting and trapping, and support activities for agriculture and forestry.
- Construction – Industries under this umbrella involve the construction of buildings, heavy and civil engineering construction, and specialty trade contractors.
- Manufacturing – This group includes the processing of raw material into products for trade, such as food manufacturing, apparel manufacturing, wood product manufacturing, petroleum and coal products manufacturing, chemical manufacturing, plastics and rubber products manufacturing, nonmetallic mineral product manufacturing and primary metal manufacturing.
- Wholesale – Wholesale industries do business in the trade of raw materials and durable goods.
- Retail – Retail industries engage in the sale of durable goods directly to consumers.
- Information – Businesses in this industry specialize in the distribution of content through a means of sources, including newspaper, periodicals, books, software, motion pictures, sound recording, radio and television broadcasting, cable or subscription programming, telecommunications, data processing/hosting, and other information mediums.
- Finance/Insurance/Real Estate – This sector includes businesses associated with banking, consumer lending, credit intermediation, securities brokerage, commodities exchanges, health/life/medical/title/property/casualty insurance agencies and brokerages, and real estate rental/leasing/sales.
- Professional Management – This industry involves businesses that specialize in professional/scientific/technical services, management of companies and enterprises, and administrative and support services. Types of establishments that would fall under this category range from law offices, accounting services, architectural/engineering firms, specialized design services, computer systems design and related services, management consulting firms, scientific research and

development services, advertising firms, office administrative services, facilities support services, among many others.

- Education/Health – Organizations include elementary and secondary schools, junior colleges, universities, professional schools, technical and trade schools, medical offices, dental offices, outpatient care centers, medical and diagnostic laboratories, hospitals, nursing and residential care facilities, social assistance services, emergency relief services, vocational rehabilitation services, and child day care services.
- Leisure/Hospitality – These industries include organizations in the performing arts, spectator sports, museums, amusement/recreation industries, traveler accommodations, and food and drink services.
- Public Administration – This classification includes public sector organizations, including legislative bodies, public finance institutions, executive and legislative offices, courts, police protection, parole offices, fire protection, correctional institutions, administration of governmental programs, space research and technology, and national security.
- Other Services – Groups in this group include, for example, automotive repair and maintenance, personal and household goods repair and maintenance, personal laundry services, dry-cleaning and laundry services, religious services, social advocacy organizations, professional organizations, and private households
- Non-Classified – Non-classified organizations involve work activites that are not included in the North American Industry Classification System.

Retail Sales Section

Retail sales data is obtained from the California Board of Equalization, which does not publish individual point-of-sale data. All data is adjusted for inflation.

Education Section

Student enrollment data is based on public school campuses that are located within each jurisdiction's respective boundary. Enrollment numbers by grade within a given jurisdiction are tabulated based upon data obtained from the California Department of Education. Enrollment year is based on the end date of the school year; for example, enrollment data for the year 2000 refers to the 1999-2000 school year. City boundaries used in the dataset for all years is based on data provided by the Local Agency Formation Commission for each county in the region.

Regional Highlights

Information for this section was developed through data from MDA Data Quick and the California Board of Equalization.

Data Sources Section

In choosing the data sources used for this report, the following factors were considered:

- Availability for all jurisdictions in the SCAG region,
- The most recognized source on the subject,
- Data sources within the public domain, and
- Data available on an annual basis.

The same data sources are used for all Local Profiles (except where noted) to maintain overall reporting consistency. The jurisdictions are not constrained from using other data sources for their planning activities.

The preparation of this report has been financed in part through grants from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation, under the Metropolitan Planning Program, Section 104(f) of Title 23, U.S. Code. The contents of this report do not necessarily reflect the official views or policy of the U.S. Department of Transportation. Additional assistance was provided by the California Department of Transportation.

XII. Acknowledgments

SCAG Management
Hasan Ikhrata, Executive Director
Sharon Neely, Chief Deputy Executive Director
Debbie Dillon, Deputy Executive Director, Administration
Joann Africa, Chief Counsel/Director, Legal Services
Huasha Liu, Director, Land Use & Environmental Planning
Rich Macias, Director, Transportation Planning
Darin Chidsey, Director, Strategy, Policy & Public Affairs
Basil Panas, Chief Financial Officer
Catherine Kirschbaum, Chief Information Officer

Project Managers
Ping Chang, Program Manager, Land Use & Environmental Planning
Michael Gainor, Senior Regional Planner

Project Core Team
Kimberly Clark, Senior Regional Planner
Prabhu Rajendran, Senior Application Developer
Jung Seo, Senior Regional Planner
Alex Yu, Manager, Application Development

Reproduction
Pat Camacho, Office Services Specialist

Assistance from the following SCAG staff members is also recognized:
Matthew Abad, SCAG Intern
Precy Agtarap, SCAG Intern
Anita Au, Assistant Regional Planner
Ludlow Brown, Graphics Designer
Diana Chamberlain, Graphics Designer
John Cho, Associate Regional Planner
Christine Delostrinos, SCAG Intern
Stacy Farfan, SCAG Intern
Carolyn Hart, Lead Graphics Designer
Gurpreet Kaur, Programmer Analyst
Cheol-Ho Lee, Senior Regional Planner
JiSu Lee, SCAG Intern
Weining Liang, SCAG Intern
Jeff Liu, Manager, Media & Public Affairs
Jonathan Nadler, Manager (former), Compliance & Performance Monitoring
Frank Wen, Manager, Research & Analysis
Ying Zhou, Program Manager II

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82.	Hon. Andrew Masiel, Sr.	*Pechanga Band of Luiseño Indians*	Tribal Government Representative
83.	Mr. Randall Lewis	*Lewis Group of Companies*	(Ex-Officio)
84.	Hon. Eric Garcetti	*Los Angeles*	(At-Large)

Appendix H

2007 Hemet/San Jacinto Groundwater Management Plan

Hemet/San Jacinto

Groundwater Management Area

Water Management Plan

Prepared for:

Eastern Municipal Water District, Since 1950

Lake Hemet Municipal Water District, Irrigation Domestic Recreation, Incorporated 1955

City of Hemet, Riverside County, California

San Jacinto

in coordination with:

Department of Water Resources, State of California

Prepared by:

WRIME Water Resources & Information Management Engineering, Inc.

in association with Stetson Engineers and Geoscience

November 7, 2007

Water Resources & Information
Management Engineering, Inc.

1451 River Park Drive, Suite 142, Sacramento, CA 95815
Phone: 916-564-2236 Fax: 916-564-1639
E-mail: info@wrime.com
www.wrime.com

Hemet/San Jacinto Groundwater Management Area
Water Management Plan

November 7, 2007

Prepared for:

Eastern Municipal Water District
Lake Hemet Municipal Water District
City of Hemet
City of San Jacinto

in coordination with
California Department of Water Resources

Prepared by:

Water Resources & Information Management Engineering, Inc.
(WRIME)
1451 River Park Drive, Suite 142
Sacramento, CA 95815

in association with:
Stetson Engineers
Geoscience

Project Management Team
Behrooz Mortazavi, *EMWD*
Ali Taghavi, *WRIME*

Technical Team
Jim Blanke, *WRIME*
John Loncar, *LHMWD*
Steve Johnson, *Stetson Engineers*
Dennis Williams, *Geoscience*

Legal Team
Art Littleworth, *Best Best & Krieger*
Gerry Shoaf, *Redwine & Sherrill*
Eric Vale, *Burke, Williams, Sorenson*
Bob Hargreaves, *Best Best & Krieger*

Facilitation
Dale Schafer, *Center for Collaborative Policy*

Department of Water Resources
Eric Hong, *DWR*
Maurice Hall, *DWR*

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SELECTED ACRONYMS, ABBREVIATIONS, AND TERMINOLOGY

Advisor	independent engineering firm or a qualified individual
AF	acre-foot
AFY	acre-feet per year
Agreement	Settlement Agreement
Association	Hemet/San Jacinto Groundwater Association
CAM	Consultants-Attorneys-Managers
CEQA	California Environmental Quality Act
cfs	cubic feet per second
DWR	California Department of Water Resources
EIR	Environmental Impact Report
EMWD	Eastern Municipal Water District
FMWC	Fruitvale Mutual Water Company
GIS	Geographic Information System
Hemet North	Hemet North portion of the Lakeview/Hemet North
IRRP	Integrated Recharge and Recovery Program
JPA	Joint Powers Authority
JUDGMENT	Stipulated Judgment
Legal Counsel	independent attorney or legal firm
LHMWD	Lake Hemet Municipal Water District
Management Area	Hemet/San Jacinto Groundwater Management Area
MGD	million gallons per day
MOU	Memorandum of Understanding
MWD	Metropolitan Water District of Southern California
PC	Policy Committee
Plan	Hemet/San Jacinto Water Management Plan
Plan Participants	EMWD, LHMWD, Private Water Producers, and Cities of Hemet and San Jacinto (collectively)
Principles	Principles for Water Management
Private Water Producers	Property owners who are pumping groundwater pursuant to overlying water rights
Public Agencies	EMWD, LHMWD, and Cities of Hemet and San Jacinto (collectively)
RCFC&WCD	Riverside County Flood Control and Water Conservation District
RWQCB	Santa Ana Regional Water Quality Control Board
RWRD	Regional Water Resources Database
S.A.A.	Settlement Agreement Approval
S.J.A.	Stipulated Judgment Approval
Soboba Tribe	Soboba Band of Luiseno Indians
TC	Technical Committee
TDS	Total Dissolved Solids

TM	Technical Memorandum
TMDL	Total Maximum Daily Load
Upper Pressure	San Jacinto - Upper Pressure Management Zone
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
Watermaster	Watermaster Governing Board
WRIME	Water Resources & Information Management Engineering, Inc.

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BACKGROUND AND GOALS

The stakeholders in the Hemet/San Jacinto Groundwater Management Area (Figure ES.1) have developed the Hemet/San Jacinto Water Management Plan (Plan) to provide a foundation that guides and supports responsible water management into the future. The Participants in the Plan are Eastern Municipal Water District (EMWD), Lake Hemet Municipal Water District (LHMWD), Cities of Hemet and San Jacinto (Public Agencies), and Private Water Producers.

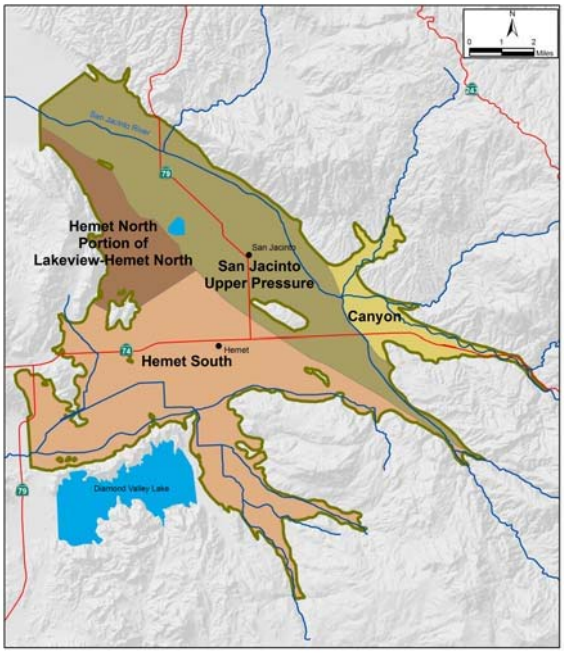

Figure ES.1 Hemet/San Jacinto Groundwater Management Area and Management Zones

Private Water Producers are those property owners who are pumping groundwater pursuant to overlying water rights, typically for agricultural or domestic uses. Private Water Producers may elect two levels of participation in the Plan, with varying levels of benefits and responsibilities, or may elect not to participate. The details on this matter are described in Section 2 of the Plan document.

The Plan, adopted by the governing bodies of the Plan Participants, has eight primary goals:

- Address pumping overdraft and declining groundwater levels,
- Provide for Soboba Tribe prior and paramount water rights,

- Ensure reliable water supply,
- Provide for planned urban growth,
- Protect and enhance water quality,
- Develop cost-effective water supply,
- Provide adequate monitoring for water supply and water quality, and
- Supersede the Fruitvale judgment and agreement.

GROUNDWATER AS A CORNERSTONE FOR WATER MANAGEMENT

The goals of the Plan are interrelated and begin with maintaining groundwater as a high-quality, low-cost, flexible source of water. Efforts are needed to make this happen, as historical groundwater pumping in excess of the Safe Yield of the groundwater basin has resulted in decreasing trends in water levels. In addition, historical land and water use practices for agricultural irrigation and dairy industry waste have raised the levels of nitrates and total dissolved solids in groundwater. Safe Yield, the long-term average quantity of water that can be pumped without causing undesirable results, has been estimated at 40,000 to 45,000 AFY, while average annual production exceeds this amount by approximately 10,000 to 15,000 AFY. The 10,000 to 15,000 AFY difference between the long-term average annual groundwater production and Safe Yield is known as overdraft, which can be responsible for creating undesirable conditions in the basin, including degradation of groundwater quality. The Plan assumes a pragmatic and economic approach in setting the target to reduce overdraft, and assumes an overdraft of 10,000 AFY. This will allow the Plan Participants and the Watermaster to initiate and adopt plans and policies to eliminate overdraft with implementation of economically feasible and cost-effective projects. The Plan intends to stabilize or reverse the decreasing trend in water levels through reducing groundwater production to a level that brings the basin production within the Safe Yield of the Management Area. Higher water levels will increase water in storage, decrease energy costs for pumping, and inhibit the migration of poor quality groundwater from surrounding basins, helping to protect groundwater quality in the Management Area.

INTEGRATION OF GROUNDWATER WITH OTHER WATER SOURCES AND DEMAND MANAGEMENT TO MEET FUTURE WATER NEEDS

The Plan Participants have several options available to increase water supply and reliability in the Management Area. Water used in the Management Area for agricultural and domestic use comes from groundwater, surface water, imports, and recycled water. As shown on Figure ES.2, most of this water has historically been from groundwater, based on 2004 data. This allows significant opportunities for underutilized sources, particularly recycled water and

winter-time imported water, to replace or augment groundwater production. The regional cooperation developed over the years is also of importance as the supply mix varies between the different water users in the Management Area; by cooperating, the water users can fully utilize their available water resources.

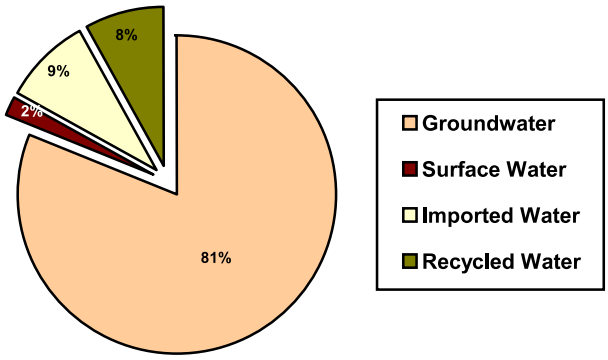

Figure ES.2 Components of Management Area Water Supply

The high-quality groundwater basin also plays an important role in future water availability. Historical declines in groundwater levels are a concern and a major impetus for the development of this Plan. However, even the dewatered portion of the groundwater basin is a significant asset and allows for the full utilization of the available water supplies mentioned above. The new water supplies can be introduced into the system filling the empty portions of the groundwater basin by either substitution for pumping groundwater (in-lieu recharge) or by placing the water in the groundwater system through seepage from specially designed ponds or through injection from wells (direct recharge). Both these methods benefit the Management Area groundwater basin, which is composed of materials that can store large quantities of water and holds high quality groundwater that can be pumped for usage at a later time. A complex system of faults and other geologic features separate the groundwater system into four Management Zones (see Figure ES.1), which require some degree of individual attention in planning and designing recharge and extraction projects, based on each Management Zone's unique attributes.

The numerous water supply opportunities along with water conservation by both the Public Agencies and Private Water Producers will be utilized to meet the current and future water needs of the Management Area. Based on the latest data and information on land and water practices, general plans, urban water management plans, and other specific plans, water demand in the Management Area is projected to increase over the course of next 15-20 years (Figure ES.3). Based on these projections, there will also be a shift from agricultural water use

to urban water use, resulting in more stringent water quality requirements to meet drinking water standards.

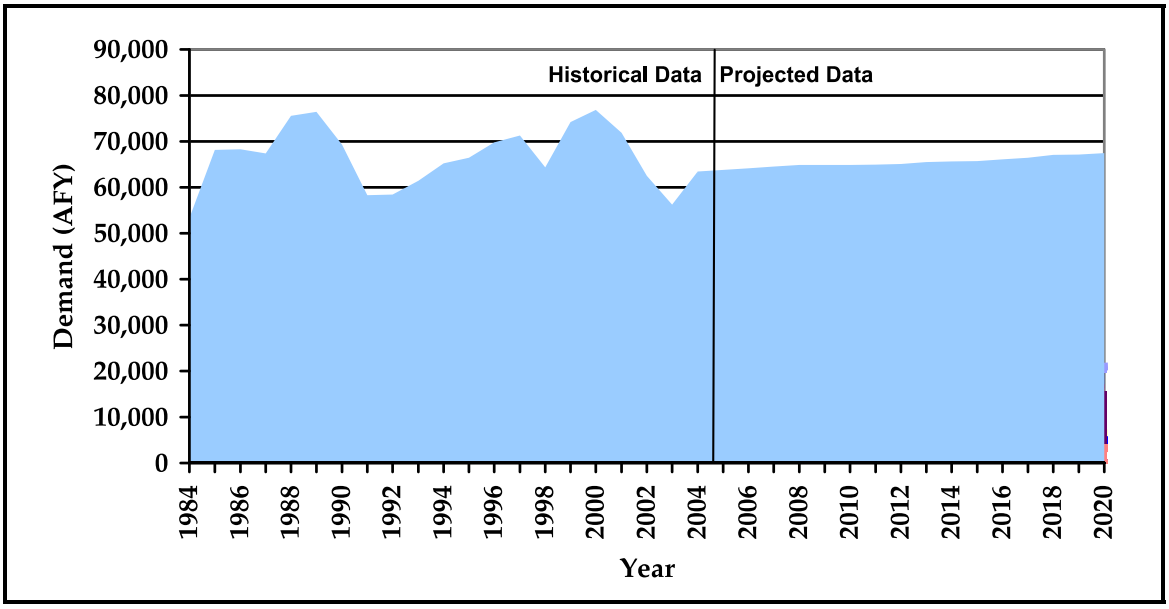

Figure ES.3 Historical and Projected Water Demand

PHYSICAL SOLUTION IS THE BASIS OF WATER SUPPLY PROJECT IN THE MANAGEMENT AREA

As described in the Stipulated Judgment, the Physical Solution is the court decreed method of managing the water supply in the Management Area to maximize the reasonable and beneficial use of the waters, eliminate overdraft, protect the prior rights of the Soboba Tribe, and provide for the substantial enjoyment of all water rights by recognizing their priorities. The Physical Solution consists of numerous water supply and conjunctive use projects, including direct and in-lieu recharge, increased use of recycled water, increased conservation, and improved monitoring. The core project in the Physical Solution is the Hemet/San Jacinto Integrated Recharge and Recovery Program (IRRP). Phase I of the IRRP has been designed, funded, the necessary environmental permits have been acquired, and construction is currently underway. Phase II is in planning stages. The IRRP is a regional recharge and recovery program to meet the following goals:

- Satisfy Prior and Paramount Soboba Tribe water rights;
- Offset the estimated 10,000 AFY overdraft in the Management Area; and
- Provide an additional 15,000 AFY to help meet the projected demand increases.

In addition to IRRP, the Plan identifies other projects that can potentially meet the above goals. These include direct recharge, in-lieu recharge, and recycled water projects.

A FIRM LEGAL AND INSTITUTIONAL ARRANGEMENT

Development of a comprehensive system of water management begins with the legal and institutional framework. To meet the goal of reducing groundwater production to eliminate overdraft, the Public Agencies agreed upon some basic principles as a basis for allocating Base Production rights. Base Production rights establish the initial amount that each Public Agency would be able to pump without the need to replenish the basin. The Base Production rights are calculated on the basis of actual production by Public Agencies during 1995-99 calendar years, and adjusted for specific historical operational activities, such as:

- Recharge Activities;
- MWD San Jacinto Tunnel Seepage;
- Fruitvale Entitlement Water Sold by EMWD to LHMWD, Hemet, and San Jacinto;
- Stream Diversions;
- Conveyance Water Deliveries; and
- Other Considerations.

The Public Agencies have, therefore, agreed to the following Base Production Rights:

Table ES.1 Public Agency Base Production Rights

Public Agency	Base Production Rights (AFY)	Base Production Rights (Percent)
EMWD	10,869	33.7
LHMWD	11,063	34.2
City of Hemet	6,320	19.6
City of San Jacinto	4,031	12.5
Total	**32,283**	**100**

Surface water rights are not impacted and/or changed by the Plan or any other recent agreements. LHMWD diverts water from the San Jacinto River and its tributaries through its pre-1914 water rights to meet their irrigation and municipal water demands, and EMWD has a license to divert water from the San Jacinto River for recharge purposes.

Soboba Tribal water rights are recognized throughout the Plan, and details of the monetary, water quantity, water quality, and property requirements to meet the obligations set forth in the settlement agreement with the Soboba Tribe are discussed in Section 8 of the Plan.

The Institutional Plan, discussed in Section 9 of the document, assigns the administration,

implementation, and monitoring of the Plan to a Watermaster. The Watermaster will consist of one elected official representing each of the Public Agencies and one representative selected by the participating Private Water Producers. The Watermaster will utilize the counsel of legal advisor, as well as provide technical oversight through an Advisor and Technical Advisory Committee. The Watermaster will utilize services of EMWD for recharge operations and administration and monitoring of the projects and the Plan. The relationships and basic responsibilities of these entities are summarized in Figure ES.4. The Watermaster will also review, approve, and adopt the annual budget, which will be funded by administrative assessments and replenishment assessments. The details of Watermaster administration are discussed in Section 9 of the Plan document.

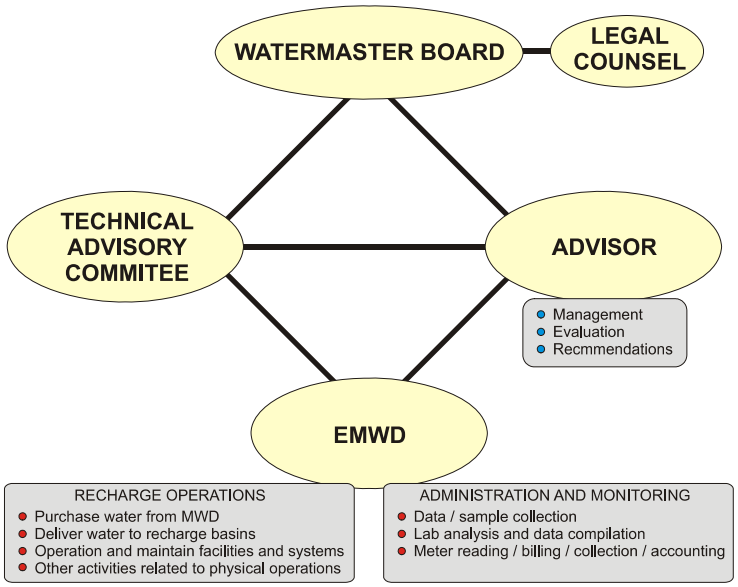

Figure ES.4 Plan Institutional Setup

IMPLEMENTATION AND PLAN EVOLUTION

The implementation of the Plan, along with any additions or modifications as may become appropriate, and all financial matters relating to Plan activities are the responsibility of the Watermaster. The implementation process can be divided into two processes: implementation and ongoing activities. The schedules for these processes are shown in Table ES.2 and Table ES.3.

Table ES.2 Implementation Schedule

Months after Approval of Stipulated Judgment	Implementation Item
Month 1	Determine the method of selection for the Private Pumper representative.
Month 2	Select Public Agency and Private Pumper representatives.
Month 3	Hold first meeting of the Watermaster. Contract with EMWD for Watermaster services.
Month 4	none
Month 5	none
Month 6	Retain legal council and advisor. Prepare and adopt Rules and Regulations for its own operation as well as for the operation of the Water Management Plan and Judgment. Review and reissue agreements and MOUs, as needed.
Upon Settlement Agreement Implementation	Recognize Tribal water rights.

Table ES.3 Ongoing Schedule

Timing	Frequency	Activity	Responsibility
January 1	Annual	Propose Monitoring Program.	EMWD
End of January	Annual	Review Monitoring Program.	Advisor
End of February	Annual	Approve budget for Monitoring Program.	Watermaster
1st Quarter	Annual	Advance payment of Administrative Assessments.	Public Agencies
1st Quarter	Annual	Payment of Replenishment Assessments.	Public Agencies
Four months after completion of calendar year monitoring	Annual	Submit Annual Hemet/San Jacinto Water Management Area Report.	EMWD
As needed	As needed	Revise safe yield.	Advisor
TBD	Annual	Prepare, File, and Distribute Watermaster Annual Report.	Watermaster

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1.1 PROJECT BACKGROUND

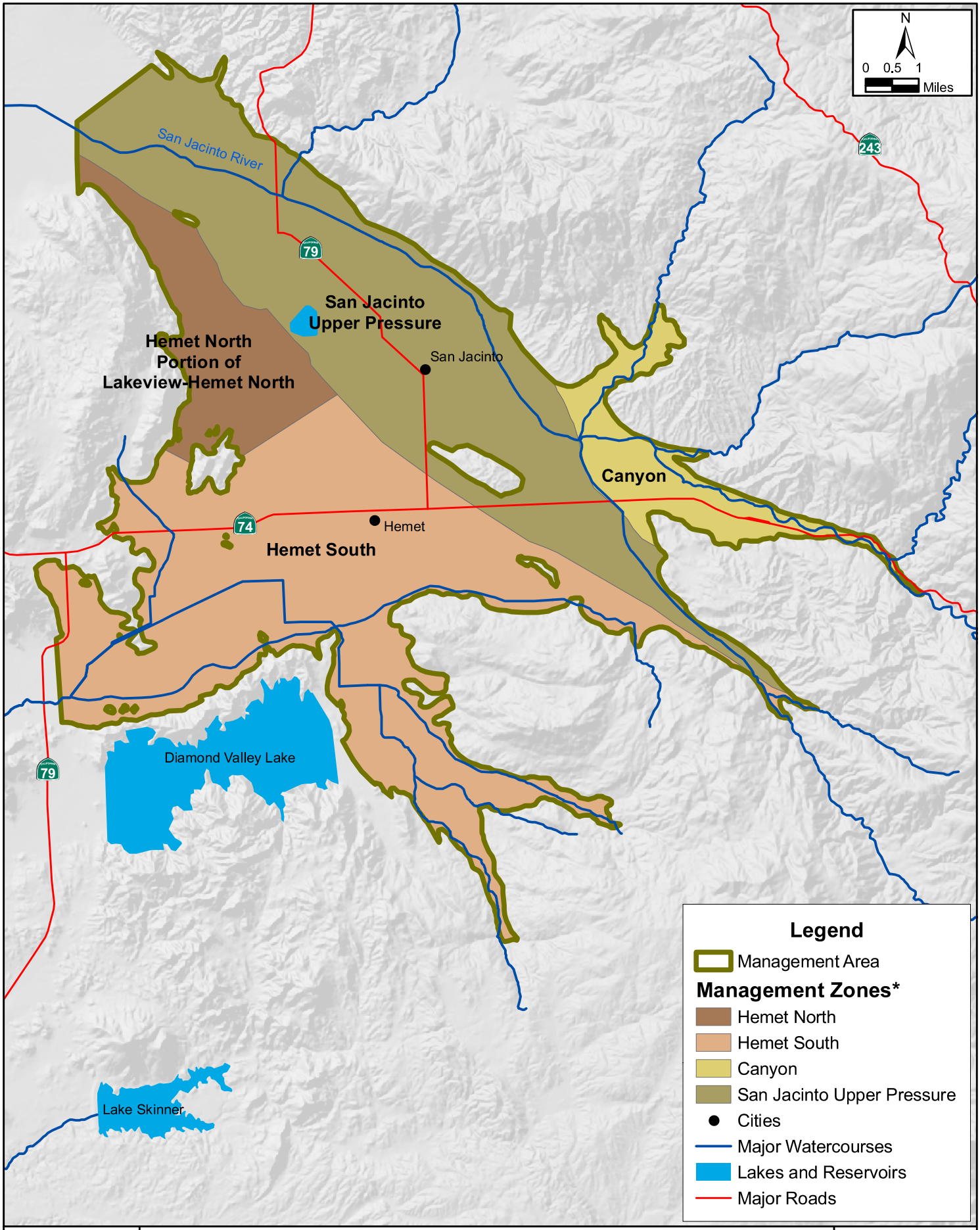
The stakeholders in the Hemet/San Jacinto Groundwater Management Area (Figure 1.1) (Management Area) have developed the Hemet/San Jacinto Water Management Plan (Plan) to provide a foundation that guides and supports responsible water management in the future. The local stakeholders involved in the Plan include Eastern Municipal Water District (EMWD), Lake Hemet Municipal Water District (LHMWD), Cities of Hemet and San Jacinto, and Private Water Producers, collectively referred to as "Plan Participants". EMWD, LHMWD, and the Cities of Hemet and San Jacinto are collectively referred to as "Public Agencies".

A Policy Committee (PC) of the Plan Participants developed and adopted the Principles for Water Management (Principles), which guide the management, development, and governance of local water supplies. The adopted Principles, along with a variety of technical analyses, guided development of the Plan. The PC established the Principles based on the historical data on the operation of the groundwater basin; historical and projected water demands; and existing and potential future facilities. The California Department of Water Resources (DWR) provided financial, facilitation, and technical support to the PC.

A Technical Committee (TC) supported the PC and served as the investigative and review body to ensure that proper technical analyses were conducted to provide a defensible technical foundation for the Plan. The TC provided technical input to support decisions by the Public Agencies, Private Water Producers, and other stakeholders. DWR also provided financial and technical support to the TC.

A Consultants-Attorneys-Managers (CAM) committee served as an interim body to develop and review technical, legal, institutional, and financial documents, plans, and standards. The CAM committee discussed the technical/policy/legal issues in anticipation of evolving documents and recommendations for action by the policy makers for the PC.

EMWD and LHMWD have also worked with the Soboba Band of Luiseño Indians (Soboba Tribe) and the Federal Government to develop a Settlement Agreement (Agreement) (Appendix A) that would resolve past issues with respect to Tribal water rights and the water management practices in the basin. The Agreement will be supported by two stipulated



WRIME

Management Area and Management Zones

Hemet / San Jacinto Water Management Plan

*Source: EMWD

October 2007

Figure 1.1

judgments[1] that will provide the legal and technical basis for future water supplies for the Soboba Tribe.

1.2 WATER MANAGEMENT PLAN

The Plan, adopted by the governing bodies of the Plan Participants, will provide a roadmap for implementation of the Physical Solution, ensure adequate and reliable sources of future water supply for the Management Area, and meet the Prior and Paramount Soboba Tribe water rights requirements. The Plan may be modified and updated in the future based on, among other things, the availability of new data, updated technical analysis, and changes in the institutional/financial structure of the stakeholders.

1.3 PHYSICAL SOLUTION

As described in the Stipulated Judgment (Appendix B), the Physical Solution is the court decreed method of managing the water supply in the Management Area to maximize the reasonable and beneficial use of the waters, eliminate overdraft, protect the prior rights of the Soboba Tribe, and provide for the substantial enjoyment of all water rights by recognizing their priorities. Therefore, the Physical Solution is a group of water supply and conjunctive use projects that would serve this purpose.

The project that is considered to be the core of the Physical Solution is Phase I of the *Hemet/San Jacinto Integrated Recharge and Recovery Program (IRRP)*. Phase I of the IRRP has been designed, funded, and the necessary environmental permits are being acquired. Phase II is in planning stages. The complete project is designed to recharge (replenish) imported water and extract groundwater at a capacity such that the following goals are met:

1. Satisfy Prior and Paramount Soboba Tribe water rights;
2. Offset the estimated 10,000 acre-feet per year (AFY) overdraft in the Management Area; and
3. Provide an additional 15,000 AFY to help meet the projected demand increases.

Major elements of Phase I of the Project are:

- Modifications to Pump Stations (Warren and Commonwealth);
- Construction of Pipelines;

[1] These judgments are in the case of Soboba Tribe v. Metropolitan Water District, et. al.; U.S. District Court in Los Angeles, Case No. 00-04208 GAF, and in a Riverside County Superior Court action, yet to be filed.

- Design and Construction of Recharge Basins;
- Drilling Three Extraction Wells;
- Installation of Pumps and Chlorination Equipment for Three Extraction Wells; and
- Design and Drilling of Three Monitoring Wells.

Additional details on Phase I of the IRRP are presented in Section 3.2.2 of this Plan, and details on Phase II are presented in Section 5.3.1.

In addition to the *San Jacinto River Integrated Recharge and Recovery Project*, there are other projects that the TC has identified as potential projects to be further considered in the future as part of the Physical Solution for the Management Area. These include *direct recharge* and *in-lieu recharge* projects and are described in Section 5.3 of this Plan.

1.4 WATER MANAGEMENT PLAN GOALS

The Principles include eight primary goals for the management of water resources in the Management Area. These are:

- Address pumping overdraft and declining groundwater levels,
- Provide for Soboba Tribe prior and paramount water rights,
- Ensure reliable water supply,
- Provide for planned urban growth,
- Protect and enhance water quality,
- Develop cost-effective water supply,
- Provide adequate monitoring for water supply and water quality, and
- Supersede the Fruitvale judgment and agreement.

SECTION 2 MANAGEMENT PLAN FRAMEWORK

This section briefly describes the geographic boundaries of the four divisions, or Management Zones, that make up the Management Area and provides a brief history and background on each of the primary stakeholder organizations. Past agreements and related activities leading to the Plan are discussed below, including the role of the state and public participation.

2.1 MANAGEMENT AREA

The Management Area is divided into four Management Zones: The Canyon, San Jacinto Upper Pressure (Upper Pressure), Hemet South, and the Hemet North portion of the Lakeview/Hemet North (Hemet North). The locations of the Management Zones are shown in Figure 1.1. The delineation of the Management Zones is based on the recent update by the Santa Ana Regional Water Quality Control Board (RWQCB) in the *Water Quality Control Plan - Santa Ana River Basin (RWQCB, as amended 2004)*. The RWQCB defined these boundaries on the basis of hydrogeologic conditions to support implementation of specific water quality criteria. Additional descriptions of the basin hydrogeology are provided in Section 4.

2.2 MANAGEMENT PLAN PARTICIPANTS

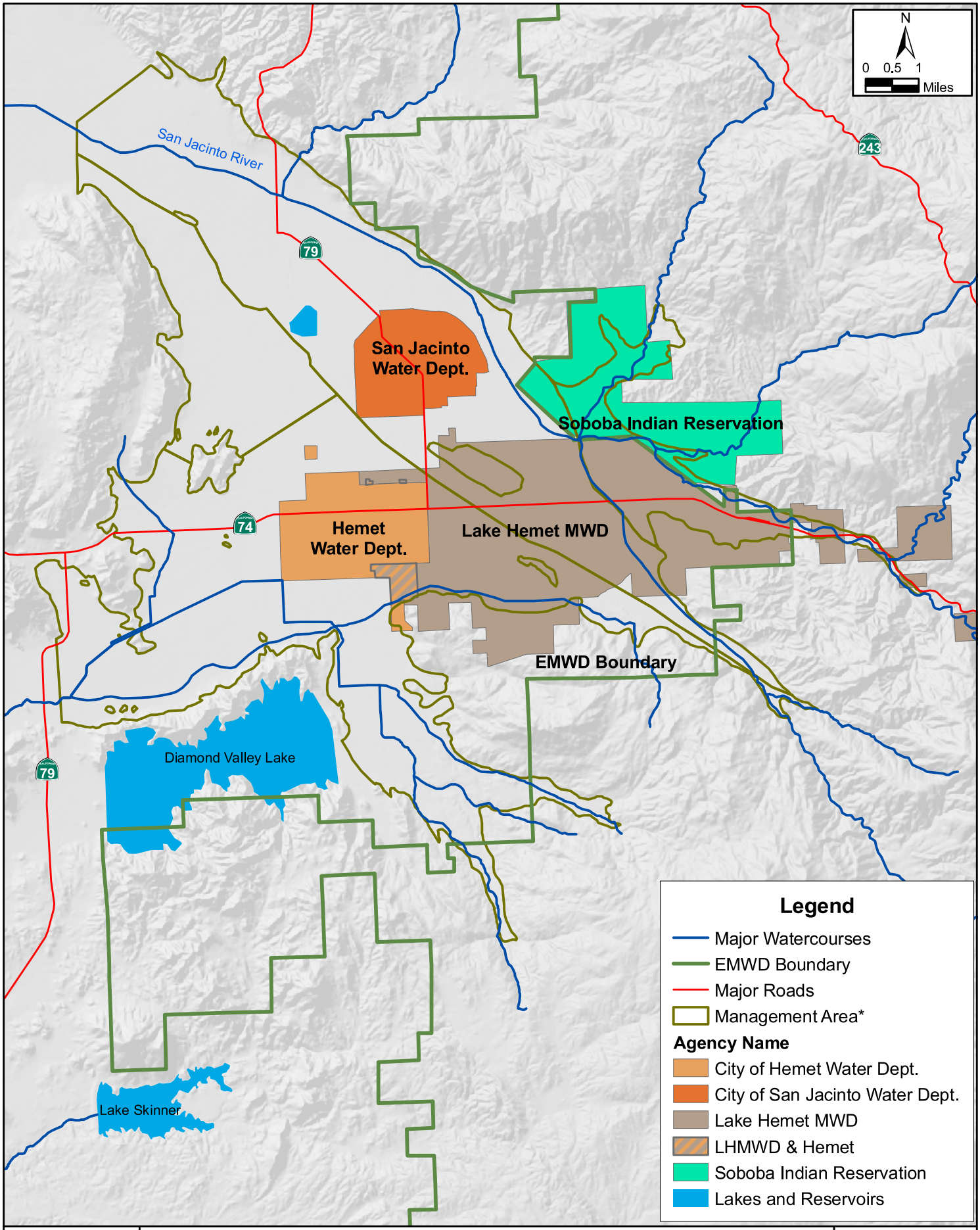
A map of the service areas of the Public Agencies near the Management Area and the Soboba Reservation is provided in Figure 2.1. The Plan Participants are briefly described below.

2.2.1 PUBLIC AGENCIES

EMWD, LHMWD, the City of Hemet, and the City of San Jacinto provide water service in various areas of the Canyon, Upper Pressure, Hemet South, and Hemet North Management Zones. A list of governing bodies is provided in Appendix C. Additionally, there are a number of Private Water Producers extracting groundwater for agricultural and domestic use.

2.2.1.1 Eastern Municipal Water District (EMWD)

Since its formation in 1950, EMWD has matured from a small agency primarily serving agriculture to one whose major demands come from domestic customers. In 1951, EMWD annexed to the Metropolitan Water District of Southern California (MWD). With the purchase of the Fruitvale Mutual Water Company (FMWC) in 1971, EMWD acquired all of Fruitvale's



Public Agencies and Soboba Reservation

Hemet / San Jacinto Water Management Plan

*Source: EMWD

October 2007

Figure 2.1

assets including appropriative, prescriptive, and riparian water rights; water system, wells, well sites, pumps, and storage; real property, easements, rights, and interests; and franchises, permits, and licenses. Over time, the agency has continued to grow. Today, in addition to providing retail service, EMWD provides wholesale water to the seven local water agencies within its service area, including the three remaining Public Agencies in the Management Area.

As of 2005, EMWD serves approximately 113,000 retail connections, including approximately 200 agricultural connections, in a service area with an estimated population of 567,000 within the 555-square-miles, including many areas outside the Management Area. The population within EMWD's boundaries is expected to grow to 830,000 by 2025 (EMWD, 2005a), not including the population of the Rancho California Water District.

In addition to wholesale and retail potable water supply, EMWD's services include wastewater collection and treatment as well as water recycling. The San Jacinto Valley Regional Water Reclamation Facility is an 11 million gallons per day (MGD) plant that provides most of the treatment and water recycling capability for the Management Area.

The five-member Board of Directors comprise the governing body of EMWD and are responsible for setting the policies guiding the operations of the District. Board members are elected to four-year terms by the registered voters from five geographic divisions, which are apportioned on the basis of population distribution. Terms of service are staggered to ensure continuity; public elections are held in at least two divisions every two years. Directors must reside within the division from which they are elected.

The 2004 water use in the portion of the EMWD service area within the Management Area was 13,900 AFY, and it is projected to increase to 21,000 AFY by the year 2020 (EMWD, 2005b).

2.2.1.2 Lake Hemet Municipal Water District (LHMWD)

LHMWD was created in its present form in 1955, but its origins date back to the late 1880s. The service area covers 16,500 acres in the Hemet/San Jacinto Valley area with an additional 2,200 acres in Garner Valley. LHMWD provides water to residential and agricultural customers in its service area. All wastewater collection and treatment within the LHMWD area is performed by EMWD.

LHMWD operates the Hemet Dam and reservoir. The dam, an engineering marvel at the time of its construction in 1895, is a gravity-type, granite dam. LHMWD historically treated a portion of this surface water for domestic use, however since 1998 the surface water treatment plant has been offline and all surface water usage has been for untreated agricultural uses.

LHMWD usually maintains approximately 11.7 million gallons in storage in the Hemet/San Jacinto Valley.

LHMWD customers are represented by a publicly elected board of five directors from five divisions, representing approximately 13,700 domestic and 52 agricultural connections within a 21-square mile service area with a 2005 population of approximately 39,100. The population within the LHMWD service area is expected to grow to approximately 49,500 by 2025 (LHMWD, 2005).

The 2004 water use within the LHMWD service area was estimated to be 16,900 AFY. Due to the expected benefits of more robust conservation efforts, demand is projected to remain fairly constant over the next several years despite an increasing number of service connections. Demand in 2020 is expected to be 16,300 AFY before increasing above the 2004 demand level in years thereafter (LHMWD, 2005).

2.2.1.3 The City of Hemet

The development of Hemet began in 1887 with the formation of the Lake Hemet Water Company and the Hemet Land Company by W. F. Whittier and E. L. Mayberry. The completion of the Hemet Dam in 1895, the formation of Lake Hemet behind the dam, and a water distribution system to and through the valley made future development of the Hemet area possible.

As of 2005, the city had a population of 78,600 with an area of approximately 26 square miles. City of Hemet anticipates a population growth to 154,000 by 2025 (Hemet, 2006).

The City of Hemet was incorporated on January 20, 1910 with a population of 992. The city government is a Council/Manager form of government with seven elected positions, which includes five Council Members, one City Treasurer, and one City Clerk. The Mayor is elected by the Council Members and serves a one-year term. All Council Members serve a four-year term.

The City of Hemet Water Department treats and distributes water to 9,500 connections, covering 5 square miles of the city area. The 2005 population of the Water Department's service area is 20,200 and is projected to grow to 22,300 by 2025. EMWD and LHMWD serve the remaining 21 square miles of the city, with 7,830 and 3,025 connections, respectively. All wastewater collection and treatment within the City of Hemet area is performed by EMWD.

The 2004 water use within the City of Hemet Water service area was estimated to be 6,000 AFY, and is projected to increase to 6,700 AFY by year 2020 (Hemet, 2006).

2.2.1.4 The City of San Jacinto

Incorporated in 1888, San Jacinto is one of the oldest communities in Riverside County. The city has a Council/Manager form of government with a five member Council that includes a Mayor and Vice Mayor. The City of San Jacinto Water/Wastewater Divisions are responsible for the health and safety of the community through the delivery of the potable water supply and the collection of wastewater. The city wastewater collection system is maintained by this Division while wastewater treatment service is provided by EMWD.

The 2005 population of the city was 34,100; it is anticipated the population of the city will grow to 63,600 by 2025 (San Jacinto, 2005). The City of San Jacinto Water Department serves the central portion of the city with approximately 3,700 residential and commercial service connections. The 2005 population of the Water Department's service area is 13,200 and is projected to grow to 24,000 by 2025. The remaining portions of the city are served by EMWD and LHMWD, which have 4,636 and 475 service connections within the city boundaries, respectively.

The 2004 water use within the City of San Jacinto water service area was estimated to be 3,100 AFY, and is projected to increase to 5,100 AFY by year 2020 (San Jacinto, 2005).

2.2.2 PRIVATE WATER PRODUCERS

Private Water Producers are those property owners who are pumping groundwater pursuant to overlying water rights, typically for agricultural or domestic uses. Historically there was no comprehensive metering program in-place to monitor groundwater production and/or water use by the Private Water Producers. EMWD collected groundwater data through an informal, voluntary monitoring program. In 2004 the Hemet/San Jacinto Groundwater Monitoring Program was initiated by the Public Agencies and the DWR to collect, analyze, and compile groundwater-related data (EMWD, 2005).

It is estimated, on the basis of limited data and land use analysis, that the 2004 water use by Private Water Producers was about 22,200 AFY. This annual level of water use is unusually low, compared to a long-term average of 31,000 for 1984-2004 (WRIME, 2003a). Water use is expected to drop to approximately 16,000 AFY by 2020.

The Public Agencies recognize the overlying water rights of Private Water Producers, and the Principles provide several options for voluntary participation in the Plan by the Private Producers. For more details, please see the Principles provided in Appendix D.

There are two classes of participants, Class A and Class B; both agree to have their wells metered and to have those meters read by EMWD personnel at no cost to the participants. The two types of participants are further explained below.

2.2.2.1 Class A Participants

A Private Water Producer can sign an agreement acknowledging the existence of the Plan, while not being required to participate in Plan implementation. Class A participants are allowed to vote for and/or serve as the Private Water Producer representative on the Watermaster board. The Class A participants may continue to pump from their property without assessments by the Watermaster, so long as the water is put to a reasonable and beneficial use as authorized by California law.

The Class A participants have the right to convert to Class B during a grace period that ends 3 years after the entry of the Stipulated Judgment, and upon payment of the total assessments without interest, as if they were Class B participants to begin with.

2.2.2.2 Class B Participants

A Private Water Producer can become a Class B participant by electing to limit annual pumping to their estimated average annual production during the 1995 – 1999 calendar years and by agreeing to pay replenishment assessments on amounts in excess of that average annual production.

Like Class A Participants, Class B Participants can vote for and/or serve as the Private Water Producer's representative on the Plan's governing board. Additional benefits are given to Class B Participants as well. Under certain conditions, the Class B Participant can convey their Adjusted Production Right to the Plan or to a Public Agency. Also, upon conversion from agricultural to urban uses, Class B Participants would receive credits from the Public Agency toward the satisfaction of any requirements then in effect for water supplies and toward any fees associated with water supply that the Public Agency may then have in effect. For more information on production rights, please see Section 6.

2.2.2.3 Non-Participants

A Private Water Producer can elect not to participate in the Plan and not to formally acknowledge its existence. These non-participants will continue to exercise their water rights unaffected by the Plan.

2.2.3 ROLE OF STATE OF CALIFORNIA DEPARTMENT OF WATER RESOURCES

In June 2001, the DWR executed a Memorandum of Understanding (MOU) with EMWD, LHMWD, and the Cities of Hemet and San Jacinto. Initially, DWR worked to bring the group together to establish a mutual understanding of the issues in the Management Area. The goals of the group were determined and included the following: (i) finalizing an approach to groundwater management; (ii) settling on a mechanism to involve the Plan Participants in the water rights claim by the Soboba Tribe; (iii) agreeing on the basic components of a regional conjunctive use program; and (iv) establishing the necessary institutional structures. Major involvement of the DWR to-date include providing technical support to the TC and PC on resolving various technical and data analysis issues, providing facilitation and mediation support to the PC and the CAM committee, providing financial support on a number of studies and projects, including the Plan document.

2.2.4 PUBLIC PARTICIPATION

There have been numerous opportunities for public input into the development of the Plan. Meetings were held for the public at the beginning of the Plan process to provide information and gather input. While the Plan was being developed, more opportunities were provided for public input, including TC and PC meetings and meetings with the Private Water Producers, all of which were open to the public. The public was also given the opportunity to review the draft of the Plan and submit comments.

2.3 PREVIOUS AGREEMENTS AND INSTITUTIONAL BODIES

During the course of history of water supply in the Management Area, there have been other agreements and institutional bodies that have been formed and operated to facilitate the management of water supplies. Following is a brief description of these agreements and institutional bodies, which are no longer active or are superseded by this Plan.

2.3.1 FRUITVALE JUDGMENT AND DECREE

The Fruitvale Judgment and Decree (The City of San Jacinto, et al., v. Fruitvale Mutual Water Company, et al., No. 51546, Riverside County) was entered into Book 72, Page 164 of Judgments, Riverside County, on June 4, 1954. Under the Judgment and Decree, FMWC could extract groundwater from an area which largely corresponds to the Canyon Management Zone without any restrictions as long as a specified criteria regarding static depth to groundwater and production limits were met. After purchase of FMWC, EMWD was subject to the

provisions of the Judgment and Decree. The Water Management Plan and related Stipulated Judgment will subsume and supersede the 1954 Fruitvale Judgment and Decree, along with any other agreements between EMWD and other agencies related to the FMWC acquisition, provided that none of the service area agreements included in the Fruitvale documents or those related to mutual aid or system interties are affect by this Plan or the Stipulated Judgment.

In 1971, EMWD purchased all of FMWC's assets and water rights, and FMWC was dissolved. EMWD also agreed to continue to provide to the Cities of Hemet and San Jacinto and LHMWD the amounts of water which they had been entitled to receive as shareholders in FMWC. These deliveries were known as "entitlement water" and the water was provided at a fixed rate, subject to annual adjustments. The amounts of water to be provided were:

- City of Hemet: 6.39% of the greater of FMWC pumping or 9,000 AFY;
- City of San Jacinto: 0.38% of FMWC pumping; and
- LHMWD: 3.74% of FMWC pumping.

The reporting by EMWD since the purchase of FMWC shows that an average of approximately 10,000 AFY was pumped from FMWC wells. Of this total, an average of 61% was from Upper Pressure, 33% was from Canyon, and 6% AFY was from Hemet South.

2.3.2 HEMET/SAN JACINTO GROUNDWATER ASSOCIATION

The Hemet/San Jacinto Groundwater Association (Association) was formed in 1991 to provide an over-arching organization to proactively address groundwater issues in the Management Area. The Association Board of Directors included representatives from the Private Water Producers, EMWD, LHMWD, and the Cities of Hemet and San Jacinto.

The Mission Statement and Articles of Association were approved on September 9, 1991. The Mission Statement read: *The Hemet/San Jacinto Groundwater Association serves as the regional groundwater management entity for portions of the San Jacinto Valley groundwater basins. The Mission of the Association is to maintain a secure reliable and reasonably priced supply of high quality water for groundwater producers in the basin. The Association will implement its Mission by developing and applying sound groundwater basin management concepts.*

With regard to the area covered by the Association, the Articles of Association state: *The portions of the San Jacinto Valley Groundwater Basins shall include the Canyon area, the Intake area, and the upper pressure area, of the San Jacinto Hydrologic Subarea; the Hemet Hydrologic Subarea; and a portion of the Winchester Hydrologic Subarea. Such also being that portion of the San Jacinto Valley southeasterly of Bridge Street and northeast of one-quarter mile west of California Avenue in the area of Simpson Road, together with tributary basins, streams, and watersheds.*

In May 1994, following receipt of the Soboba Band of Mission Indians water rights settlement claim, requests were submitted to the U.S. Department of the Interior by EMWD, the Association, and the Soboba Tribe, to appoint an Indian Water Rights Settlement team to participate in settlement negotiations. The activities of the Association stopped when the current negotiations took precedence.

2.4 ACTIVE INSTITUTIONAL BODIES

As part of the on-going activities leading to the development and adoption of the Principles, the Stipulated Judgment, and agreement with the Soboba Tribe, the following institutional bodies are formed:

- Hemet/San Jacinto Policy Committee (PC),
- Hemet/San Jacinto Technical Committee (TC), and
- Hemet/San Jacinto Consultant-Attorney-Managers Committee (CAM).

Following is a brief description of each body, their role, and participants.

2.4.1 HEMET/SAN JACINTO POLICY COMMITTEE

The PC is comprised of elected officials representing EMWD, LHMWD, the Cities of Hemet and San Jacinto, and representatives of the Private Water Producers. Each entity, including the Private Water Producers, has three representatives on this committee. In the case of the Public Agencies, the PC representatives are two members of the Board of Directors or City Council and the agency or city manager. Three representatives reflecting the Private Water Producers interests (agricultural, dairy, golf course, etc.) are selected by the Private Water Producers. Each entity participates and votes as a unit in the PC. The decision making process is based on consensus. DWR provides a facilitator, a project manager, and technical experts to support and facilitate the decisions of the PC and TC members. Observers to the PC include other Private Water Producers, attorneys, and/or consultants representing various members, and representatives of the Soboba Tribe.

The list of participants in the PC at the time of adoption of this Plan is presented in Appendix E.

2.4.2 HEMET/SAN JACINTO TECHNICAL COMMITTEE

The PC formed a TC to compile, share, interpret, evaluate, and reach agreement on data; to define problems; and to address the PC's technical issues and make recommendations to the PC. Committee membership consists of representatives assigned by the Public Agencies, the Private

Water Producers, and DWR and an engineering consultant provided by DWR as a neutral third-party participant. The representative from LHMWD served as the TC chairman. Through a collaborative effort, the TC developed the data set (WRIME, 2003a) that provides the basis for understanding the area's hydrology, and has identified potentially feasible initiatives, programs, and projects to enhance the safe yield of the Management Zones.

The list of participants in the TC at the time of adoption of this Plan is presented in Appendix E.

2.4.3 HEMET/SAN JACINTO CONSULTANT-ATTORNEY-MANAGERS COMMITTEE

The PC formed the CAM Committee, consisting of technical, legal, and management representatives of each Public Agency, assisted by the DWR project manager and facilitator. The role of the CAM Committee is to facilitate the preparation of technical and legal documents in support of the Stipulated Judgment, the Agreement, and the Plan. Tasks assigned to the CAM Committee include: the development of contractual agreements and MOUs, and the evaluation of the financial impacts to the community for consideration and action by the PC. The CAM Committee provides administrative or policy recommendations to the PC.

The list of participants in the CAM Committee at the time of adoption of this Plan is presented in Appendix E.

2.5 RELATED GROUNDWATER MANAGEMENT ACTIVITIES

There have been numerous investigations and technical analyses conducted in the Management Area. This section highlights more recent reports that were produced to support the Plan, reviewed by the TC, and used by the PC to make decisions. There has been a significant amount of work completed by the local agencies documented in the form of presentations to the PC and the TC. These include:

- Analysis of EMWD Fruitvale water transfer and use by other agencies;
- Analysis of Conveyance (export) water from the Management Area;
- Reconciliation of the Groundwater Production records amongst the participants;
- Estimation of basin overdraft;
- Review and assessment of the San Jacinto Watershed Groundwater Model; and
- Recycled water use and activities.

A Basin Assessment Study was undertaken in 2003 by the local stakeholders with the support of DWR in order to evaluate the existing conditions of the Management Area, evaluate likely future conditions, and develop and evaluate potential conjunctive use opportunities in the

Management Area. To support the Basin Assessment Study, the following Technical Memoranda (TM) and reports were produced:

- *Operational Yield Study, Hemet/San Jacinto Groundwater Management Area (WRIME, 2003d);*
- *Technical Memorandum No. 1 (TM1), Assessment of Historical and Projected Land and Water Use Data (WRIME, 2003a);*
- *Technical Memorandum No. 2 (TM2) - Description of Preferred Potential Conjunctive Use Projects (WRIME, 2003c);*
- *Basin Assessment Study Executive Summary (ES) (WRIME, 2003b); and*
- *Draft Technical Memorandum No. 3 (TM3) - Analysis of Impacts of Conjunctive Use Projects (January 2004).*

The *Operational Yield Study, Hemet/San Jacinto Groundwater Management Area* presents estimates of the operational yield of the Management Area. Several time periods were used to examine the water budgets of each Management Zone and the Management Area as a whole under various hydrologic conditions. The purpose of the report was to review the previous estimates of hydrologic water budget and reconcile differences in the previously prepared water budgets, and to achieve a consensus on the assumptions, data, methods, and yield of the basin. The long-term period of 1958-2001 was used since it had the best available data at the time and represented a balanced hydrologic period, with wet, dry, and normal periods similar in frequency to the overall historical record.

Hemet/San Jacinto Basin Assessment Study – Basin Assessment Report/Integrated Water Management Plan, Technical Memorandum No. 1 (TM 1), Assessment of Historical and Projected Land and Water Use Data presents background and available data, and analyzes the quality and utility of the data for evaluating basin conditions. The data presented in TM 1 include historical groundwater production, water diversions, water sales, and imported water. The purpose of the report was to obtain agreement on existing conditions, document assumptions, and provide a baseline for purposes of future comparison.

Hemet/San Jacinto Basin Assessment Study – Basin Assessment Report/Integrated Water Management Plan, Technical Memorandum No. 2 (TM 2), Identification and Description of Potential Conjunctive Use Projects presents the process and basis of selection of sites for further evaluation for potential conjunctive use projects. Seven sites were selected from an initial group of 15. The sites were ranked based on screening criteria that included: general site characteristics (size, recharge needs, ownership, etc.), recharge water sources, hydrogeologic suitability, sub-basin interactions, engineering suitability, land use suitability, and environmental impacts. An initial screening was also performed for two potential in-lieu projects.

Hemet/San Jacinto Basin Assessment Study – Executive Summary provides a summary of TM 1 and TM 2.

Draft Hemet/San Jacinto Basin Assessment Study – Basin Assessment Report/Integrated Water Management Plan, Technical Memorandum No. 3 (TM 3), Analysis of Impacts of Conjunctive Use Projects (January 2004) presents a summary of available information on seven potential recharge sites and two potential in-lieu sites for conjunctive use. Draft TM 3 synthesizes information from multiple sources to compare potential recharge sites and proposes preferred sites and documents any additional study or data needs. The TM 3 was presented to the TC in draft form, and comments were received. Due to initiation of the development of the Water Management Plan, the work to finalize TM 3 was re-scoped, which obviated the need to prepare a final TM 3.

Significant other work has been performed and documented by EMWD. These reports include planning documents and feasibility studies with modeling efforts:

- *West San Jacinto Groundwater Basin Management Plan;*
- *Hemet/San Jacinto Water Management Area 2004 Annual Report;*
- *Hemet-San Jacinto Recharge and Recovery Program- Feasibility Study;*
- *Regional Groundwater Model for the San Jacinto Watershed;*
- *Hemet-San Jacinto Integrated Recharge and Recovery Program- Feasibility Study Groundwater Flow Model;*
- *Lake Elsinore and Canyon Lake Nutrient Source Assessment;*
- *Groundwater Infiltration Predictions Using Surface Water Model Output for the San Jacinto Watershed;*
- *Development of the Regional Water Resources Database (RWRD); and*
- *Preliminary Design Report for the San Jacinto Agricultural In-Lieu Water Supply Project.*

West San Jacinto Groundwater Basin Management Plan (EMWD, 1995). This plan was prepared in accordance with Assembly Bill 3030. This groundwater management plan covers the western portion of the EMWD service area in the San Jacinto Watershed. Since the groundwater management in the eastern San Jacinto watershed was being developed under Association in the early 1990s, the Management Area was excluded from the AB3030 planning process. The goal of the West San Jacinto Groundwater Basin Management Plan is "to maximize the use of groundwater for all beneficial uses in such a way as to lower the cost of water supply and to improve the reliability of the total water supply for all water users in the West San Jacinto Groundwater Basin Management Area" (EMWD, 2004). Implementation of the plan included the establishment of an Advisory Committee; Management Zone prioritization; and

groundwater resources evaluation including groundwater quality and level monitoring, extraction monitoring, and hydrogeophysical investigations.

Hemet/San Jacinto Water Management Area 2004 Annual Report (EMWD, 2005b). As part of the reporting process to the Management Area stakeholder group, EMWD produces annual reports that summarize groundwater quality, level, and extraction monitoring results, and provide an update on activities and progress toward meeting the previous year's recommendations and goals of the groundwater management plan. The first annual report for the Hemet/San Jacinto Area was produced in June 2005.

Hemet-San Jacinto Recharge and Recovery Program- Feasibility Study (Psomas, 2003). This report documents the feasibility of a proposed recharge project. The proposed Hemet/San Jacinto Integrated Recharge and Recovery Program consists of average annual recharge of 43,750 acre-feet (AF) based on long-term hydrology at a site within the City of Hemet and near the San Jacinto River's confluences with Poppet and Bautista Creeks. This program involves the construction of approximately 15 recharge ponds on a 100-acre site in the San Jacinto River channel, construction of new pipeline facilities, upgrade of existing pump stations, and construction of new extraction wells at various locations within the Management Area. In order to assess the feasibility of the proposed program, a comparative analysis was completed to evaluate potential alternatives to the preferred option of recharging imported water.

Regional Groundwater Model for the San Jacinto Watershed (TechLink Environmental, 2002a). This report documents the development of a regional groundwater flow and transport model for the San Jacinto watershed basin within EMWD's service area, an area that includes the Management Area as well as the areas to the west included in the *West San Jacinto Groundwater Basin Management Plan. Regional Groundwater Model for the San Jacinto Watershed* includes review of available data, development of a conceptual model, setup of a flow and transport model, calibration of the model, and simulation of management scenarios.

Hemet-San Jacinto Integrated Recharge and Recovery Program - Feasibility Study Groundwater Flow Model (TechLink, 2002b). This report documents the application of the regional groundwater model to evaluate the various recharge and recovery activities and alternative water supplies. These model simulations are intended to compare project and no-project alternatives, evaluate the aquifer capability to store large volumes of water, and evaluate the availability of recharged water for extraction.

Lake Elsinore and Canyon Lake Nutrient Source Assessment (TetraTech, 2003). TetraTech developed a watershed model of the San Jacinto watershed for the Lake Elsinore and San Jacinto Watershed Authority and the RWQCB as part of the Lake Elsinore and Canyon Lake Nutrient Source Assessment. The model provided a framework for nutrient source assessment through representation of contributing land uses in a subwatershed network and subsequent

determination of required nutrient load reductions and allocations to Total Maximum Daily Load (TMDL) objectives. Relating to the Management Area, the report showed that nutrients from the Management Area only reach the lakes when Mystic Lake overflows.

Groundwater Infiltration Predictions Using Surface Water Model Output for the San Jacinto Watershed (TetraTech, 2004). This report documents the update and modification of the watershed model by TetraTech to support EMWD's development of a groundwater model of the San Jacinto River basin to simulate aquifer storage in the region. The update and modification included extension of the modeling period from January 1984 to March 2003, division of one subwatershed into 4 subwatersheds, and modification of model output. The model was validated and scenarios were run.

Regional Water Resources Database (EMWD, 2005c). A RWRD was developed for EMWD in 2004 to house the existing and future groundwater-related records and to interface Geographic Information System (GIS) maps and aerial photographs. The RWRD contains information for groundwater levels and extraction; streamflow and diversions; well information, construction data, downhole logs, and well/aquifer pump tests; precipitation; temperature; evaporation; imported water usage and quality; conjunctive use; and water quality data from other laboratories and published reports. While no formal document is available to-date describing the full development and implementation of this project, *Regional Water Resources Database* presents a concise summary of the capabilities of this important component of data management in the region.

Preliminary Design Report for the San Jacinto Agricultural In-Lieu Water Supply Project (Engineering Resources of Southern California, 2005). This report details how recycled water could be incorporated into existing irrigation infrastructure and how to be consistent with the regulatory constraints associated with recycled water use. This included study of water demands, pipeline alignment and size, and environmental issues and resulted in the development of a preliminary plan and cost estimate. The preliminary plan included 13,200 feet of 24-inch pipeline serving Rancho Casa Loma and Scott Brothers Dairy Farms. Total irrigation demand from these farms is estimated at 8,640 AFY. Of this amount, the project could deliver 3,215 AFY due to limited availability of recycled water during the summer months. The project is estimated to take 13 months to complete.

SECTION 3 WATER MANAGEMENT PLAN ELEMENTS

The elements of this Plan include water management goals and a set of management strategies that discuss and identify the actions necessary for meeting the goals.

3.1 MANAGEMENT PLAN GOALS

The Plan has eight primary goals derived from the Principles and the Agreement. Each of the goals, listed below, is briefly discussed in subsequent sections:

- Address pumping overdraft and declining groundwater levels,
- Provide for Soboba Tribe prior and paramount water rights,
- Ensure reliable water supply,
- Provide for planned urban growth,
- Protect and enhance water quality,
- Develop cost-effective water supply,
- Provide adequate monitoring for water supply and water quality, and
- Supersede the Fruitvale Judgment and Decree.

3.1.1 ADDRESS PUMPING OVERDRAFT AND DECLINING GROUNDWATER LEVELS

The Principles and the Stipulated Judgment recognize that groundwater levels within the Management Area have generally been declining for a number of years, and that the Management Area is presently in a condition of groundwater overdraft. The amount of groundwater overdraft is estimated to range from 10,000 to 15,000 AFY. This Plan has a goal of reducing the overdraft in the short-term, and completely eliminating the annual overdraft in the long-term. The timeframe will depend on the extent of overdraft, as more knowledge is gained through the years. For example, a six-year period would be needed to eliminate overdraft if there is an annual overdraft of 10,000 AF.

The Principles identify management strategies to be included in the Plan to reduce overdraft and ensure a long-term supply of reliable water for current and future uses. The Plan contains both management (non-structural) and capital facility (structural) elements to reduce demand and/or increase the available supply. The management elements include: reduction in native groundwater production; enhanced recharge with local runoff, imported, and/or recycled water; and water conservation programs. Short-term planned reductions in pumping are part

of the Plan while further supplies are obtained through the identified management elements. The management strategies are described in more detail in Section 3.2.

3.1.2 PROVIDE FOR SOBOBA PRIOR AND PARAMOUNT WATER RIGHTS

The Agreement with the Soboba Tribe provides for financial obligations, settlement of all water rights claims, and water purchases from MWD, including infrastructure and groundwater storage. The Plan requires that all parts of the Agreement with the Soboba Tribe be met. The management elements to ensure this include: recognition of 9,000 AFY of Soboba Tribe water rights and up to 4,100 AFY of water use in Canyon and Upper Pressure Management Zones for the first 50 years from the date of Settlement, purchase of replenishment water, and MWD's long-term average delivery of 7,500 AFY of imported water.

3.1.3 ENSURE RELIABLE WATER SUPPLY

Reliability is a key component of any water supply system. This goal of the Plan is to ensure that the Public Agencies have a consensus and commitment to develop a comprehensive water supply portfolio that realizes all potential opportunities, and that plans are in place to adapt to changing demands, natural disasters, and drought conditions. Such a portfolio should rely on a range of sources of water supply and include a large component of local supply and storage. These objectives minimize, to the extent possible, reliance on weather patterns, over-stressed aquifers, and over-allocated imported water. The Plan elements that address these goals include imported and recycled water use.

3.1.4 PROVIDE FOR PLANNED URBAN GROWTH

The Management Area, like much of the Inland Empire area of Southern California, is experiencing dramatic urbanization. The Principles and the Plan recognize and acknowledge that the Management Area will continue to experience residential, commercial, and industrial growth and development, and that the existing water production and service systems will need to be expanded to meet this growth. This urbanization will affect water supplies in several ways. Urban development on non-irrigated lands will increase water use. Urban development and conversion of irrigated lands may not significantly increase water use, but the urban water use requires a more dependable, higher quality water supply. It is estimated that at least 15,000 AFY incremental water supply capacities over the existing Base Production Rights of Public Agencies must be dedicated to adequately serve this growth. The Plan will help local communities comply with recent changes in state law effective January 2002 (SB 221 and SB 610) requiring municipal suppliers, water districts, and cities or counties to document water availability from all sources in normal, dry, and multiple dry years whenever land use decisions

are made. Planned urban growth, as identified in prevailing land use and general plans, or in approved Urban Water Management Plans (UWMP), provided the basis for all demand forecasts and assumptions in the Plan.

3.1.5 PROTECT AND ENHANCE WATER QUALITY

The Management Area has some of the highest quality groundwater in the San Jacinto Watershed, but it has its own problems and issues. Nitrates and Total Dissolved Solids (TDS) concentrations have historically increased as the area experienced urban and agricultural growth. As noted above, urban uses will replace agricultural uses, resulting in more stringent water quality standards for most constituents, including nitrates. The Plan seeks to meet goals for water quality through preventing degradation of the groundwater due to activities in the Management Area, and as a result of implementation of the Plan. Each of the Public Agencies also seeks to prevent degradation or to improve groundwater quality to avoid high costs for drinking water treatment.

3.1.6 DEVELOP COST-EFFECTIVE WATER SUPPLY

Equitable distribution of costs and benefits are part of the Plan. It is important that the Plan elements are selected and implemented in a way that keeps costs to a minimum so as to keep water bills as low as possible for customers. Cost management includes purchasing imported water at low rates; utilizing groundwater storage space; fully utilizing existing infrastructure; promoting conservation; efficiently implementing new infrastructure; and maintaining good quality groundwater and surface water to keep treatment costs low. The Public Agencies also seek to cost-effectively reclaim municipal wastewater for beneficial reuse whenever possible.

3.1.7 PROVIDE ADEQUATE MONITORING FOR WATER SUPPLY AND WATER QUALITY

Monitoring programs will be implemented to determine if the Plan's goals are being met; to document that anticipated benefits are being achieved; and to predict future needs. Included in the monitoring should be water quality, sampled at sufficient locations to be representative, with analysis for all constituents of concern. In addition, the monitoring program should include monitoring of water levels, well metering, and tracking of imported water and recycled water availability and deliveries. Monitoring can also be used to improve yield estimates and groundwater model performance through the development of better estimates of stream recharge and other components. The results of monitoring will be used to strengthen or relax actions needed to meet Plan goals.

3.1.8 SUPERSEDE THE FRUITVALE JUDGMENT AND DECREE

The Fruitvale Judgment and Decree (The City of San Jacinto, et al., v. Fruitvale Mutual Water Company, et al., No. 51546, Riverside County) was entered into Book 72, Page 164 of Judgments, Riverside County, on June 4, 1954. EMWD, as successor in interest to FMWC, is subject to the provisions of the Judgment and Decree. Provisions in the document are discussed and summarized in Section 2 of this Plan. The Stipulated Judgment and its Water Management Plan are to supersede the Fruitvale Judgment and Agreement subject to certain exceptions in Section 3.5 of the Stipulated Judgment.

3.2 WATER MANAGEMENT PLAN STRATEGIES

To meet the stated goals of the Plan, the stakeholders have adopted the following specific strategies.

3.2.1 REDUCE PUBLIC AGENCY NATIVE GROUNDWATER PRODUCTION

The Public Agencies have agreed to reduce native groundwater production so that total production is within the Safe Yield of the Management Area. The average annual groundwater production in the Management Area for the hydrologic period 1958-2004 is estimated to be 54,800 AFY. The initial estimate of Safe Yield is 45,000 AF. The Public Agencies have also agreed to a 10% reduction from each Base Production Right in the first full year after entry of the Stipulated Judgment. The Public Agencies' share of Safe Yield is calculated based on their Adjusted Production Right, and is discussed further in Section 11. Within the first six years, the Watermaster will make a determination of the Safe Yield of the Management Area. Thereafter, the Safe Yield shall be reviewed and modified, if necessary, upon the recommendation of the TC or as the Watermaster may determine. Until Adjusted Production Rights are consistent with the Public Agencies' share of Safe Yield, the Watermaster will determine the required reductions in Adjusted Production Rights in each subsequent year to achieve Safe Yield within a reasonable period of time as determined by the Watermaster. The Watermaster is to consider the extent of the overdraft, the economic impact on the parties bound by this Judgment, and other relevant factors in determining the total and pro-rata shares of Adjusted Production Rights. The goal is to achieve production at the same level as Safe Yield over a six-year period assuming an annual overdraft of 10,000 acre-feet. In the event the extent of the overdraft is different than assumed, then the period of time reasonably required to reach Safe Yield may be extended or reduced accordingly. However, in no event shall any reduction for any Public Agency be more than 10% of the Adjusted Production Rights of the prior year.

3.2.2 IMPLEMENT THE SAN JACINTO RIVER RECHARGE AND RECOVERY PROJECT

The stakeholders have agreed that Phase I of the IRRP is the primary project considered to be the core of the Physical Solution. The stakeholders are working towards an agreement for Phase I of the IRRP project which documents their agreement on the ownership, financing, and operation of the facilities.

The information presented here is based on previously published documents adjusted when appropriate based on the latest knowledge at the time of publication of the Plan.

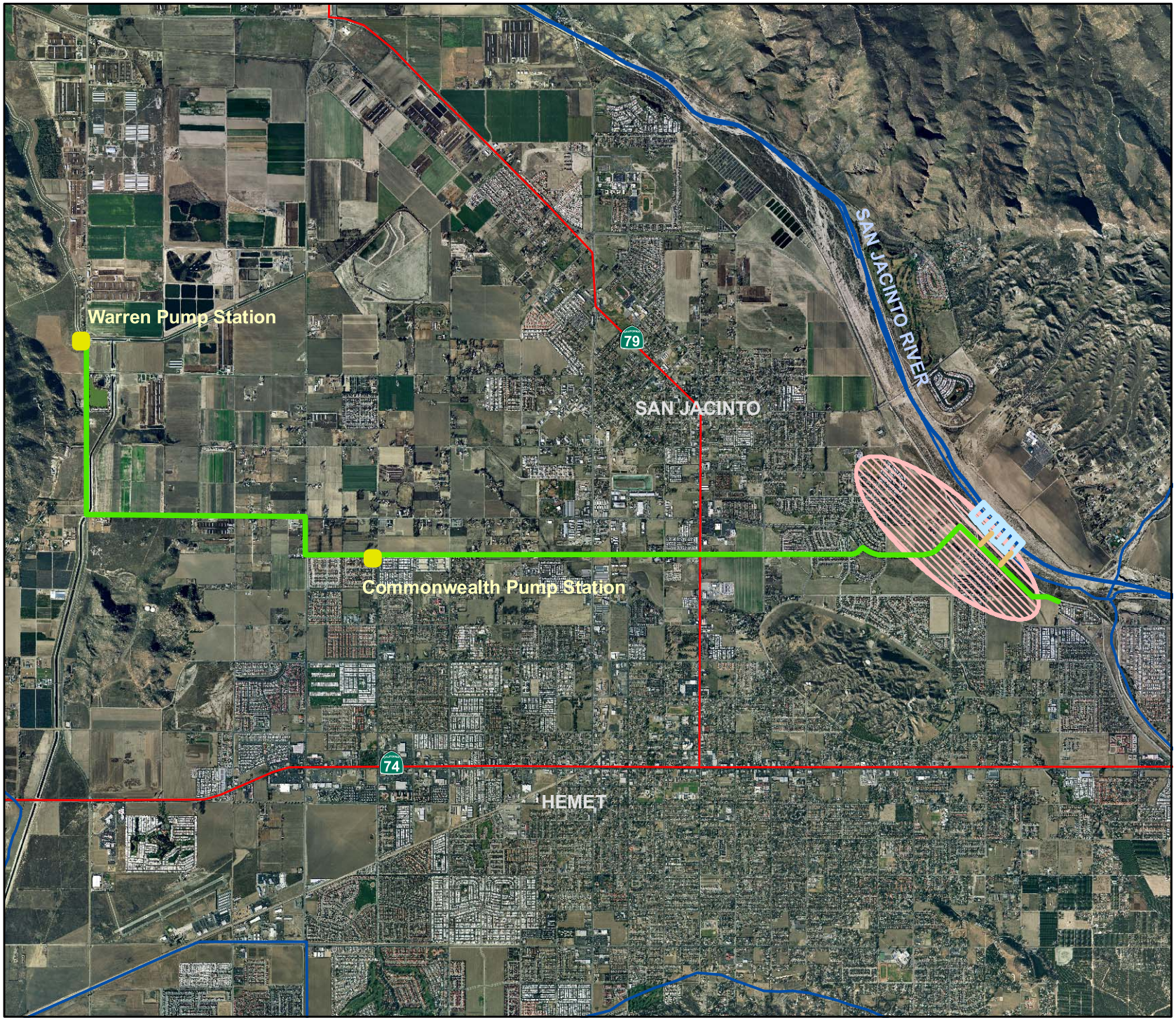
Phases I and II of the IRRP are designed to recharge (replenish) imported water and extract groundwater at a capacity such that the following goals are met:

- Satisfy the Tribe's prior and paramount rights as set forth in the Agreement with the Tribe by providing an average annual supply of 7,500 acre-feet pursuant to the terms of such agreement. The proposed Program would provide the MWD with the right to store up to 40,000 acre-feet of imported water in the Upper Pressure Sub-basin as advance deliveries under its agreement to provide an average annual supply of 7,500 acre-feet.
- Offset the existing overdraft of the Management Area, estimated at approximately 10,000 AFY.
- Provide approximately an additional 15,000 AFY of water storage to help meet projected demand increases.

Major elements of Phase I of the Project are (Figure 3.1):

- Modifications to Pump Stations (Warren and Commonwealth);
- Construction of Pipelines;
- Design and Construction of Recharge Basins;
- Drilling Three (3) Extraction Wells;
- Installation of Pumps and Chlorination Equipment for Three (3) Extraction Well; and
- Design and Installation of Three (3) Monitoring Wells.

The project is designed and implemented in two Phases. While project Phase I activities are defined in detail, Phase II of the project is defined at conceptual level and the detailed design will be developed in the future.



Hemet / San Jacinto Water Management Plan

Schematic of Integrated Recharge Recovery Program - Phase I

Figure 3.1

Legend

- Pump Station
- Phase I Pipeline
- Phase I Ponds
- Existing Pipeline
- Phase I Well Field

Source: EMWD

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3.2.2.1 Phase I

This phase of the project consists of the construction of the San Jacinto Integrated Recharge and Recovery Project, which will provide up to 42 cubic feet per second (cfs)* of recharge water capacity. Phase I is scheduled to be completed by December 2008*, and will cost approximately $16.2* million. Major activities during Phase I are:

1. **Completion of Environmental Process -** The Environmental Impact Report (EIR) was prepared and adopted in August of 2004. Additional permitting requirements include Section 7 consultation with USFWS and issuance of Biological Opinion by the appropriate federal agency.
2. **Acquisition of Land -** A 100 acre parcel has been purchased by EMWD for required habitat mitigation measures for a 35 acre* parcel that is dedicated to recharge basins. In addition, EMWD is in the process of acquiring approximately one acre of land (in several parcels) for monitoring wells.
3. **Approval, Advertising, and Award of Construction Contract -** The EMWD Board of Directors has approved the bidding process.
4. **Drilling of Extraction Wells No. 1, 2, and 3 -** This includes construction and testing of three 18-inch diameter extraction wells, each to a depth of approximately 1,000 feet.
5. **Installation of Pump and Chlorination Equipment for Wells No. 1, 2, and 3 -** This includes installation of pump and chlorination equipment, appurtenances and site improvements required to complete and operate the new extraction wells.
6. **Modifications to the Pump Station -** This includes modifications to the Warren and Commonwealth Pump Stations. The modifications include upgrades to increase pump station capacity to provide a seasonal maximum of 42 cfs* to the recharge basins.
7. **Construction of Recharge Basins -** This activity includes construction of six recharge ponds within the San Jacinto river bed in two clusters of three ponds each. The footprint of the recharge area will be approximately 35 acres*, along the west side of the San Jacinto River, immediately upstream of the river confluence with the Meridian Channel.
8. **Construction of Pipelines -** This includes design and construction of pipelines and appurtenances to convey, regulate, and meter raw imported water flows into the recharge basins. Pipelines include two (2) 24-inch diameter laterals to convey water from an existing 33-inch diameter transmission main along the proposed Ramona Expressway alignment to the first basin in each of the two basin clusters. There will be appurtenances including regulation valves, meters to record water

* Number has been updated since the publication of the IRRP Feasibility Report.

flow, telemetry-based flow control systems, and discharge piping into the recharge basins.

9. **Design and Construction of Monitoring Wells -** Three monitoring wells will be constructed outside the river bed along the west berm. The wells are designed to monitor the vertical and lateral migration of recharge water into the underlying aquifer zones. These clustered wells will be multi-cased and perforated to monitor the groundwater levels at various depths.

The overall project size may change as a result of negotiations with regulatory agencies.

3.2.3 IMPLEMENT GROUNDWATER REPLENISHMENT PROGRAM

The groundwater aquifers in the Management Area are a valuable resource and provide many advantages to operating a reliable water supply system. For many Private Water Producers, groundwater is their sole source of water. Declining water levels increase costs for pumping water and can also cause wells to go dry, requiring deeper drilling, or can result in the intrusion of poor quality groundwater from neighboring Management Zones, rendering the groundwater unsuitable for many beneficial uses. Also, the replenishment of high quality imported water from the State Water Project or high quality runoff from the surrounding mountains can maintain or improve the quality of the groundwater in the Management Area.

Groundwater replenishment, therefore, is a major part of the water management strategies considered by the stakeholders. Replenishment efforts to increase water supply in the Management Area can be grouped into two categories:

1. Direct replenishment of groundwater to store water for future use; and
2. Augmentation of imported or recycled water supplies to provide immediate increases in water supply and the associated decrease in groundwater pumping. Often, these categories are combined, with increases in imported or recycled water being used to replenish groundwater for future use.

3.2.3.1 Enhancing Natural Replenishment

The Management Area already receives a significant amount of natural recharge, from sources such as direct recharge from precipitation and infiltration from the San Jacinto River and its tributaries. While much of this water is able to infiltrate naturally, natural recharge could be increased by capturing surface flows during storm events, allowing the water to infiltrate over time rather than be swept out of the Management Area. As part of the Basin Assessment Study, the TC has identified and considered several conjunctive use and natural replenishment projects that have the potential to address such a water supply management strategy. These are described in Section 5.3 of the Plan.

3.2.3.2 Additional MWD Replenishment Water

Utilizing replenishment allows for significant cost savings when purchasing imported water from MWD. MWD provides special rates for water used for replenishment purposes. This water is available during the low-demand winter period and currently costs $238/AF for untreated water, while full-service Tier 1 & 2 untreated water currently costs $331/AF and $427/AF, respectively.

3.2.4 EXPAND THE USE OF RECYCLED WATER

Recycled water is available from EMWD's San Jacinto Valley Regional Water Reclamation Facility. Currently, recycled water is used by agricultural users and other large-scale outdoor irrigators such as golf courses and municipal facilities in place of groundwater. The Watermaster will use recycled water as a significant part of its water supply strategy for replenishment of the groundwater basin. The Watermaster will work with EMWD to determine the operational constraints currently facing the availability of recycled water for replenishment of the basin. The recycled water is to follow the State and Federal guidelines. Future phases of the Plan include upgrade of the San Jacinto Valley Regional Water Reclamation Facility to tertiary treatment.

3.2.4.1 Continue and Expand the In-Lieu Replenishment with Recycled and/or Imported Water

In-lieu replenishment with recycled and/or imported water provides many benefits over direct replenishment of the groundwater. In-lieu involves utilizing an alternate source, in this case imported or recycled water, instead of pumping groundwater. Using in-lieu recharge means that there is no cost to pump groundwater, no land is needed for a spreading basin, and there is no constant recharge through a basin to push salts out of the unsaturated zone. Disadvantages include timing of the supplies with demand; that is, most in-lieu customers cannot use the quantity of water available during the off-peak time. To maximize use of water available for in-lieu replenishment, significant infrastructure will be needed to serve the maximum number of customers. This strategy would require the Watermaster to work with EMWD, other agencies, and Private Water Producers to develop specific plans for expanding the use of recycled water for in-lieu replenishment of the basin.

3.2.4.2 Expand and Upgrade the San Jacinto Valley Regional Water Reclamation Facility

The San Jacinto Valley Regional Water Reclamation Facility is currently an 11 MGD plant with capability to treat wastewater to a secondary level of treatment. While this plant is scheduled for upgrade to tertiary treatment, the recycled water discharge beyond the sale to the agricultural customers is currently being disposed of in the basin. The plant is scheduled for expansion in size and upgrade of the treatment level, and the upgraded plant will have the capacity to treat 14 MGD by 2011 and 18 MGD by 2024. The Watermaster shall have the right of first refusal to purchase all recycled water produced from the treatment facilities serving the Management Area that is not subject to then existing contracts. The Watermaster will analyze the need and decide on the amount of recycled water for direct recharge and/or direct delivery.

3.2.5 Provide for Reliable Water Supply to Meet the Future Demand

The Plan is to provide sufficient water supplies to meet future water demands in the Management Area. This strategy is tied directly to the IRRP that is designed to provide 15,000 AFY of additional supplies to meet the projected water demands. As part of this strategy, additional conjunctive use projects, identified in Section 5.3 of this Plan, will augment Phase II of the IRRP. These projects are mostly designed to capture winter run-off for recharge, unlike the IRRP that is designed to recharge imported water.

3.2.6 Implement Additional Water Conservation Measures

The current level of water conservation has significantly helped to reduce the water demand in the Management Area. In addition to the conservation measures implemented by the Public Agencies, additional conservation measures can be designed and implemented by the agricultural and dairy water users. The Watermaster, in coordination with the Agencies, should develop specific strategies for additional water conservation. In addition, they should identify practical steps and means for voluntary implementation by the agricultural and dairy water users that would help water management of the basin.

3.2.7 Implement and Expand Monitoring Program

At the heart of any water management plan is a robust monitoring program capable of assessing the status of the basin and monitoring the responses to future management actions.

EMWD, on a voluntary basis, has compiled historical groundwater elevation and quality data from mid-1950s through the present. In the early data collection efforts, the location and

frequency of monitoring were not as consistent as the more recent measurements. This was mostly due to the voluntary nature of participation in the monitoring program, as well as funding availability. This lack of consistency in data collection hampers rigorous and thorough analysis. However, long-term hydrographs as well as contours of groundwater levels have been produced by EMWD to present long-term trends in groundwater conditions over time, and with appropriate geographic extent.

In 2004, the Hemet/San Jacinto Groundwater Monitoring Program was initiated to collect, compile, and analyze groundwater-related data. This program was undertaken by the Public Agencies and DWR. The monitoring program provides the information necessary for a comprehensive view of the Management Area, and contains the following elements:

- Groundwater Level Monitoring;
- Groundwater Quality Monitoring;
- Groundwater Extraction Monitoring; and
- Inactive Well Capping and Sealing.

Finally, the monitoring program utilizes EMWD's RWRD, for assembling and assessing groundwater-related data in the Management Area. All Public Agencies provide data on their wells and assist in communicating with private well owners in their respective jurisdictions to collect their data and information.

This strategy reconfirms that the monitoring program, as established in 2004, should continue and be expanded to new areas. The Stipulated Judgment requires that the Watermaster implement a monitoring program to ensure that Plan activities follow best management and engineering principles to protect Management Area water resources, and to compile and analyze data on groundwater production, water levels, water quality, and groundwater in storage. The Watermaster, in coordination with EMWD and other Public Agencies, will develop plans for expansion of the monitoring program, as well as, specific actions for implementation of the monitoring program in the Management Area. Funding for the monitoring program will come from the Administrative Assessment, as detailed in Section 10.3.1.

3.2.7.1 Groundwater Monitoring

Groundwater level and quality monitoring are valuable, but can be costly and time consuming. A robust network of monitoring wells can be established to develop the optimum amount of data on groundwater. Some criteria to be used in the development or modification of the network may include:

- Monitor the same well for selected seasons over many years to understand trends and variability;
- Develop an unbiased distribution of monitoring wells, aerially and vertically, that account for differences in:
  - Topography,
  - Geology and soils,
  - Climate, and
  - Land Use;
- Maintain supporting data to aid in analysis, including:
  - Meteorological data,
  - Hydrologic data, and
  - Land use data, including pumping and irrigation;
- Monitor at a frequency that captures variability of water level and water quality fluctuations;
- Utilize wells, to the extent possible, intended solely for groundwater monitoring, not production; and
- Maintain high levels of data quality.

The Watermaster is to work cooperatively with the Public Agencies and Private Water Producers to establish an optimum network of monitoring wells for collection and analysis of groundwater trends and variability.

3.2.7.2 Surface Water Monitoring

Surface water monitoring would build on the existing cooperative program between EMWD and the United States Geological Survey (USGS). This program monitors streamflow on the San Jacinto River just upstream of State Street and on Lamb Canyon Creek near Victory Ranch. The USGS also monitors a gage on the San Jacinto River at the Cranston Ranger Station. Continued and additional surface water flow and quality monitoring would include the following criteria:

- Monitor the same location for many years to understand trends and variability;
- Maintain supporting data to aid in analysis, including:
  - Meteorological data,
  - Groundwater data, and
  - Land use data, including pumping and irrigation; and
- Maintain high levels of data quality.

Gaging station should be installed on reaches not currently being monitored, such as:

- San Jacinto River near Main Street;
- San Jacinto River near Highway 74 bridge crossing;
- Bautista Creek near Highway 74 bridge crossing; and
- Salt Creek near State Street.

The Watermaster is to work cooperatively with the Public Agencies to establish specific monitoring locations for collection and analysis of surface water trends and variability.

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SECTION 4 STATE OF THE MANAGEMENT AREA

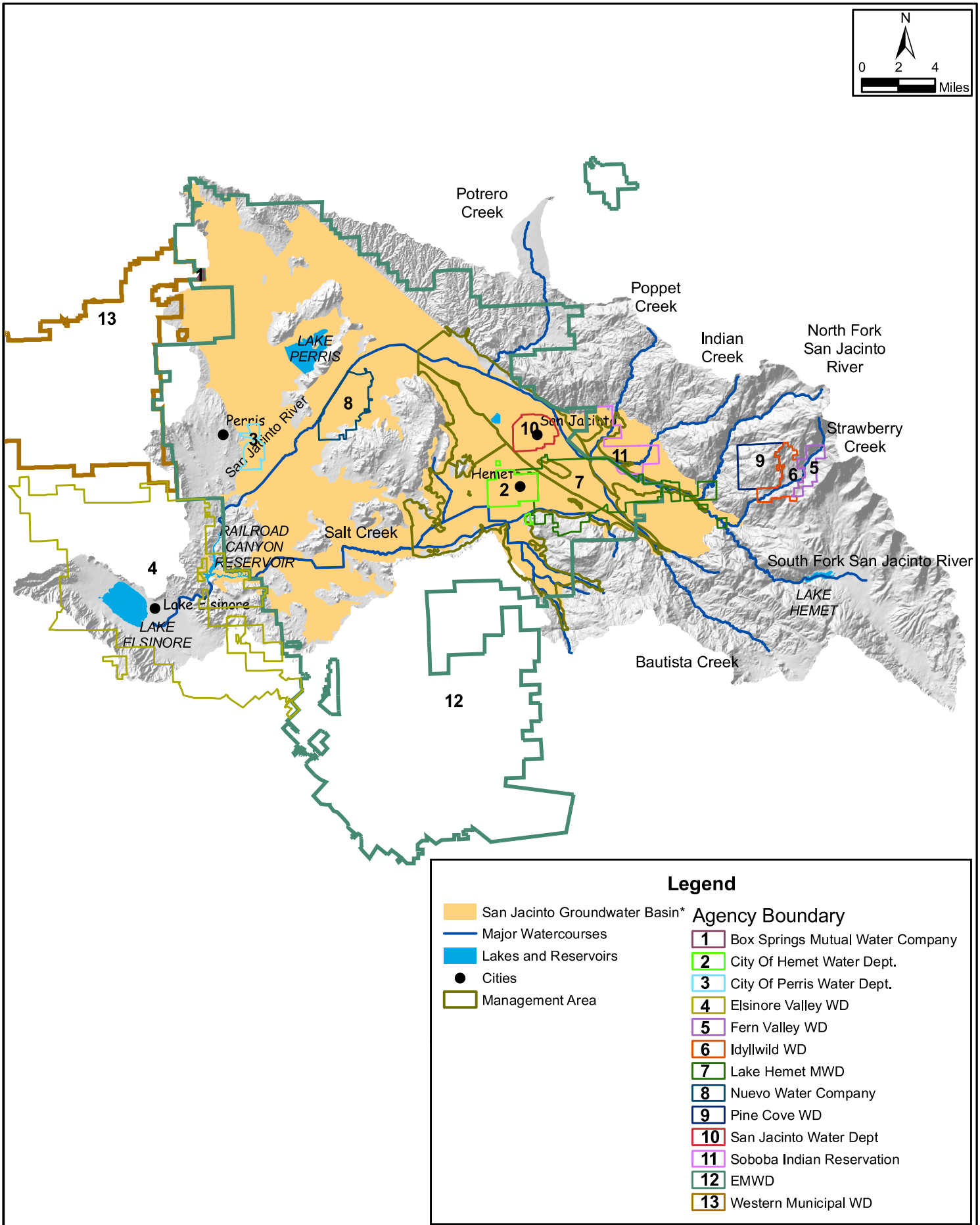
This section discusses the local geologic and hydrologic conditions that provide the foundation for the development of the Plan. The ability to manage available water supplies is to a large degree governed by naturally occurring conditions and the physical environment. This section further describes water supply conditions and sources; historical and current water demands; status of the groundwater basin; and summarizes water quality conditions.

4.1 GEOGRAPHY AND CLIMATE

4.1.1 GEOGRAPHY

The Management Area is located in western Riverside County, approximately 70 miles southeast of the City of Los Angeles. The area encompasses the Cities of Hemet and San Jacinto; unincorporated residential/commercial areas, including Valle Vista; and agricultural lands. State Highway 74 (Florida Avenue) crosses the valley in an east-west direction and State Highway 79 provides a north-south corridor for the region. The San Jacinto mountain range, to the east of the valley, is the dominant geographic feature of the region, rising to a height of 10,805 feet at Mount San Jacinto. Elevations on the valley floor range from approximately 1,400 to 1,800 feet. There are various bedrock outcrops in the area, none of which exceed 2,700 feet.

The San Jacinto Watershed (Figure 4.1) includes the Management Area and surrounding mountains and covers an area of approximately 728 square miles, measured above a point just downstream from Railroad Canyon Dam. All of the streams and rivers in the watershed are ephemeral, flowing only when precipitation occurs and losing much of this flow to groundwater infiltration. The San Jacinto River arises in and drains the western slopes of the San Jacinto Mountains. Waterways tributary to the river include the North and South Forks and Strawberry, Indian, Poppet, and Bautista Creeks. Lake Hemet, located in the mountains on the South Fork of the San Jacinto River, is a 12,775 AF capacity LHMWD-operated reservoir completed in 1895. The San Jacinto River recharges the groundwater basin, primarily in the area southeast of the City of San Jacinto. It then occasionally flows northwest past the Lakeview Mountains, filling Mystic Lake, before turning southwest to flow across the Perris Valley floor. The San Jacinto River ultimately flows into Lake Elsinore via Railroad Canyon and Canyon Lake. Lake Elsinore, when full, overflows into Temescal Wash, which joins the Santa Ana River near Prado Dam.



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San Jacinto Watershed

Hemet / San Jacinto Water Management Plan

*Source: DWR, 2003

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Figure 4.1

4.1.2 CLIMATE

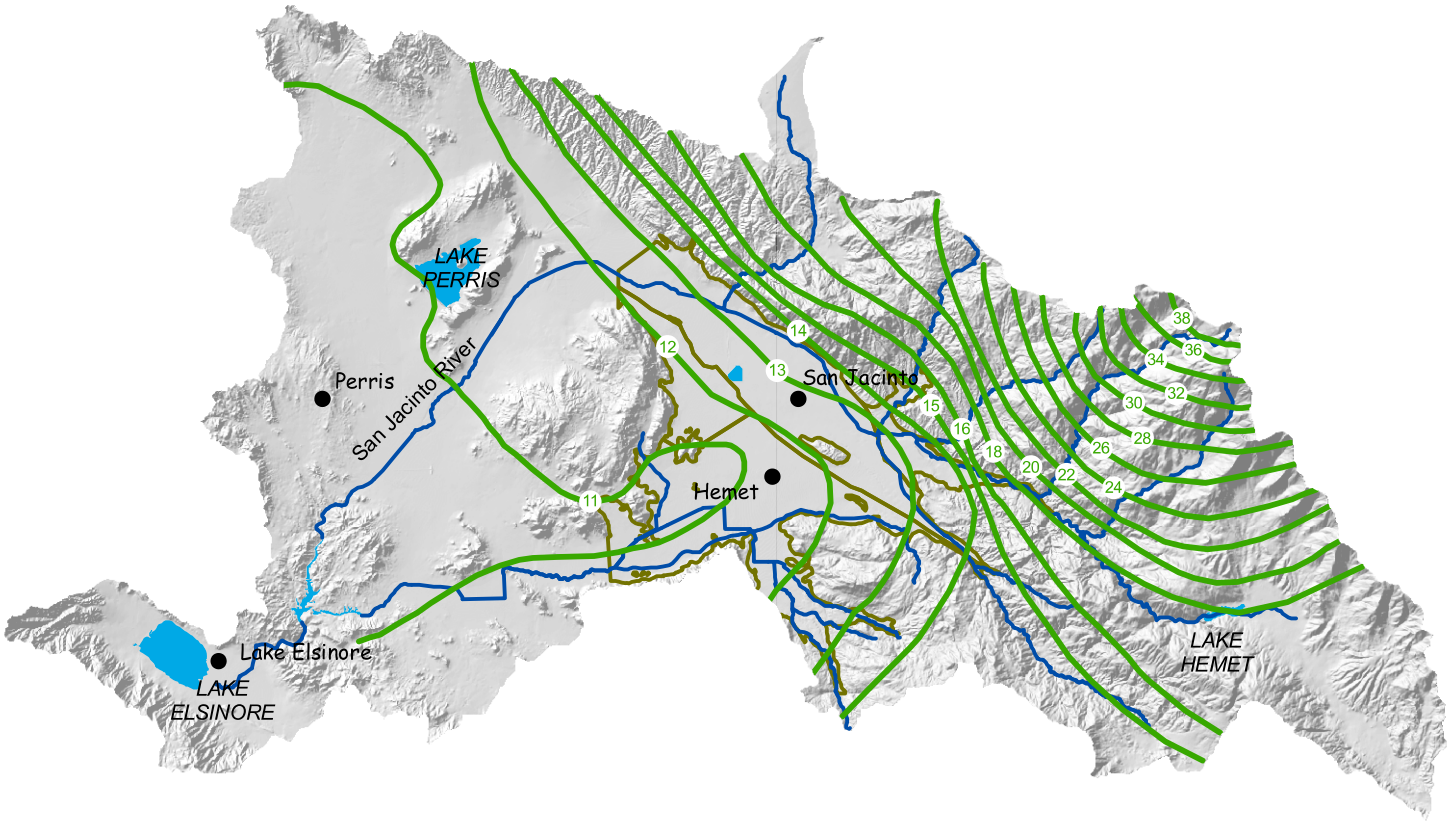
The climate of the area is that of a dry, semi-arid, near-Mediterranean zone, typical of the moderately elevated inland valleys of southern California. The climate is characterized by wet and dry seasons, generally low precipitation, and a large proportion of clear days, moderately high summer temperatures, and mild winter temperatures. The yearly average temperature at the City of San Jacinto is 62°F (25°C). Summer temperatures are often more than 100°F (38°C), and the recorded maximum at San Jacinto is 120°F (49°C). Frost occasionally occurs during the December through February period. The lowest recorded temperature was 7°F (-14°C). The average frost-free period is 247 days long, from March 15 to November 19. These temperatures for the San Jacinto climate station are considered to be generally representative of temperatures throughout the valley area.

Along with the rest of Southern California, the area is subject to the annual Santa Ana winds. Usually occurring in the fall of the year, these winds blow from the northeast, bringing hot, dry desert air with velocities of up to 50 miles per hour. Relative humidity has at times dropped below 5 percent with temperatures of 105°F (40°C) and higher. This phenomenon normally lasts only a few days, but has been known to last for several weeks, thereby greatly increasing the evaporation rate.

As a result of the hot, dry climate, the area has a high rate of evapotranspiration. Evapotranspiration is recorded as reference evapotranspiration (ETo; evapotranspiration from a standardized grass surface) by the DWR's California Irrigation Management Information System. Reference evapotranspiration averages 57 inches per year and is highly seasonal, with an average monthly maximum of 7.9 inches in July and average monthly minimum of 2.0 inches in December (DWR CIMIS, 2006).

Virtually all precipitation falls in the winter months, with some summer thunderstorms. Topography generally controls the relative amounts of precipitation from one location to the next. The average precipitation on the valley floor is about 13 inches, but near Mt. San Jacinto, the average precipitation is approximately 40 inches. Figure 4.2 shows the distribution of precipitation in the watershed.

The Riverside County Flood Control and Water Conservation District (RCFC&WCD) currently maintains precipitation records from the National Weather Service precipitation gauge at the California Division of Forestry Station at 1st Street and San Jacinto Avenue in San Jacinto (Site #186). Annual San Jacinto precipitation totals for the 1850/51 through 2004/05 rain years (July – June) are shown in Figure 4.3. For the 155 years from July 1850 through June 2005, average precipitation equaled 13.12 inches; median precipitation was 12.13 inches; the year with



Average Annual Precipitation

Hemet / San Jacinto Water Management Plan

*Source DWR, 1978 (1932 - 1964 data)

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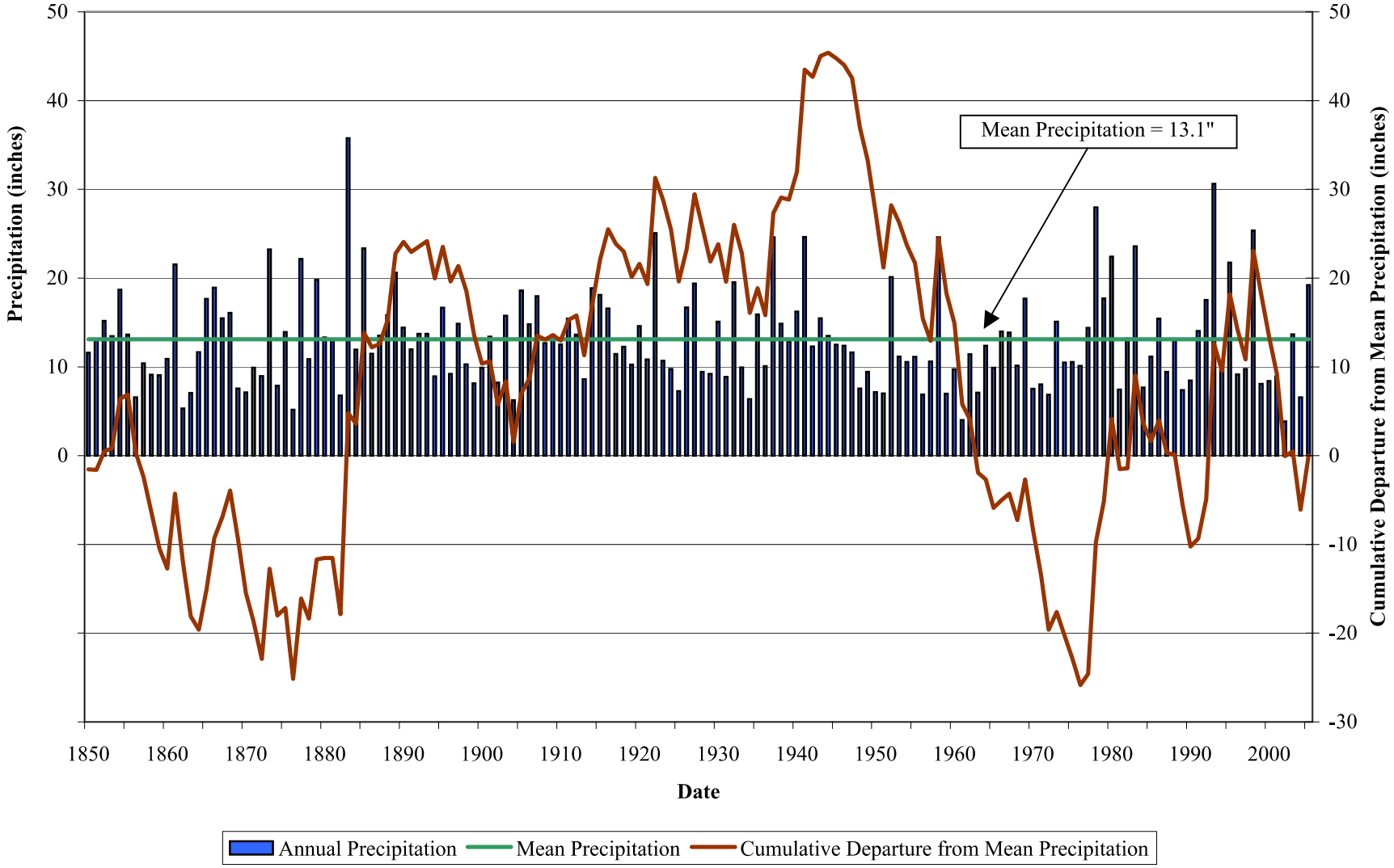
Figure 4.2

Figure 4.3 Annual Precipitation and Cumulative Departure from Mean Precipitation



the highest precipitation was 1883/84 with 35.77 inches of rain; and the driest year was 2001/02 with 3.85 inches. Figure 4.3 also shows the cumulative departure from mean precipitation. This chart represents wet periods with increasing values, such as 1882-1890 and 1990-1998; normal periods with near-constant values, such as 1859-1881 and 1980-1988; and dry periods as decreasing values, such as 1944-1976 and 1999-2004.

4.2 SURFACE WATER CONDITIONS

The San Jacinto River and its tributaries are the primary surface water elements in the Management Area. This river and its tributaries provide water for direct use, artificial recharge, as well as for significant natural recharge to the groundwater system through the riverbeds. The San Jacinto River contains high quality water that flows from the mountain watershed and recharges groundwater. The river is a losing stream throughout the Management Area. Artificial and natural recharge of San Jacinto River water improves the overall quality and quantity of groundwater. Groundwater levels have been lowered over the years to the point where additional changes in groundwater levels has little or no impact on surface flows or vice versa, although in predevelopment conditions groundwater contributed to surface flows in swampy areas of the basin floor, particularly upgradient of faults.

EMWD and RCFC&WCD have partnered with USGS to monitor stream flows. USGS gaging stations along the San Jacinto River and its tributaries in the Hemet/San Jacinto and surrounding area are listed in Table 4.1, below.

In 1996, EMWD entered into a Cooperative Water Program Joint Funding Agreement with the USGS for a long-term water budget study in the San Jacinto area. As part of this project, the USGS installed two stream flow gages and three stage gages in the San Jacinto Watershed.

The USGS applied a rainfall-runoff model to estimate the water budgets for groundwater and surface water flows and to determine the hydrological effects of urbanization. The study used historical precipitation data with the model to produce a simulated long-term record of groundwater recharge and surface water runoff for a variety of potential urbanized conditions. The major objectives of the study were to:

1. Estimate groundwater recharge and surface water flows in the Canyon and Upper Pressure Management Zones;
2. Summarize the long-term water budget of the study area upstream of Mystic Lake; and
3. Determine the effects of urbanization in the study area.

Table 4.1 USGS Surface Water Gaging Stations

Station No.	Description:	Lat.; Long.*	Data Type	Time Frame
11069200	Lake Hemet WC up Canyon near San Jacinto	33°44'20"; 116°49'30"	Daily flows	1961-1991
11069300	WF San Jacinto Tributary near Valle Vista	33°43'20"; 116°48'00"	Peak flows Daily flows	1962-1973 1961-1967
11069500	San Jacinto River near San Jacinto (Cranston Ranger Station)	33°44'17"; 11649'59"	Real time Peak flows Daily flows Water Qual.	 1921-present 1920-present 1998
11069501	San Jacinto River near San Jacinto plus Canals	33°44'17"; 116°49'59"	Daily flows	1948-1990
11070000	Bautista Creek Near Hemet	33°41'40"; 116°51'00"	Peak flows Daily flows	1947-1969 1947-1969
11070020	Bautista Creek at head of Flood Channel in Hemet	33°42'42"; 116°52'04"	Peak flows Daily flows	1988-2003 1987-present
11070050	Bautista Creek at Valle Vista	33°44'04"; 116°53'33"	Peak flows Daily flows	1970-1987 1969-1987
11070150	San Jacinto River above State Street near San Jacinto	33°49'17"; 116°58'21"	Peak flows Daily flows	1997-present 1996-present
11070158	Line D Storm Drain at Santa Fe St. near San Jacinto	33°46'44"; 116°57'46"	Peak flows	1997-1999
11070160	Line E Storm Drain at Santa Fe St. near San Jacinto	33°46'41': 116°58'18"	Peak flows	1997-1999
11070185	Lamb Canyon at Victory Ranch near San Jacinto	33°51'31"; 117°00'53"	Peak flows	1997-2004
11070190	Laborde Canyon near San Jacinto	33°51'44"; 117°01'29"	Peak flows	1962-1973
11070210	San Jacinto River at Ramona Expressway near Lakeview	33°50'23"; 117°08'06"	Real time Peak flows Daily flows	 2001-present 2000-present

* The longitude and latitude measurements are published figures, but were estimated by the USGS from maps and, therefore, only have an accuracy of +/- 500 feet.

Five gages were installed upstream of Bridge Street in the San Jacinto basin area. Two stream flow gages were installed in the San Jacinto River, one at the State Street (Highway 79) crossing and the other at the Cranston Ranger Station. Three crest stage gages were installed in Potrero Canyon near San Jacinto, Lamb Canyon near San Jacinto, and at an urban runoff site.

Groundwater recharge in the Canyon and Upper Pressure Management Zones was calculated in addition to the surface runoff leaving the Management Area (including urban runoff) that reaches the Mystic Lake area. The study results are summarized in the USGS Water Resources Investigations Report 02-4090, *Rainfall-Runoff Characteristics and Effects of Increased Urban Density on Streamflow and Infiltration in the Eastern Part of the San Jacinto River Basin, Riverside County,*

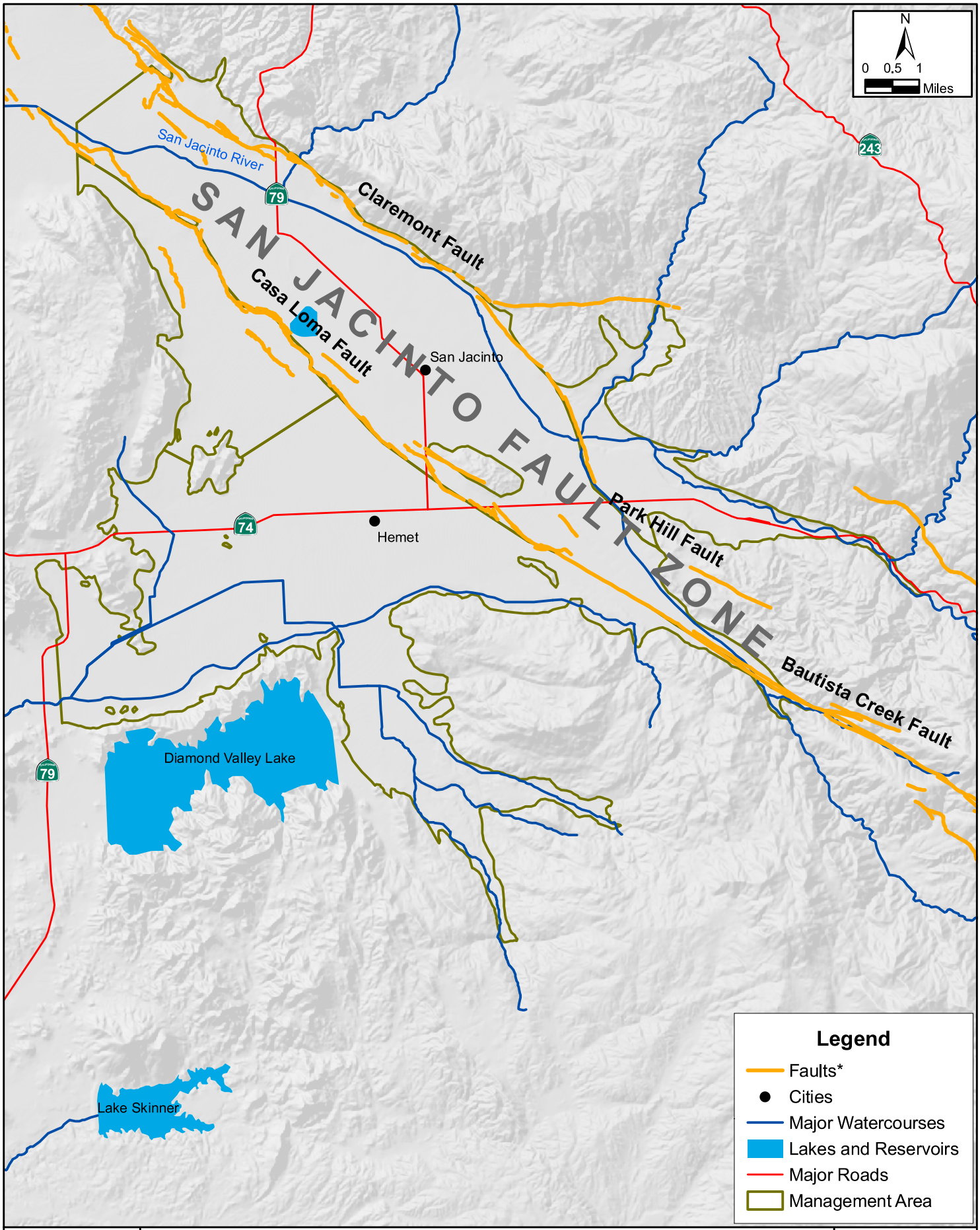
California. The report includes all measured, simulated, and statistical data used to support the conclusions of the study.

After the end of the study, some of the crest stage gages were no longer monitored and fell into disrepair. However, EMWD continues to fund, and USGS continues to operate, the stream gage on the San Jacinto River at State Street. The crest stage gage at Lamb Canyon Creek at Victory Ranch is still jointly funded by EMWD and USGS. For the 2005/2006 monitoring, the effort was funded as part of the Hemet/San Jacinto Monitoring Program by EMWD, LHMWD, and the Cities of Hemet and San Jacinto. The stream gage on the San Jacinto River at Cranston Ranger Station is currently funded and maintained by USGS and Riverside County Flood Control District with real-time data available on the USGS website.

4.3 GEOLOGY

The geology of the Hemet/San Jacinto area, relevant to groundwater supplies, has two primary features: a sediment filled graben, and the San Jacinto fault zone. The sediments in the graben provide for the majority of storage and movement of groundwater in the area and the movement of water is altered by the presence of the faults, which provide most of the internal boundaries for the area's Management Zones.

The Management Area partially contains a geomorphic feature known as a graben or fault-graben, along with additional permeable materials in alluvium-filled valleys. A graben is a depressed, trough-like structure in the Earth's crust, filled or partially filled with sediments, and usually formed by faulting and the relative downward movement of block-like geologic structures. The San Jacinto graben is a deep, sediment-filled structure approximately 2.5 miles wide and more than 20 miles long and forms the Upper Pressure Management Zone's boundaries in the Management Area. The Management Area, including the graben, is nearly surrounded by impermeable bedrock mountains and hills. Internally, island-like masses of granite and metamorphic bedrock or older alluvium rise above the valley floor. Surface and near-surface sediments in the graben and alluvium filled valleys are primarily sand and sandy silt with some silt and silty clay. The San Jacinto graben consists of a forebay area in the southeast where surface water recharge primarily occurs and a pressure area in the northwest where deep aquifers exist under confined conditions. The northwest-southeast oriented graben is formed by the right-slipping San Jacinto fault zone, believed to be the most seismically active in southern California. Between 1899 and the present, seven earthquakes of Richter magnitude 6.0 or greater have occurred along the San Jacinto fault between the San Gabriel Mountains and Mexico. This complex zone of faulting and cross faulting has two main branches, the Claremont and the Casa Loma, which form the northeast and southwest borders of the graben, respectively (see Figure 4.4).



Fault Locations

Hemet / San Jacinto Water Management Plan

*Source: Riverside County

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Figure 4.4

The Claremont fault separates the graben from the Badlands and the San Jacinto Mountains on the northeast. This fault follows Gilman Springs Road from State Highway 60 to the City of San Jacinto, hugging the foothills. It then follows the San Jacinto River before shifting to Bautista Creek south of Valle Vista. To the west, the Casa Loma fault generally parallels the Claremont Fault. The Casa Loma portion of the San Jacinto fault zone forms the southwesterly border of the graben. It runs from Park Hill (also known as Casa Loma) to the northwest toward Reche Canyon. The Bautista Creek fault is an extension of the Casa Loma fault, but is separately named due to differences in fault movement (DWR, 1969). The Bautista Creek fault runs from Bautista Canyon through the intersection of Menlo and San Jacinto Streets, joining the Casa Loma fault on the western side of Park Hill.

The portions of the Management Area outside the graben, to the east of the Claremont Fault and to the west of the Casa Loma and Bautista Creek faults, are sediment filled basins. These sediments are similar in nature to those in the graben, but are much thinner.

The faulting in the Management Area plays an important role in the movement of groundwater and is therefore a key factor in the delineation of Management Zones.

4.4 DELINEATION OF MANAGEMENT ZONES

Groundwater Management Zones (Figure 2.1) were delineated by the RWQCB based on major impermeable boundaries (such as bedrock or faults), flow systems that prevent widespread mixing even without a physical barrier, and water quality. Groundwater flow, whether or not determined by a physical barrier, was the primary characteristic used to define the Management Zones. Water quality data were used to support understanding of the flow regime and to assure that unusually high quality or poor quality waters were distinguished for regulatory purposes. (RWQCB, Resolution No. R8-2004-0001).

The four Management Zones within the Hemet/San Jacinto Management Area are:

1. Canyon;
2. San Jacinto Upper Pressure (Upper Pressure);
3. The Hemet North portion of Lakeview/Hemet North (Hemet North); and
4. Hemet South.

The Canyon Management Zone lies along a northwest to southeast axis in the eastern part of the Management Area. The boundaries of the Canyon Management Zone include the virtually impermeable San Jacinto Mountains to the east and Claremont Fault to the west. The Claremont Fault inhibits flow between Canyon and Upper Pressure Management Zones (DWR, 1969; DWR, 1978; SWRB, 1955).

Like the Canyon Management Zone, the Upper Pressure Management Zone lies along a northwest to southeast axis in the eastern part of the Management Area. The Upper Pressure Management Zone is bounded by the Claremont Fault to the northeast, the Casa Loma and Bautista Creek Faults to the southwest, and the flow system boundary with the San Jacinto Lower Pressure Management Zone to the northwest.

Boundaries of the Hemet North Management Zone include the Casa Loma Fault to the east; the groundwater divide near Esplanade Avenue to the south; the impermeable bedrock of the Lakeview Mountains to the west; and a constricted area of permeable materials between the Lakeview Mountains and the Casa Loma Fault to the northwest. The Casa Loma fault zone is a known barrier to groundwater flow (DWR, 1969; DWR, 1978; SWRB, 1955).

The Hemet South Management Zone boundaries include the Casa Loma and Bautista Creek faults to the east; the groundwater divide near Esplanade Avenue to the north; the groundwater divide in the Winchester area and various crystalline bedrock outcrops to the west. Diamond Valley Lake, a water supply reservoir for the MWD completed in 1999 and filled by 2002, is located southwest of the Hemet South Management Zone. MWD (1991) states that seepage through the permeable materials in the upper 200 feet may take place. The Casa Loma and Bautista Creek faults are known barriers to groundwater (DWR, 1969; DWR, 1978; SWRB, 1955).

For the Management Area as a whole, the mountains (Figure 4.1) form a nearly impermeable boundary such that there are only three pathways for groundwater to migrate to or from other Management Zones outside the Management Area. These locations are:

- Between the Hemet South and Perris South Management Zones, in the southwest;
- Between the Hemet North portion and Lakeview portion of Lakeview/Hemet North Management Zones, in the northwest; and
- Between the Upper Pressure and Lower Pressure Management Zones, in the northwest.

Groundwater flow in and out of the Management Area is important, as water quality is typically better in the Management Area than in the surrounding areas.

4.5 SOILS

The influence of soils on water use and hydrologic processes makes it an important component to consider when estimating changes in water use due to land use change as well as for siting spreading basins for artificial recharge projects.

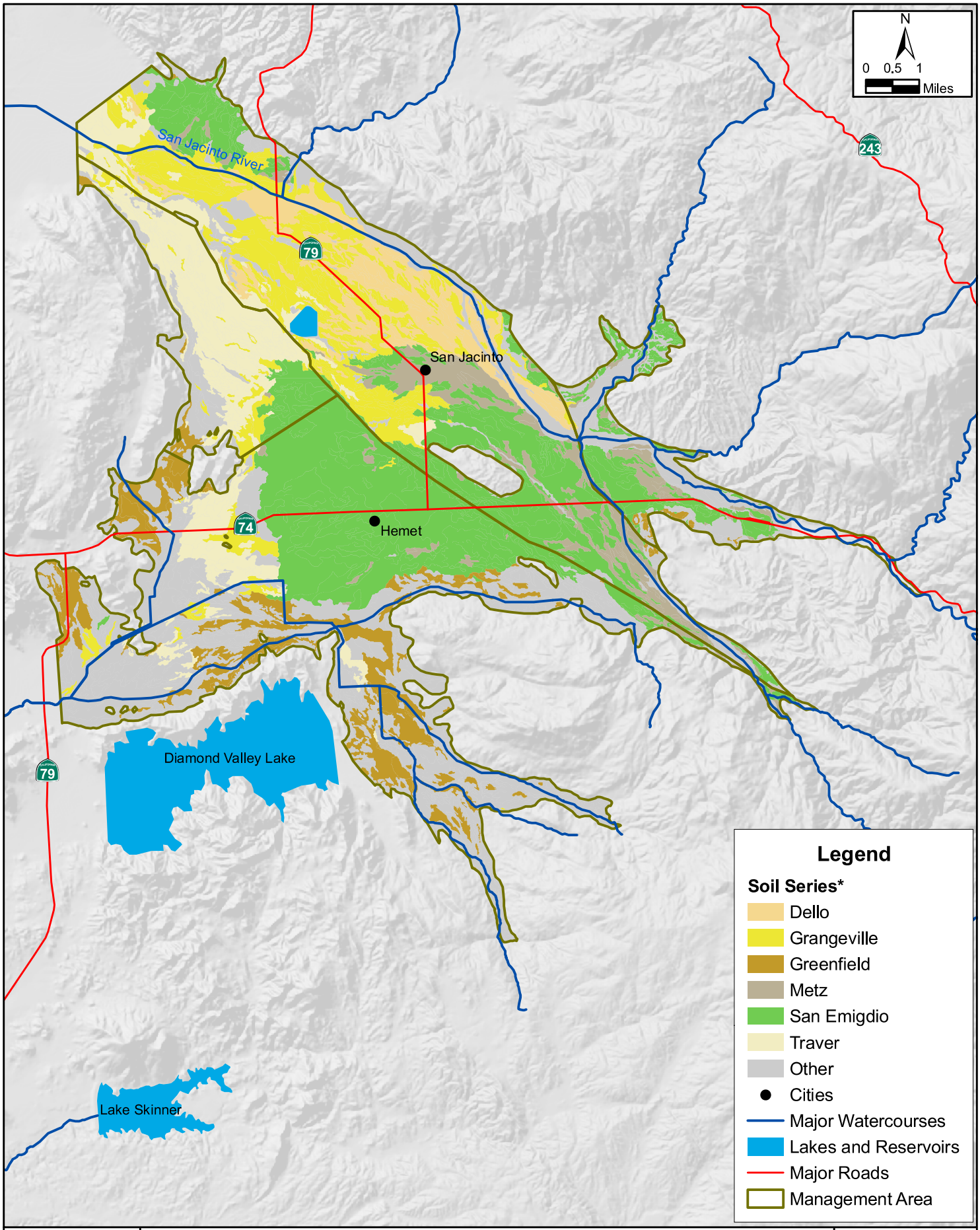
The predominant soils, as defined in the USDA's soil survey (USDA, 1971) at the series level, in the Management Area are shown in Figure 4.5 and are listed below:

- Dello,
- Grangeville,
- Greenfield,
- Metz,
- San Emigdio, and
- Traver.

The remaining soils are classified as "Other" in Figure 4.5 and consist of Chino, Domino, Exeter, Hanford, Pachappa, Ramona, Riverwash, as well as other soil series occurring in less than one square mile of the Management Area.

An important soil classification used by the USDA for hydrology is the hydrologic soils group. The hydrologic soils group can be used to estimate the amount of infiltration that can be expected from a certain soil. This grouping is based on estimates of the intake of water during the latter part of a storm of long duration, after the soil profile is wet and has an opportunity to swell, without the protective effect of any vegetation. Also considered are depths to the seasonal high water table and to a low permeability layer. The classification is useful at a planning level, but detailed studies are required for a thorough understanding of the infiltration capacity of soils. Features such as slope, ground cover, or low permeability materials away from the upper soil profile may impact the soil's capability to infiltrate water.

Under the hydrologic soils group classification system, soils are grouped A to D with "A" having the lowest runoff potential (highest infiltration rates) and "D" having the highest runoff potential (lowest infiltration rates). A map of hydrologic soils groups is provided as Figure 4.6 (USDA-SCS, 1971) and a corresponding table of hydrologic soil groups and soil series is provided in Table 4.2. As can be seen on Figure 4.6, most of the Management Area is classified as "B", soils with a moderate infiltration rate. Of the Management area, nearly 80% are "B" soils, 10% are "A" soils, and the remainder are either "C", "D", or are deemed too variable to be classified. The "A" soils are generally located along the San Jacinto River and Bautista Creek; much of the "variable" soils along these watercourses also have the potential for very high infiltration rates.



Soil Series

Hemet / San Jacinto Water Management Plan

*Source: USDA, 1971

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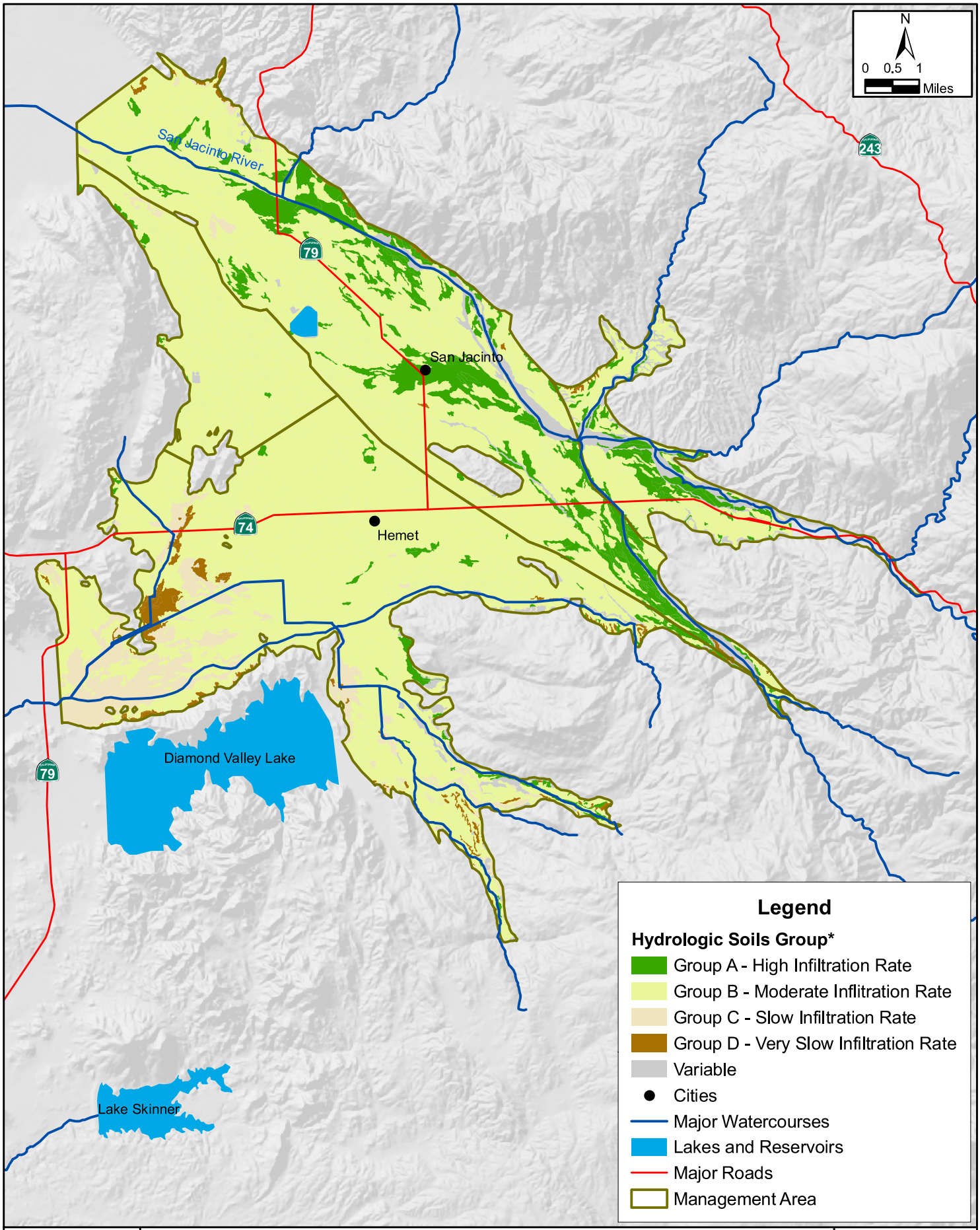
Figure 4.5



WRIME

Hydrologic Soils Groups

Hemet / San Jacinto Water Management Plan

*Source: USDA, 1971

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Figure 4.6

Table 4.2 Hydrologic Soils Groups

Common Soil Series	Hydrologic Soils Group	Minor Soil Series	Hydrologic Soils Group
Dello	A-C	Chino	B-C
Grangeville	B-C	Domino	C
Greenfield	B	Exeter	C
Metz	A	Hanford	B
San Emigdio	B	Pachappa	B
Traver	B-C	Ramona	B-C
		Riverwash	variable
		Other	variable

4.6 GROUNDWATER CONDITIONS

As previously stated, groundwater flow between Management Zones is inhibited by geologic faults, (Figure 4.4) notably the Casa Loma Fault, Bautista Creek Fault and Claremont Fault, all strands of the San Jacinto fault zone. The Claremont Fault acts as a barrier to flow between Canyon and Upper Pressure Management Zones, while the Casa Loma Fault is a barrier to flow between the Upper Pressure Management Zone and both the Hemet North and Hemet South Management Zones.

The San Jacinto River enters the basin in the southeast part of the Management Area and flows north and west across the Upper Pressure Management Zone. In most years, all river flow is lost to percolation and limited evapotranspiration in the Canyon and Upper Pressure Management Zones. Recharge from the San Jacinto River and its tributaries forms a large portion of total inflow for the Canyon and Upper Pressure Management Zones.

Groundwater pumping for irrigation and domestic purposes is the principal source of groundwater outflow. Major pumping depressions occur in the Hemet South and Upper Pressure Management Zones.

Historically, extraction in excess of recharge has resulted in lowered groundwater levels and altered directions of groundwater flow.

4.6.1 ARTIFICIAL RECHARGE OPERATIONS

In addition to natural inflows and return flows from agricultural and municipal uses, there has been and continues to be artificial recharge operations in the Management Area. These

operations use imported water, when available, typically at lower winter rates, to artificially recharge groundwater through spreading basins. The annual volume of imported water recharged is presented in Figure 4.7. Recharge operations did not begin until 1990. More recently, the Public Agencies have signed memoranda of understanding in 2004 and 2005 to plan for the recharge at two existing recharge facilities in the San Jacinto riverbed.

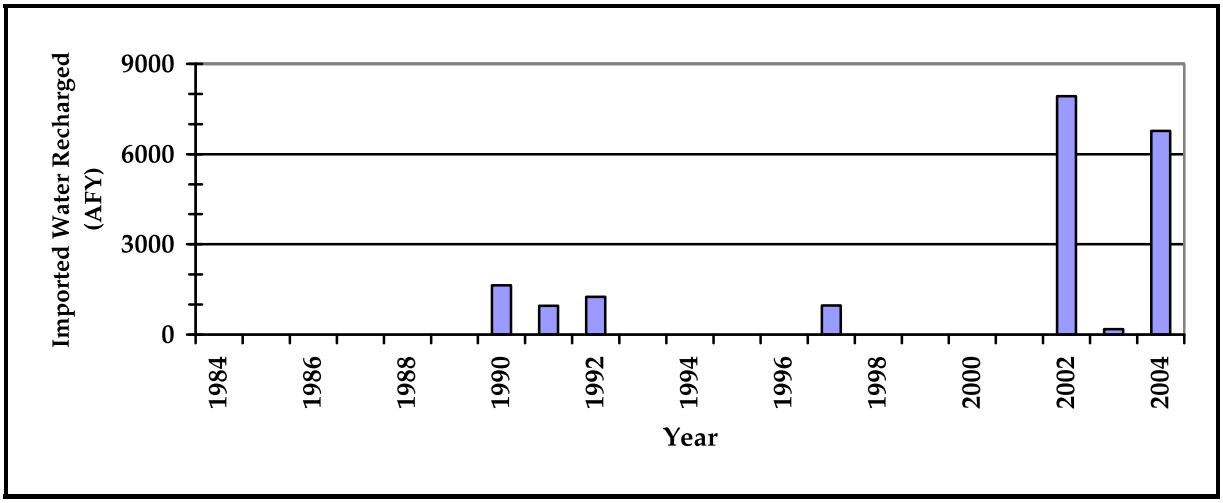
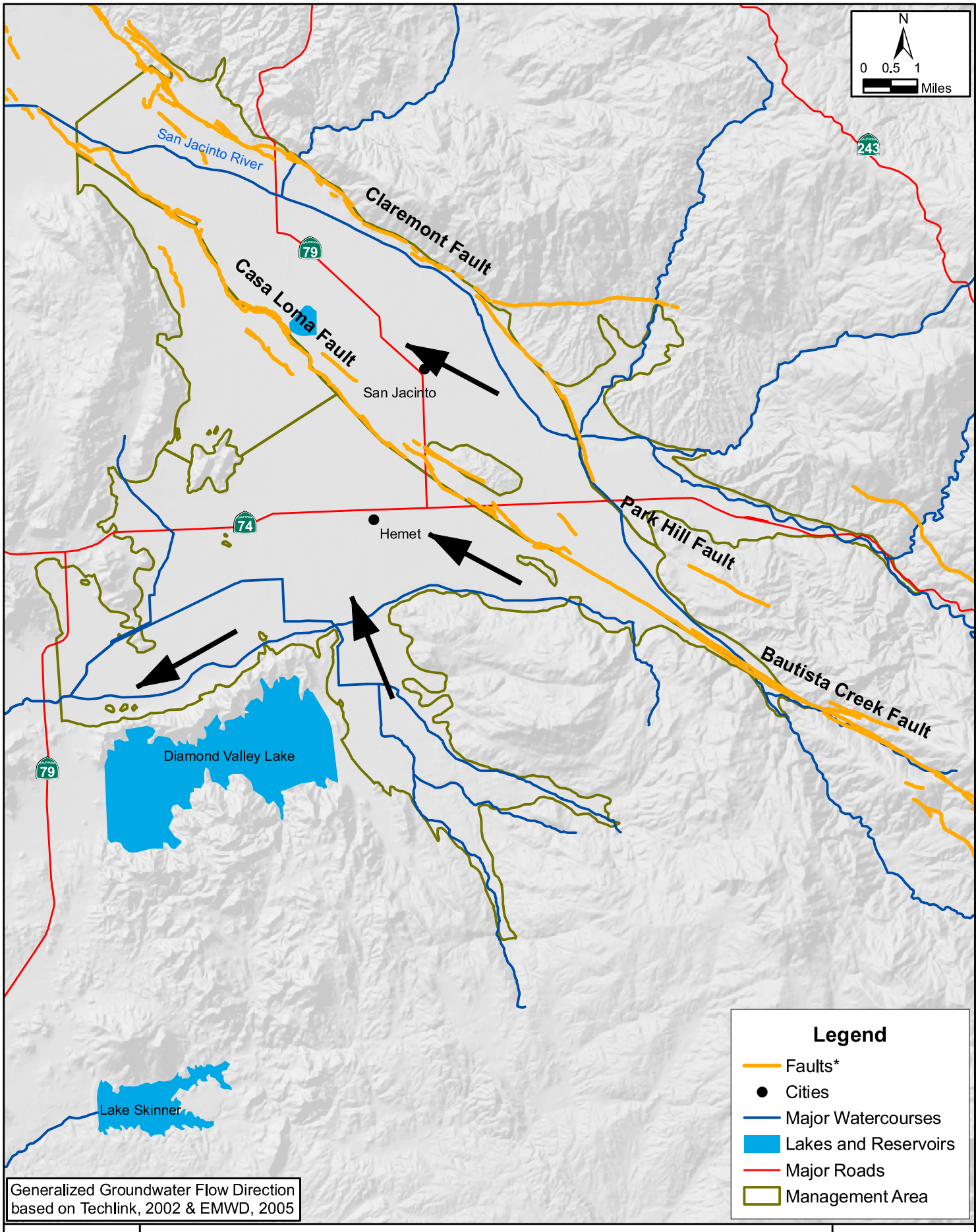


Figure 4.7 Annual Imported Water Recharged

The artificial recharge operations help address the impact of overdraft caused by past groundwater production.

4.6.2 GROUNDWATER LEVELS AND FLOW

Historical groundwater extraction from the Management Area has resulted in a significant drop in groundwater levels. The lowered groundwater levels also changed the direction of flow in parts of the Management Area. Figure 4.8 shows the flow directions in the early 20th Century. Figure 4.9 shows current flow directions. Notable changes over time include the development of a groundwater divide between the Hemet South and Perris South Management Zones (previously flow was out of the Hemet South Management Zone into the Perris South Management Zone and flow from the Hemet North portion to the Lakeview portion of the Lakeview/Hemet North Management Zone due to lower water levels in the Lakeview portion. (TechLink, 2002a)



Early 20th Century Groundwater Flow Direction

Hemet / San Jacinto Water Management Plan

*Source: Riverside County

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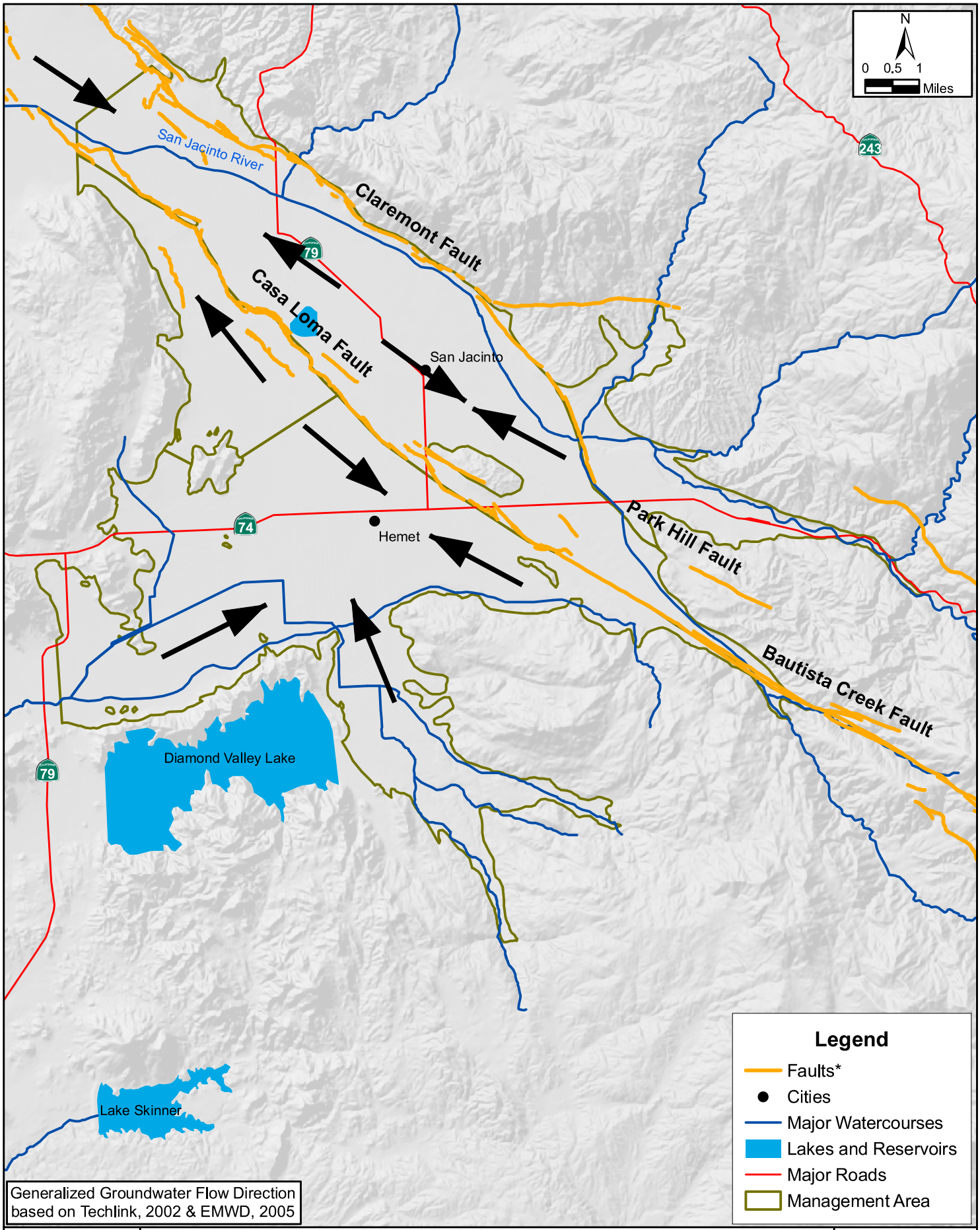
Figure 4.8



Current Groundwater Flow Direction

Hemet / San Jacinto Water Management Plan

*Source: Riverside County

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Figure 4.9

Figure 4.10 shows Spring 2004 groundwater levels. The groundwater level contours show pumping depressions in the northeastern part of the Hemet South Management Zone and in the northwestern part of the Upper Pressure Management Zone. These pumping depressions are due to concentrated pumping in those areas in excess of the local recharge capacity.

Historical groundwater levels are affected by both climatic conditions, which impact the amount of recharge, and pumping. Historical conditions in the four Management Zones can be studied in relation to their unique setting by analyzing observed water levels at representative wells with long periods of record. Hydrographs for four selected wells are presented in the following sections. The locations of the wells can be found on Figure 4.11.

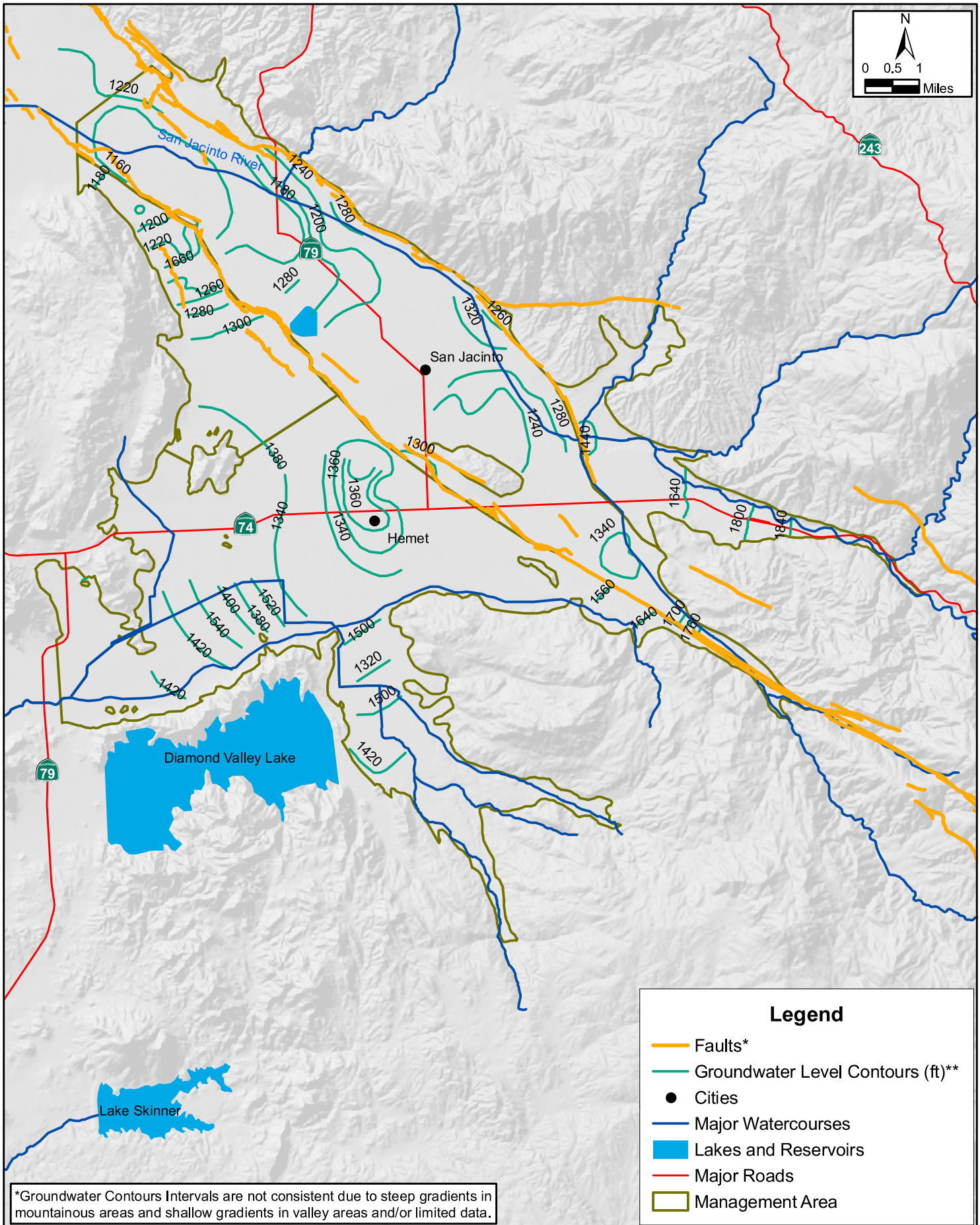
4.6.2.1 Canyon Management Zone

The Canyon Management Zone benefits from significant surface water recharge from the San Jacinto River and its tributaries. This additional recharge reduces the impact of the pumping occurring in the Canyon Management Zone. Figure 4.12 shows groundwater levels from 1948 to 2005 for EMWD's #6 Cienega well. This figure shows the impact of hydrologic variability and pumping in the area. One drought period in the late 1980s resulted in groundwater levels dropping by over 100 feet. Such declines in groundwater levels are likely due to a combination of reduced precipitation, reduced recharge from streamflow, and the effects of pumping. Most of this decline was recovered in the wet period that followed from 1991 to 1993.

Changes are also seen seasonally, with groundwater levels changing by as much as 100 feet from late fall to late spring. These seasonal changes in water levels are also due to a combination of reduced precipitation, reduced recharge from streamflow, and the effects of pumping.

4.6.2.2 Upper Pressure Management Zone

The Upper Pressure Management Zone benefits from surface water recharge from the San Jacinto River and its tributaries and supplies most of the groundwater for the Management Area. However, even with significant recharge from surface water as well as other inflows, wells in the Upper Pressure Management Zone have shown a decline in water levels over time. Figure 4.13 presents water level elevations for EMWD's #9 Hewitt and Evans well, showing a consistent decline through the dry period of the 1950s, 1960s, and 1970s with a drop of more than 200 feet over the 30-year period. The hydrologically wet and normal periods during 1978 to 1986 resulted in a recovery of about half the decline from the previous three decades. Since 1986, groundwater levels have dropped approximately 200 feet. The changes seen in the well



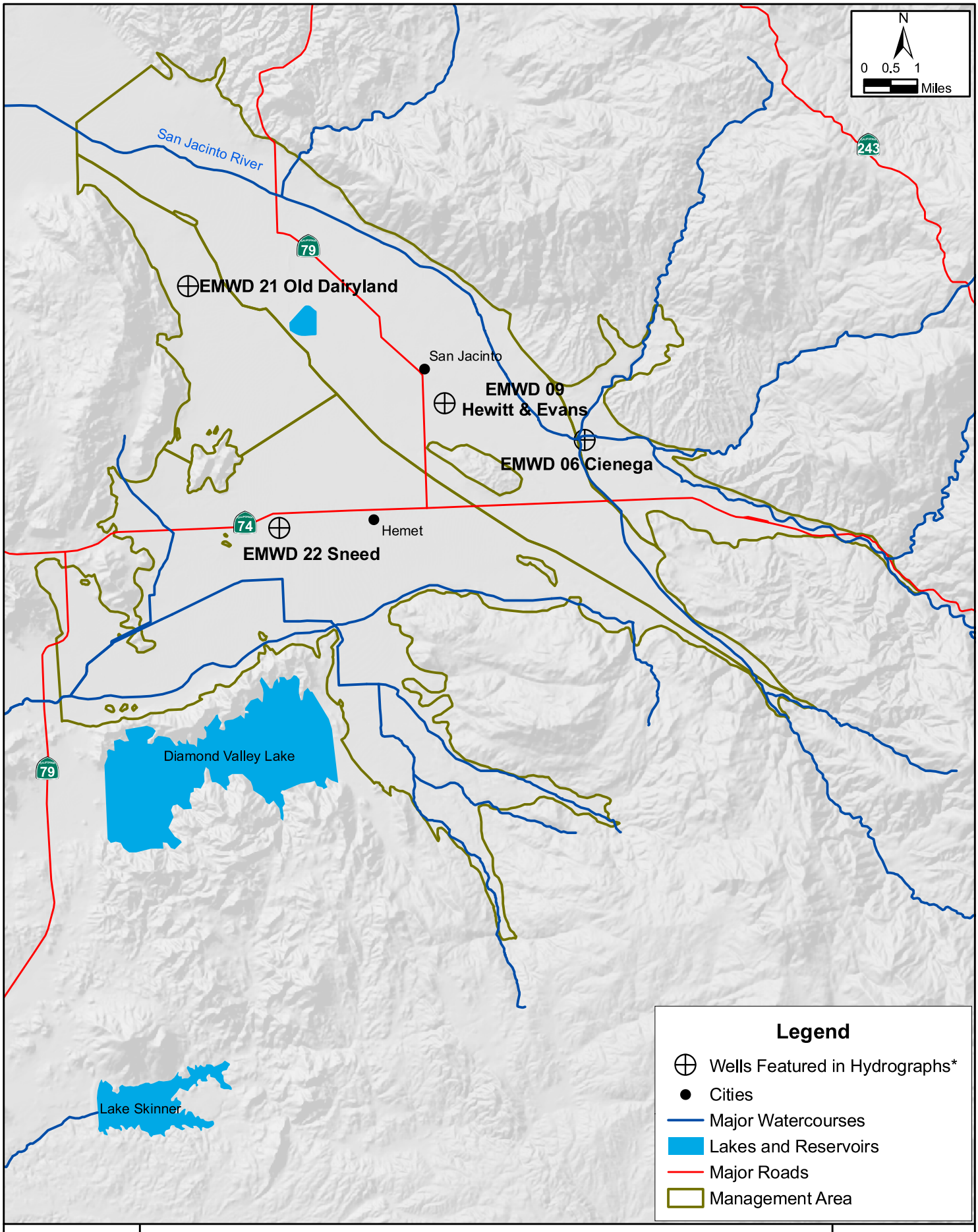
Spring 2004 Groundwater Elevation

Hemet / San Jacinto Water Management Plan

*Source: Riverside County
**Source: EMWD, 2005

October 2007

Figure 4.10



Location of Representative Well Hydrographs

Hemet / San Jacinto Water Management Plan

*Source: EMWD

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Figure 4.11

Figure 4.12 Groundwater Elevation
Canyon Management Zone, EMWD #6 Cienega

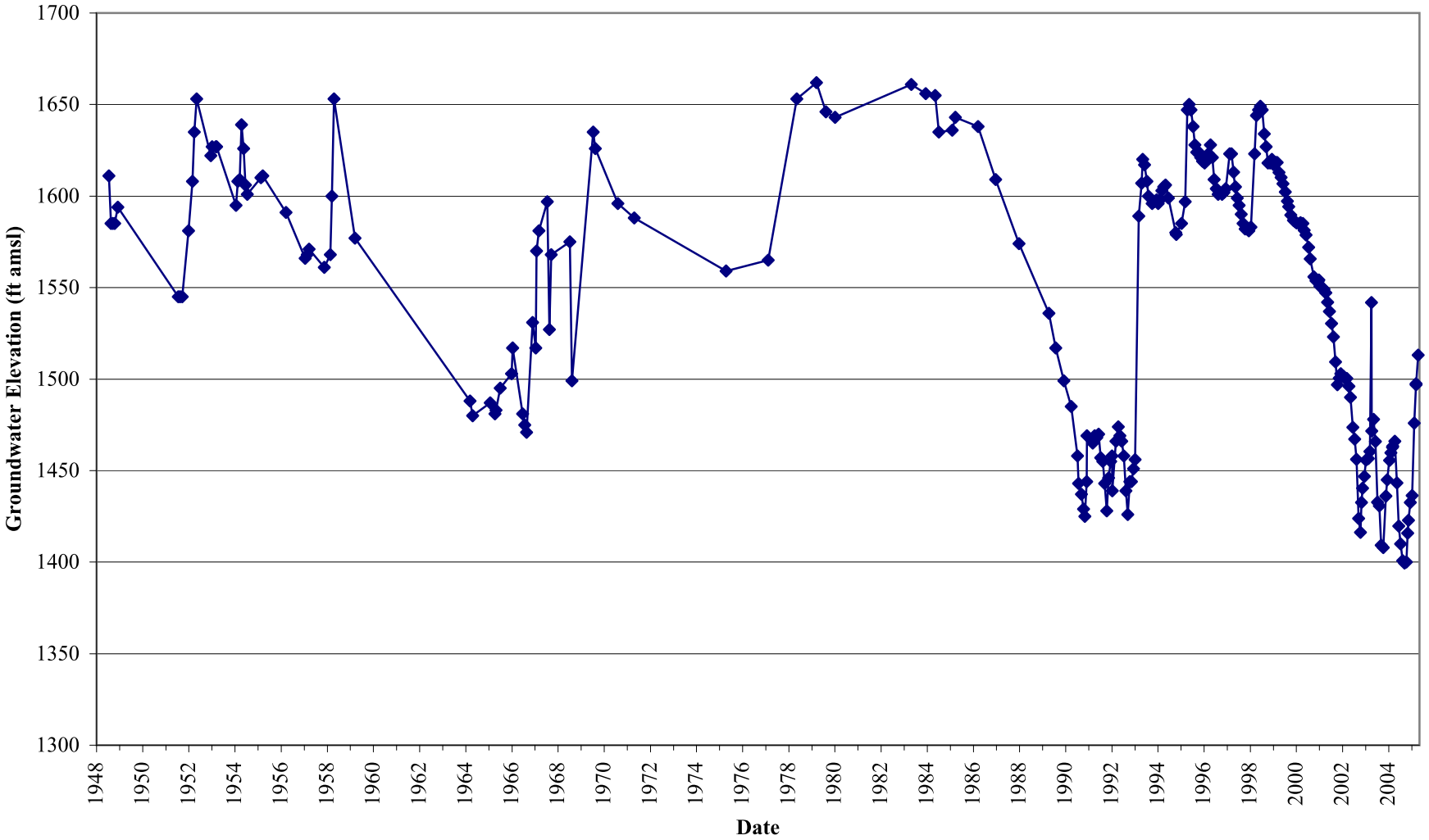
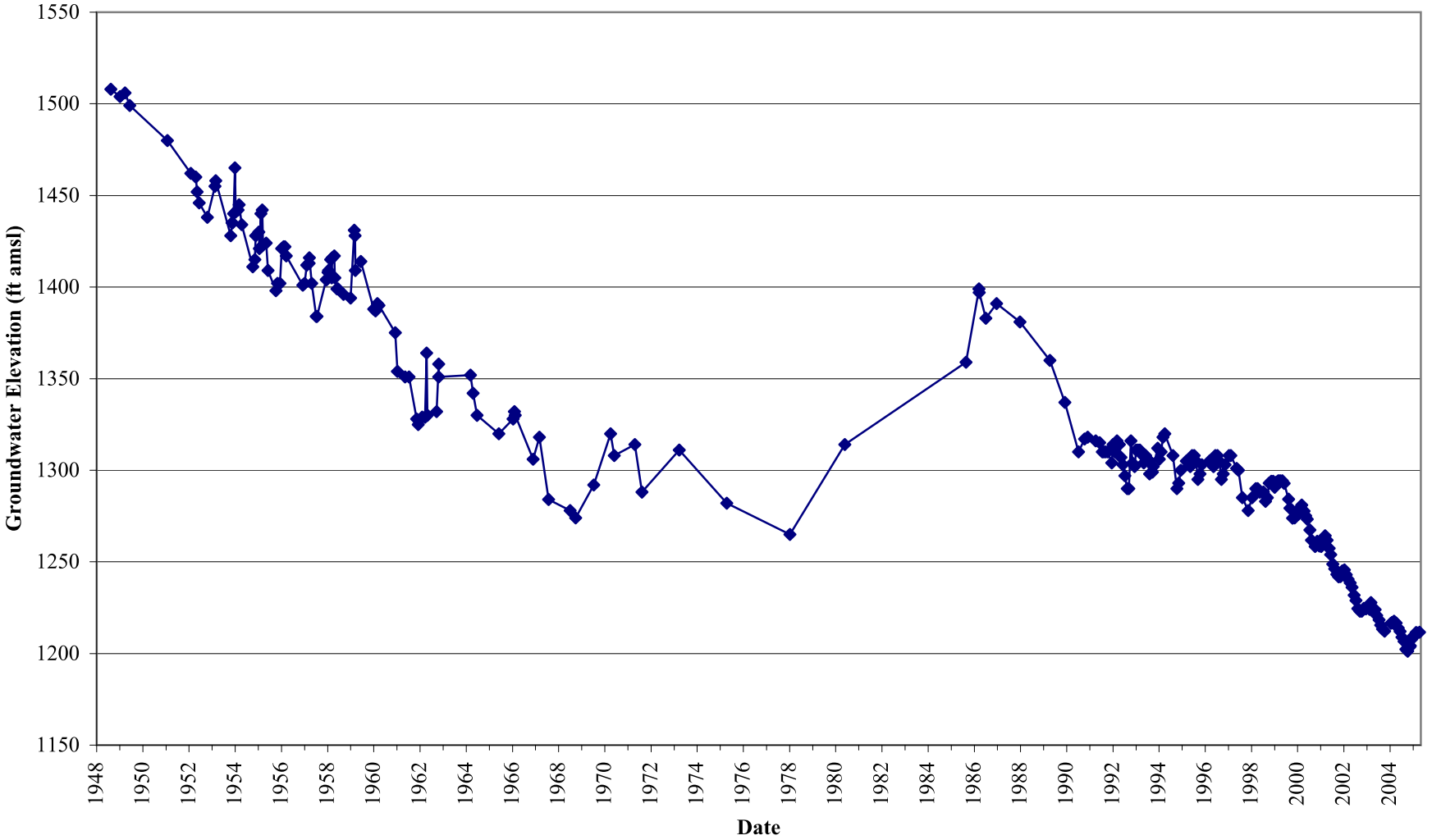


Figure 4.13 Groundwater Elevation
Upper Pressure Management Zone, EMWD #9 Hewitt and Evans



are likely due to a combination of reduced precipitation, reduced recharge from streamflow, and effects of pumping.

4.6.2.3 Hemet North Portion of the Lakeview/Hemet North Management Zone

Groundwater levels in Hemet North portion of the Lakeview/Hemet North Management Zone have shown a steady decline followed by recent stabilization. These declines occur even though significantly less water was pumped from the Hemet North portion than from other Management Zones. The Hemet North portion does not receive as much surface water recharge as Upper Pressure and Canyon Management Zones, thus impacts of pumping are more pronounced than they might be in those Management Zones. Figure 4.14 shows groundwater levels at EMWD's #21 Old Dairyland well. Since the beginning of the record in 1966, groundwater levels have steadily declined, with little variability. After dropping more than 100 feet from the mid-1960s to the mid-1990s, groundwater levels have stabilized at an average of 1,250 feet above mean sea level.

4.6.2.4 Hemet South Management Zone

Groundwater levels in the Hemet South Management Zone have shown a steady decline, although the recent rate of decline has slowed. Figure 4.15 shows groundwater levels at EMWD's #22 Sneed well since the beginning of the record in 1952. While data is limited for the 1952 to 1990 period, groundwater levels declined through the 1952-1990 period, and the increased data available from 1990 to 2005 shows little variability. Groundwater level declines have slowed but have still dropped approximately 20 feet in the past 10 years.

4.6.3 GROUNDWATER BUDGET

The changes in groundwater levels and flow directions are the result of changes in the balance of inflows and outflows from the Management Area. A groundwater budget can identify potential causes of an imbalance. The groundwater budget presented in Table 4.3 shows average annual values for the components of total inflow and total outflow. The values are based on a water balance spreadsheet tool developed for use by the TC. This Excel-based tool allowed the TC members to investigate the impact of inclusion and exclusion of specific water budget components, such as artificial recharge, imported water, and others, as well as the implications of different data sources, such as the calibrated groundwater model and the database or reported values with underflow estimates. This allowed for a more thorough understanding of the potential impacts of definitions of water budget components on the calculated yield and overdraft. The values presented in Table 4.3, as agreed upon by the TC, are the results of the calibrated groundwater model except for groundwater extraction, which is

Figure 4.14 Groundwater Elevation
Hemet North Management Zone, EMWD #21 Old Dairyland

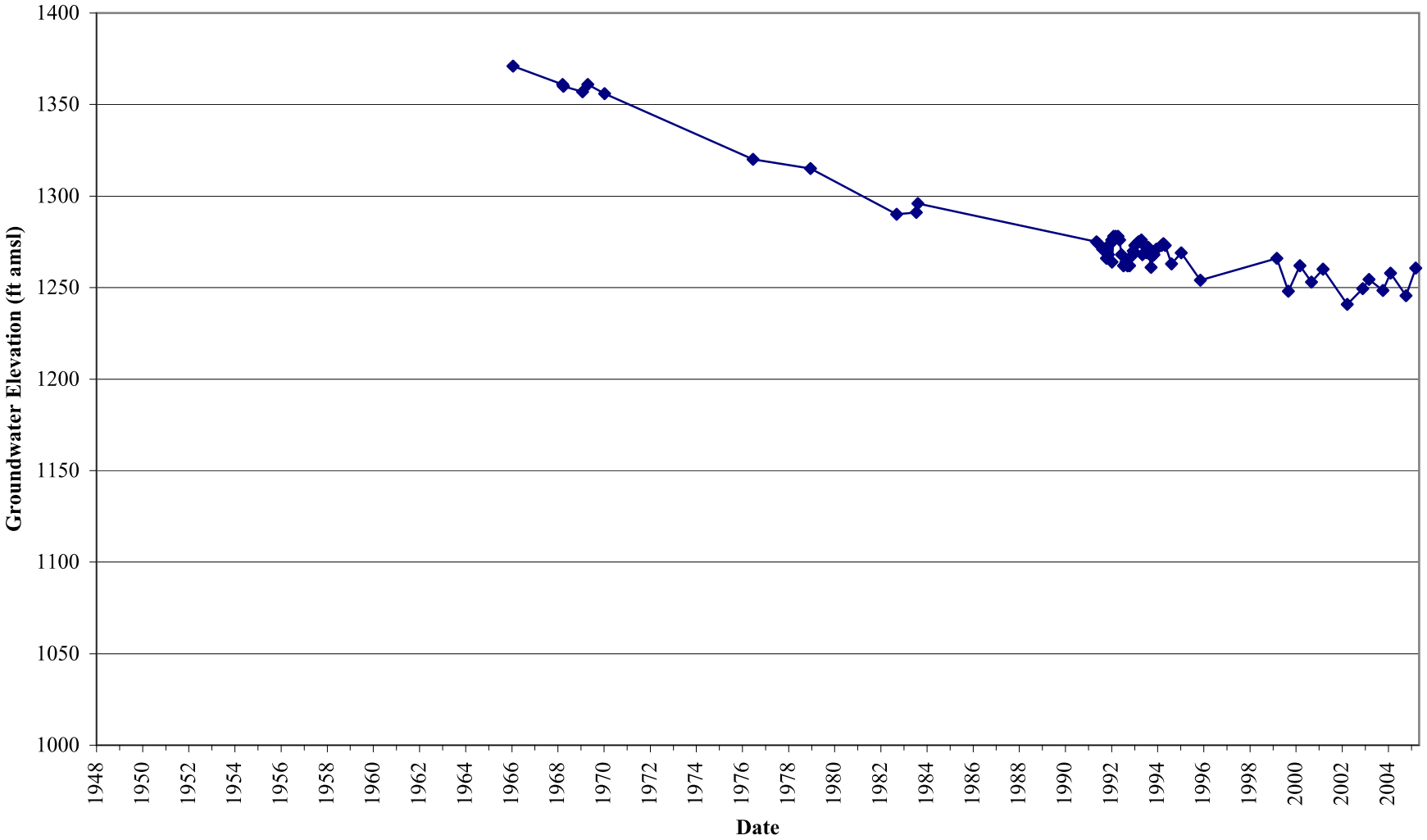
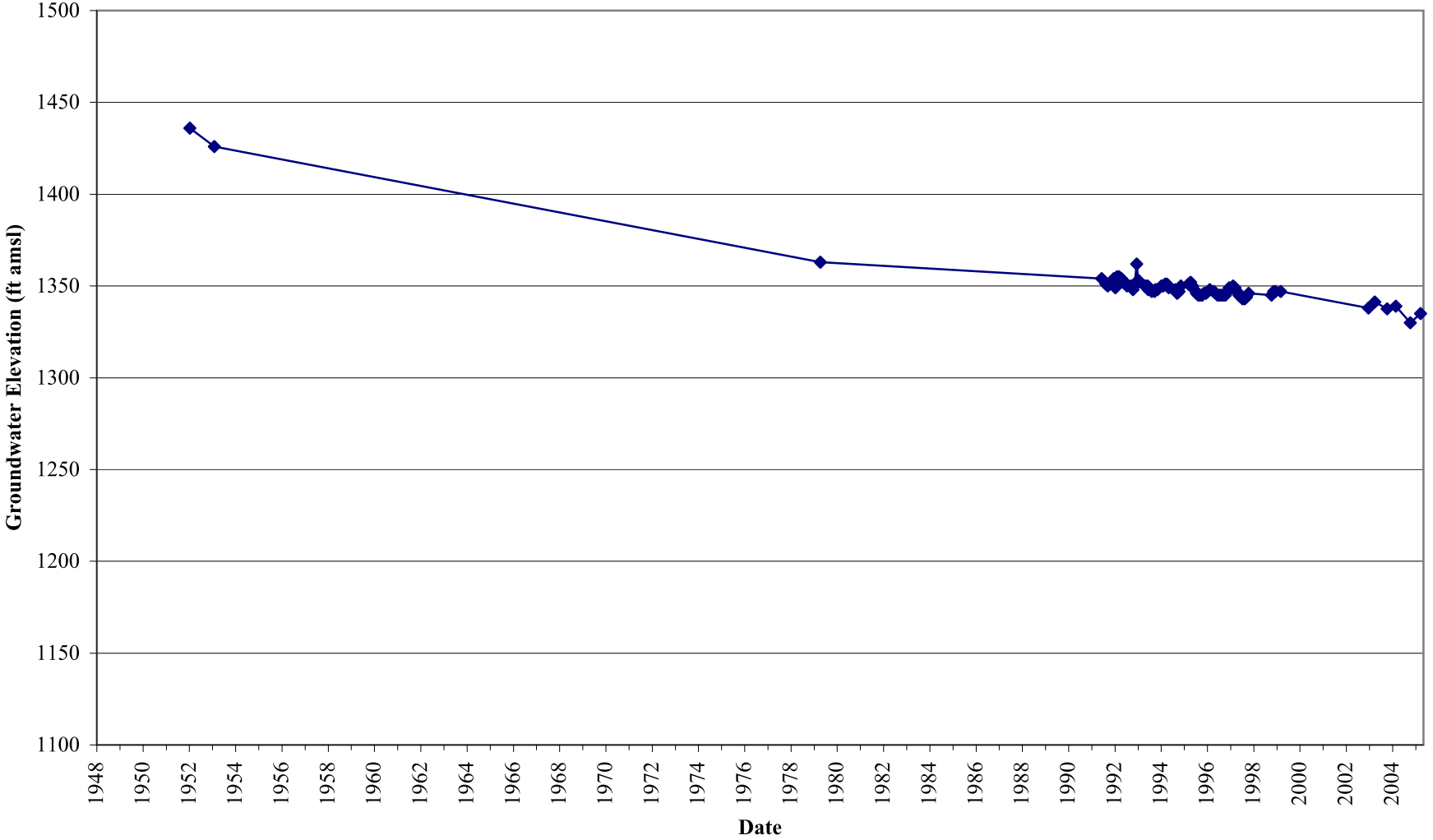


Figure 4.15 Groundwater Elevation
Hemet South Management Zone, EMWD #22 Sneed



obtained from the data tabulated in *Assessment of Historical and Projected Land and Water Use Data* (WRIME, 2003a).

Table 4.3 Groundwater Budget for the Management Area
(Average Annual Volume for Water Years 1984-2004*)

Inflow Component	Volume (AFY)	Outflow Component	Volume (AFY)
Recharge from Rainfall	8,900	Groundwater Production	57,800
San Jacinto River and Bautista Creek Recharge	9,900	Subsurface Outflow from Hemet South to Perris South	300
Recharge from Public Agency Sales	2,900	Subsurface Outflow from Hemet North to Lakeview	1,500
Recharge from Irrigation	9,600		
Conjunctive Use Recharge	800		
Reclaimed Water Recharge	1,500		
Subsurface Inflow from Mountain Fronts	8,000		
Subsurface Inflow from Lower Pressure to Upper Pressure	1,700		
Total	43,300	**Total**	59,600

* Values for Groundwater Production represent 1984-2004 averages, an update from the 1984-2003 values presented in WRIME, 2003a. All other data is taken from the 1984-1999 modeling results (TechLink, 2002a).

The total average annual inflow is 43,300 AFY and the total average annual outflow is 59,600 AFY, resulting in an average annual deficit of 16,300 AFY for the 20-year hydrologic period of 1984 to 2004. Nearly all (97%) outflow is from groundwater extraction while inflow is primarily natural recharge, representing 66% of inflow and the remainder a direct result of recharge from applied water or other human activities. The 1984-2004 hydrologic period presented in Table 4.3 represents the period during which the most consistent and continuous data for the Management Area is available. It should be noted, however, that this period does not necessarily represent the long-term groundwater basin conditions, and as described in Section 4.9 of this document, long-term overdraft is estimated based on longer periods, as well as other methods and criteria.

4.6.4 LAND SUBSIDENCE

In additional to water quantity and quality concerns, there is the potential for further land subsidence in the Management Area, although not at rates to cause significant damage.

Widespread land subsidence has been observed in the San Jacinto basin as the area and its groundwater resources have been developed. Three forms of subsidence have been reported by the U.S. Environmental Protection Agency (Boen, et al., 1971): local or regional tectonic adjustments along the faults in the area; groundwater withdrawals and subsequent artesian head decline; and soil collapse or compaction due to causes other than tectonic or artesian head decline. In the graben, tectonic subsidence has averaged 0.2 in/yr (4.5 mm/year) over the past 40,000 years and subsidence due to groundwater withdrawal and aquifer compaction is 1 - 1.2 in/yr (2.5 - 3 cm/yr) (Morton, 1995). Lofgren (1975, 1976) reported in studies that, through the years, the periods of subsidence tend to correspond to the periods of groundwater production; land surface elevation at the well tends to be lower each year; and subsidence has been greater within the graben than on either side.

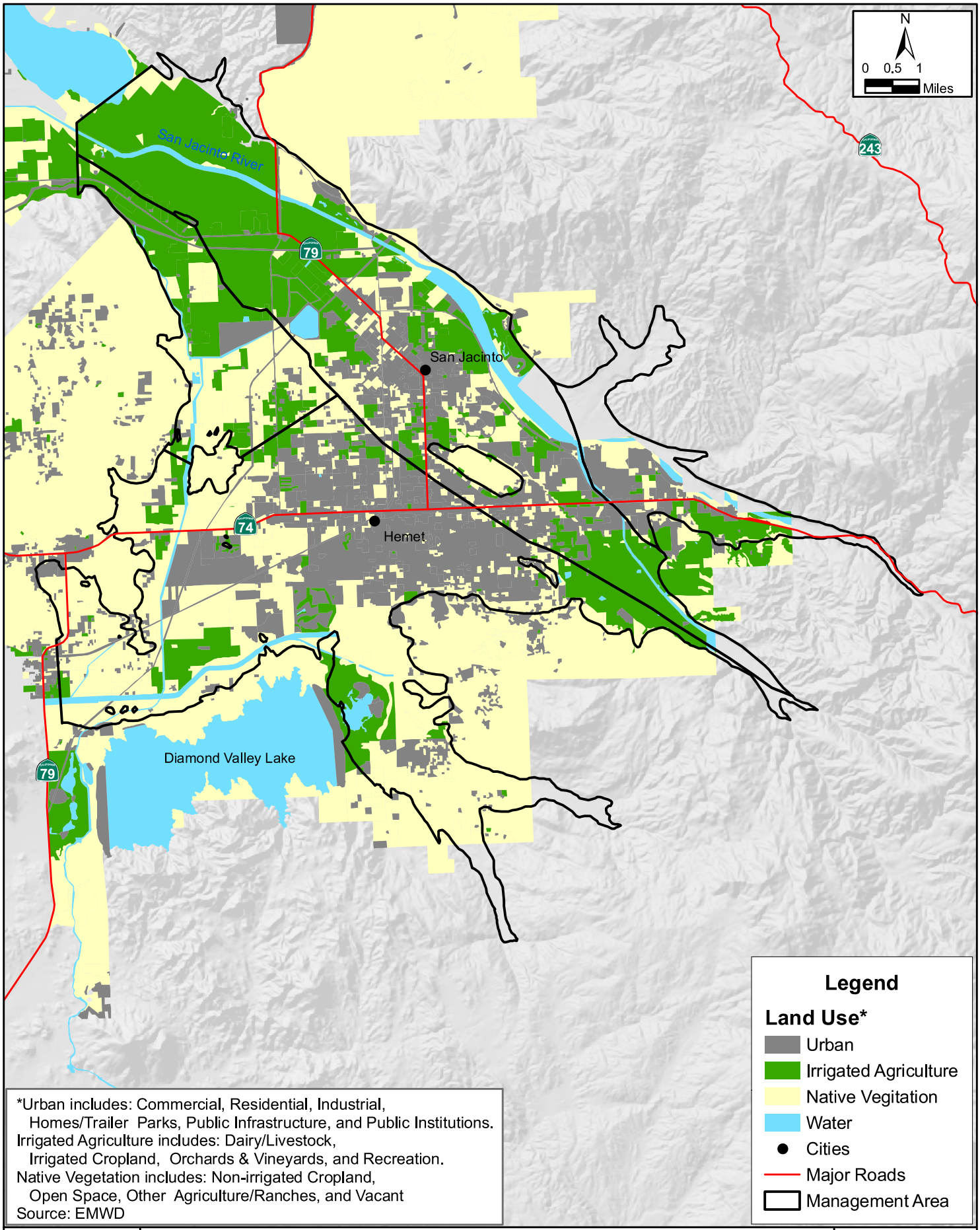
4.7 LAND USE

Land use in the Management Area has experienced changes over the past half-century. The conversion from agricultural or undeveloped lands to urban uses has an impact on basin hydrogeology as well as on water demand. Figure 4.16 and Table 4.4 show land uses in 1998 for most of the project area.

Table 4.4 Land Use Distribution Based on the 1998 Survey

Land Use	Canyon	Upper Pressure	Hemet South	Hemet North	Total
Total Area (acres)	4,400	21,200	25,300	5,600	56,500
% Urban and Suburban	24%	24%	36%	11%	28%
% Irrigated Crops and Recreational	12%	49%	15%	47%	31%
% Non-Irrigated Crops and Native Vegetation	16%	24%	45%	42%	35%
% Unmapped	48%	3%	4%	0%	7%

Much of the urban uses in the area are recent. This is shown by the significant population growth in the area, as highlighted Figure 4.17, which displays population data from the decennial US Census reports and a 2004 US Census estimate for the incorporated areas of Hemet and San Jacinto.



*Urban includes: Commercial, Residential, Industrial, Homes/Trailer Parks, Public Infrastructure, and Public Institutions.
Irrigated Agriculture includes: Dairy/Livestock, Irrigated Cropland, Orchards & Vineyards, and Recreation.
Native Vegetation includes: Non-irrigated Cropland, Open Space, Other Agriculture/Ranches, and Vacant
Source: EMWD

1998 Land Use

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Figure 4.16

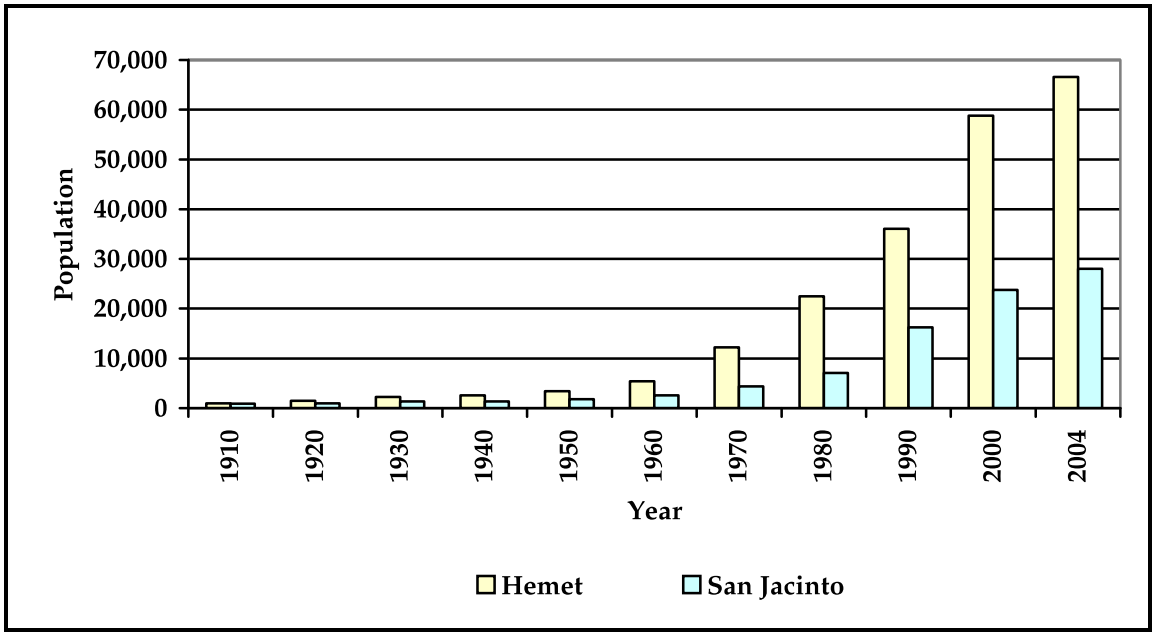


Figure 4.17 Population Growth in Incorporated Hemet and San Jacinto

From 1950 to 2004, the population in Hemet increased twenty-fold and the population in San Jacinto increased sixteen-fold. Such urbanization results in changes in both water demand and hydrologic processes. For newly urbanized areas that were previously non-irrigated, water demands obviously increase significantly. Areas that change from irrigated agricultural uses to urban uses do not typically see major changes in the total annual water demand. However, water demand from urban users is typically less elastic than water demand from agricultural users, making drought contingencies more important. The requirements for water quality are also typically more stringent for urban users. From a hydrologic perspective, urbanization results in an increase in the impervious land area, e.g., more pavement and buildings, with the resulting increased runoff and decreased infiltration. Additionally, the water used indoors by urban users is sent to treatment plants, shifting the potential for recharge of this water from the area of use to the treatment plant area.

The urbanization trend is not unique to the Management Area, but has been pervasive throughout the fringes of urbanized Southern California. While the rate of urbanization may change in the future, the trend of urbanization is likely to continue and to play a significant role in land use and water demand. Further discussion of future land use changes may be found in Section 5.

4.8 CURRENT WATER SUPPLIES

There are four Public Agencies primarily responsible for water supply in the Management Area: EMWD, LHMWD, and Cities of Hemet and San Jacinto. In addition, Private Water Producers produce groundwater and purchase water from the Public Agencies, and the Soboba Tribe pumps groundwater for its respective uses. Each entity pumps groundwater, and some entities also utilize a mix of some of the following sources: surface water diversions, surface water and/or groundwater purchases, surface water imports, and recycled water. The water supply conditions in the Management Area and the interrelationships among the various agencies is a primary factor for future water management in the area. Figure 4.18 shows these interrelationships in a diagram form.

Figure 4.19 shows the makeup of the water supply and how this mix has changed from 1985 to 2004 for the Management Area. Groundwater is the predominant source of water supplies for the Management Area. The remaining sources are smaller, but still important, sources of water. Supplies listed by entity are provided in Appendix F. Note that items such as sales to other agencies are not subtracted in these supply values, resulting in a supply that represents both wholesale and retail supplies. As a result of this definition, supplies will not equal the historical demand. Historical demand for the individual entities is shown in Figures 4.20 – 4.25.

4.8.1 GROUNDWATER

All entities pump groundwater for all or a portion of their water supply. The quantity of groundwater extraction for each Management Zone is shown in Figures 4.26a, 26b, and 4.27.

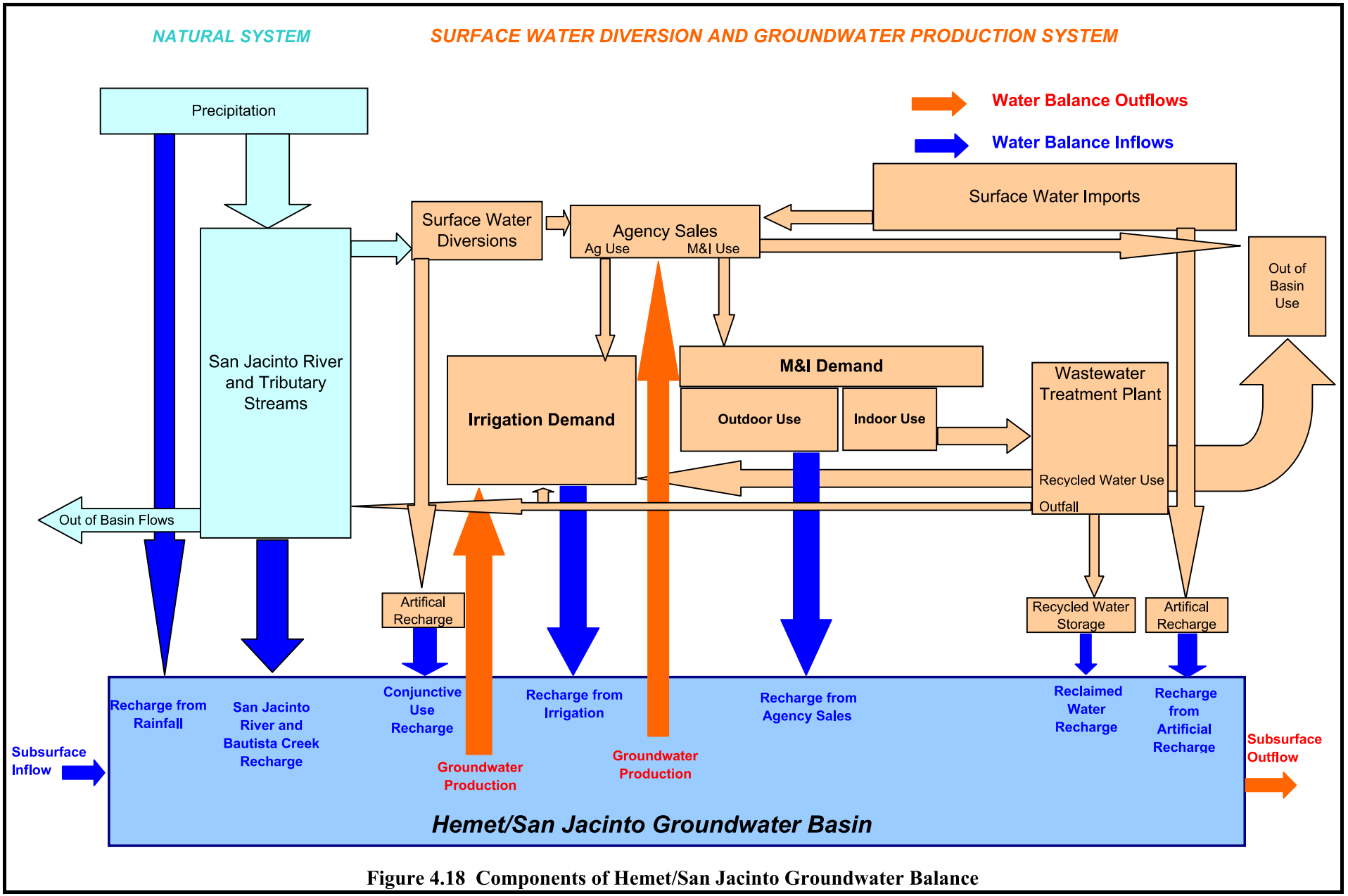


Figure 4.18 Components of Hemet/San Jacinto Groundwater Balance

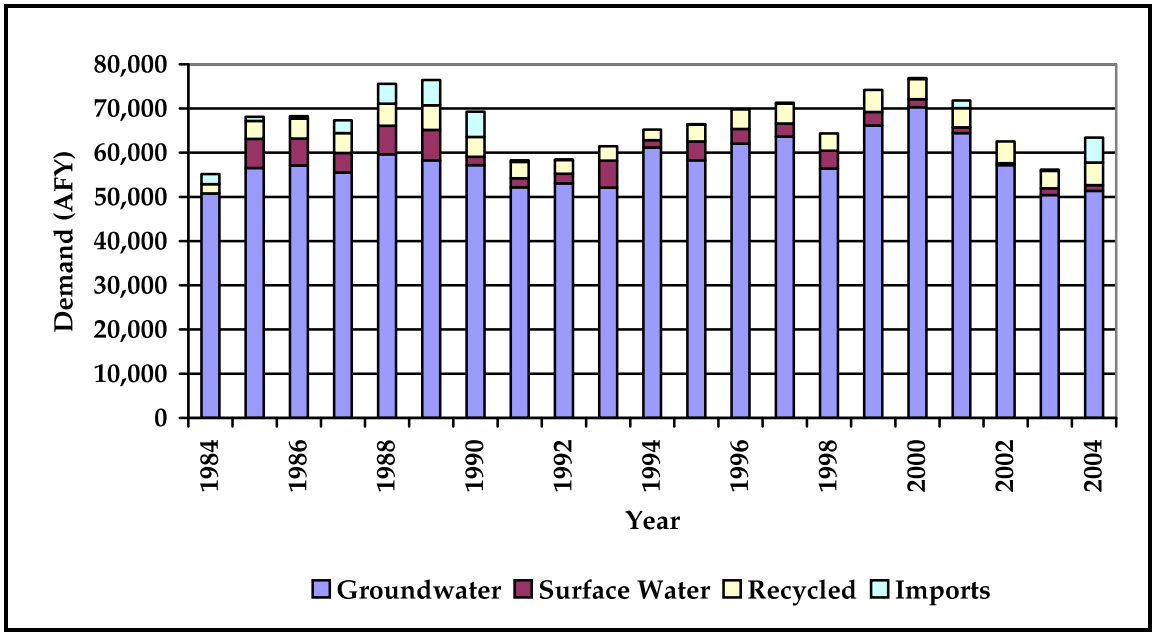


Figure 4.19 Annual Management Area Water Supplies

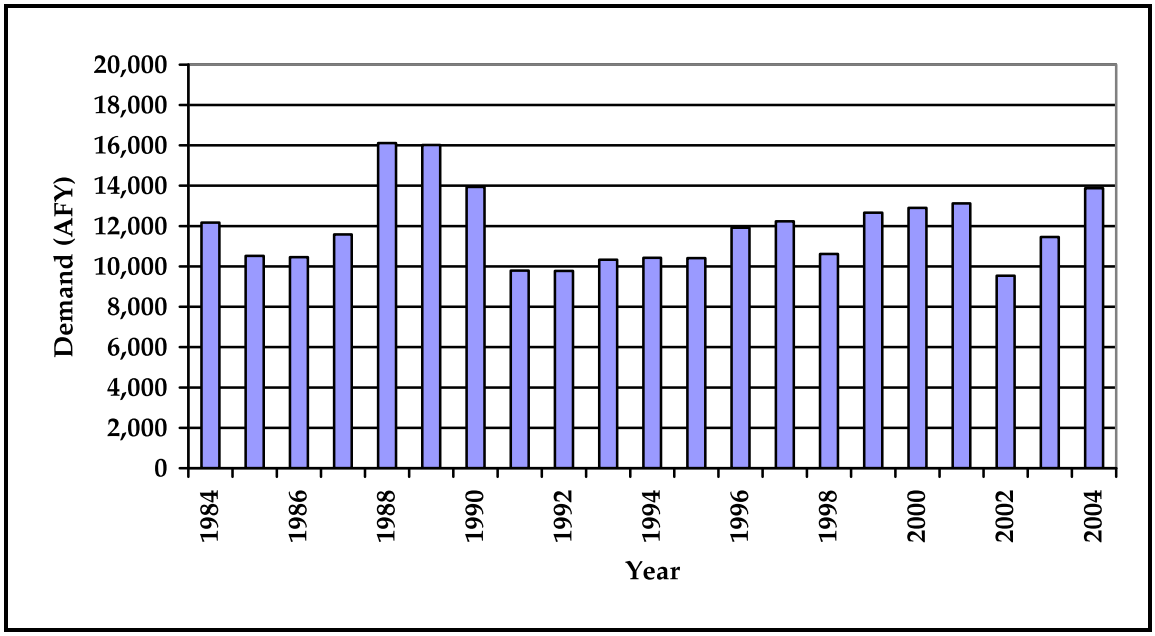


Figure 4.20 EMWD Historical Annual Demand

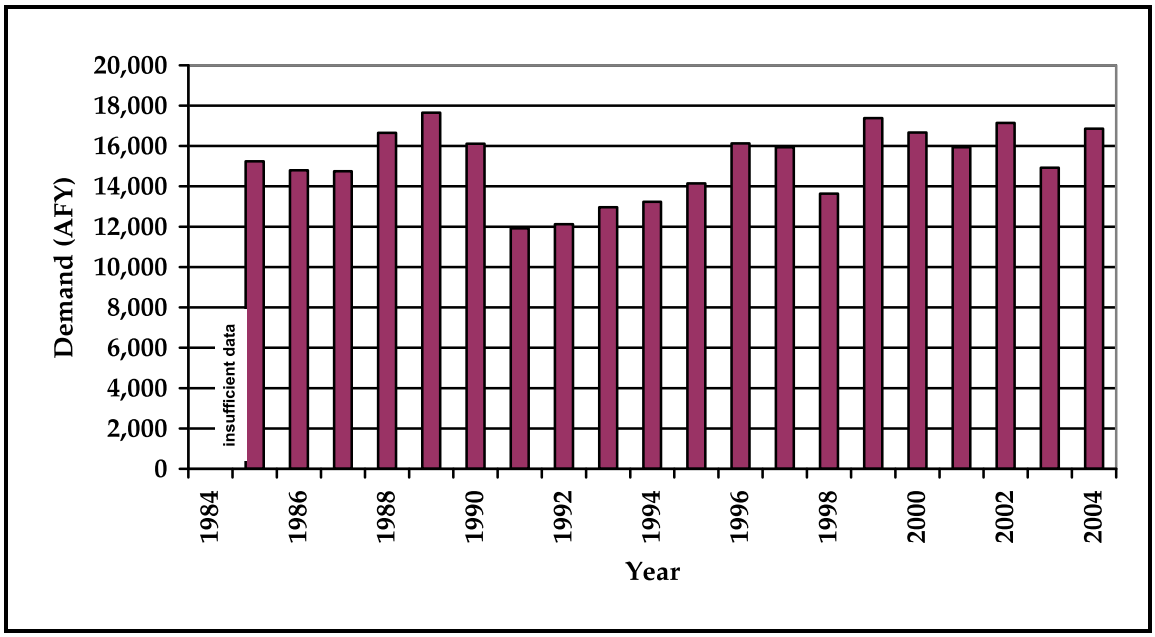


Figure 4.21 LHMWD Historical Annual Demand

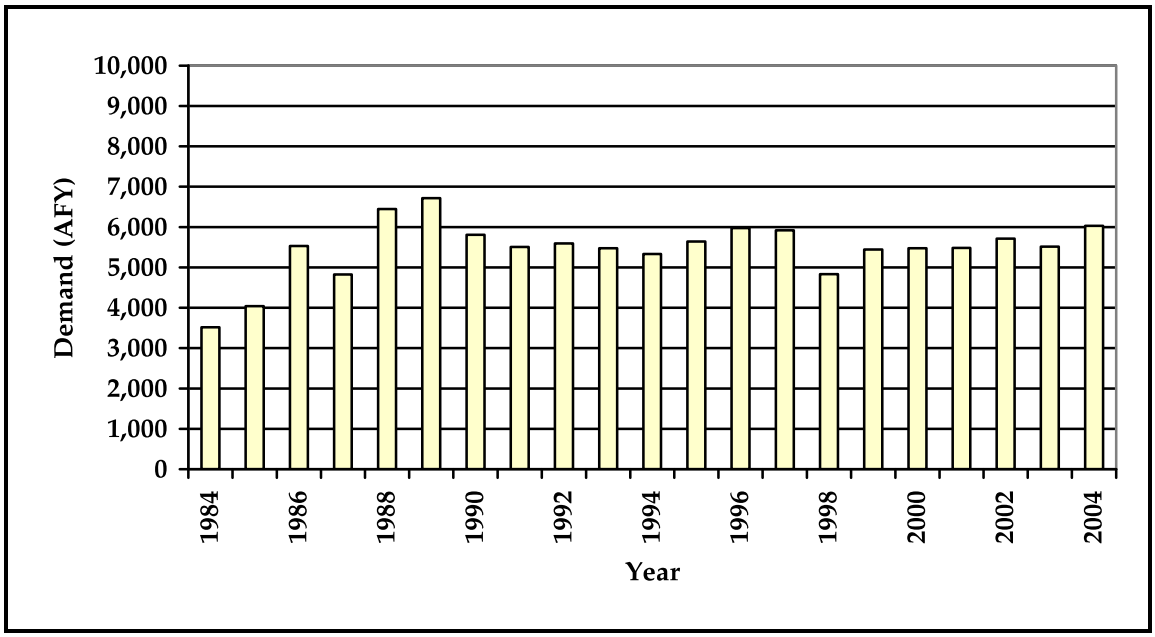


Figure 4.22 City of Hemet Water Service Area Historical Annual Demand

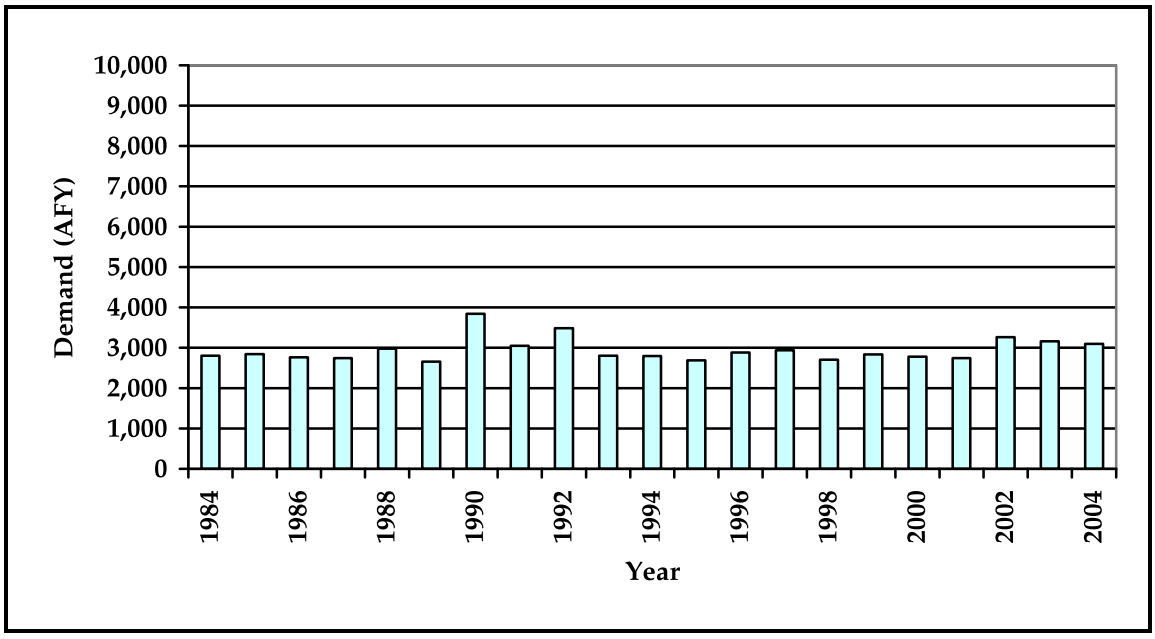


Figure 4.23 City of San Jacinto Water Service Area Historical Annual Demand

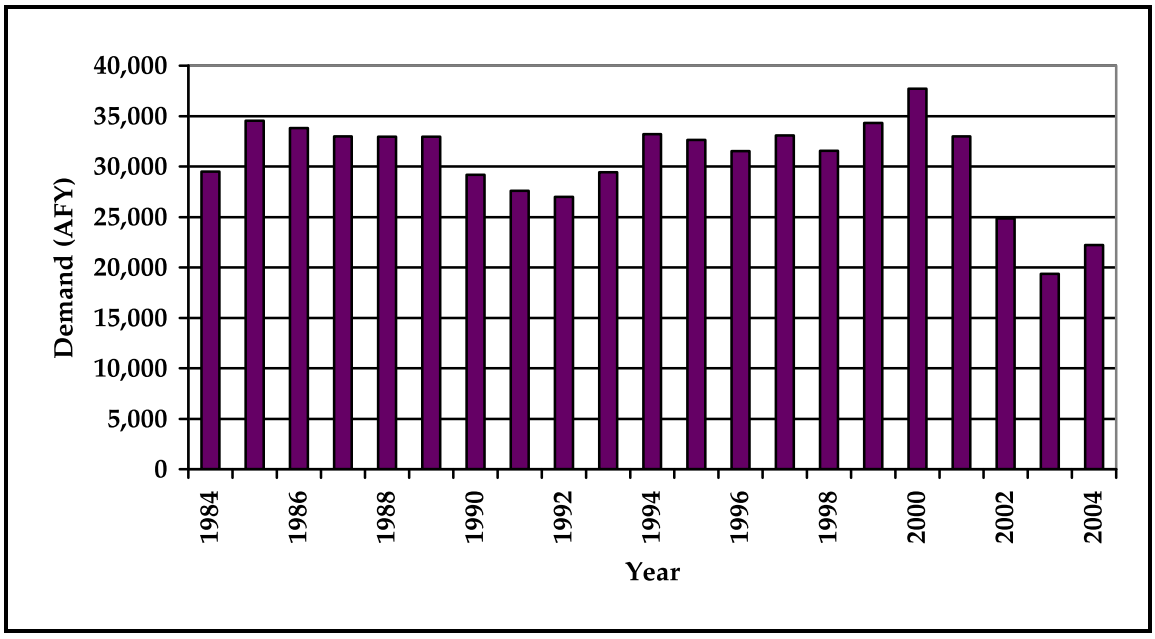


Figure 4.24 Private Water Producers Historical Annual Demand

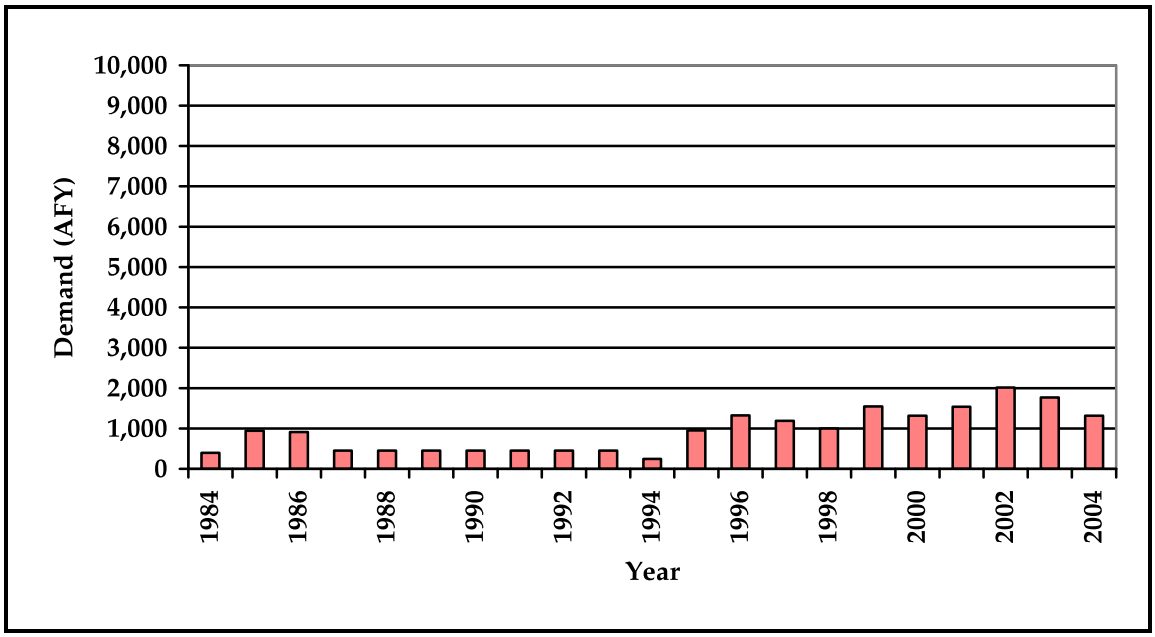


Figure 4.25 Soboba Historical Annual Demand

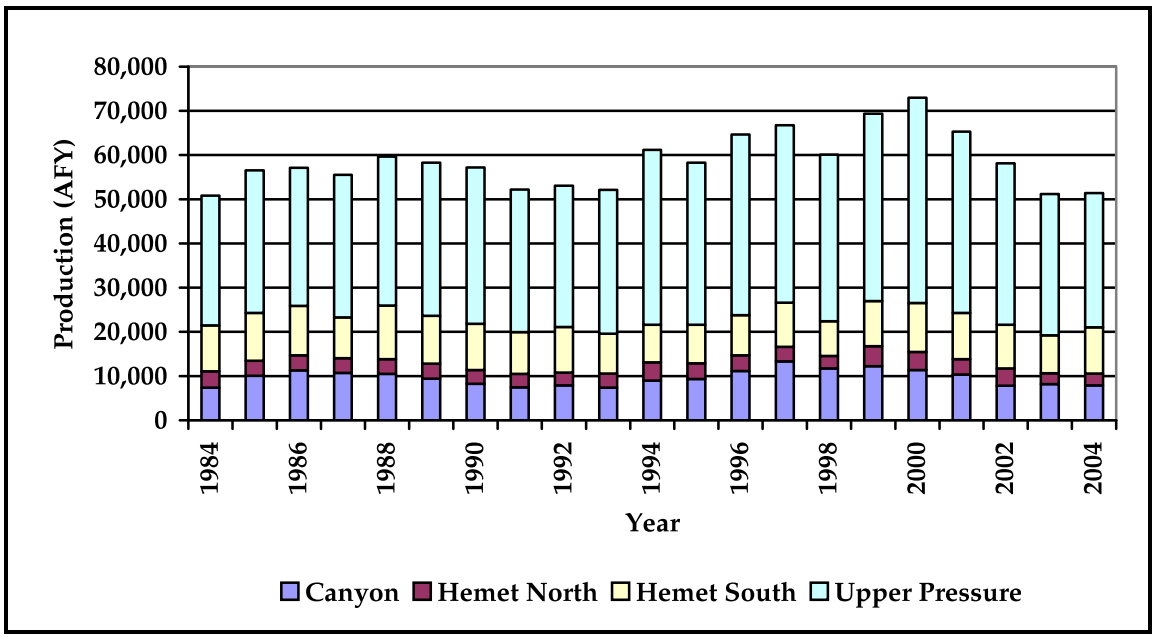


Figure 4.26a Annual Groundwater Production, by Management Zone

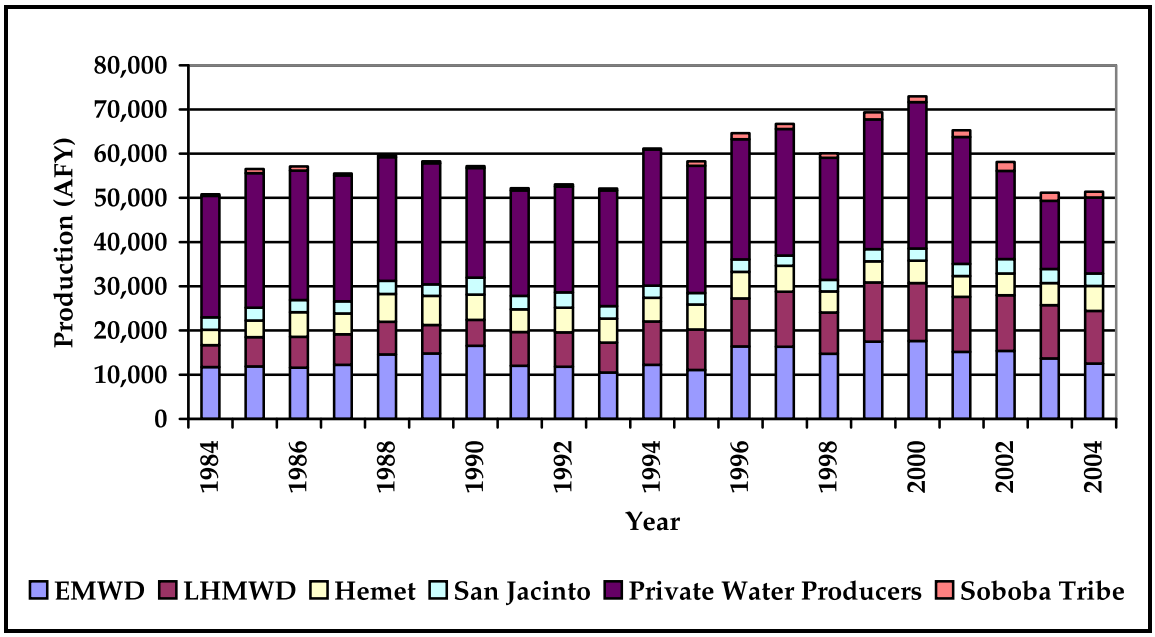


Figure 4.26b Annual Groundwater Production, by Entity

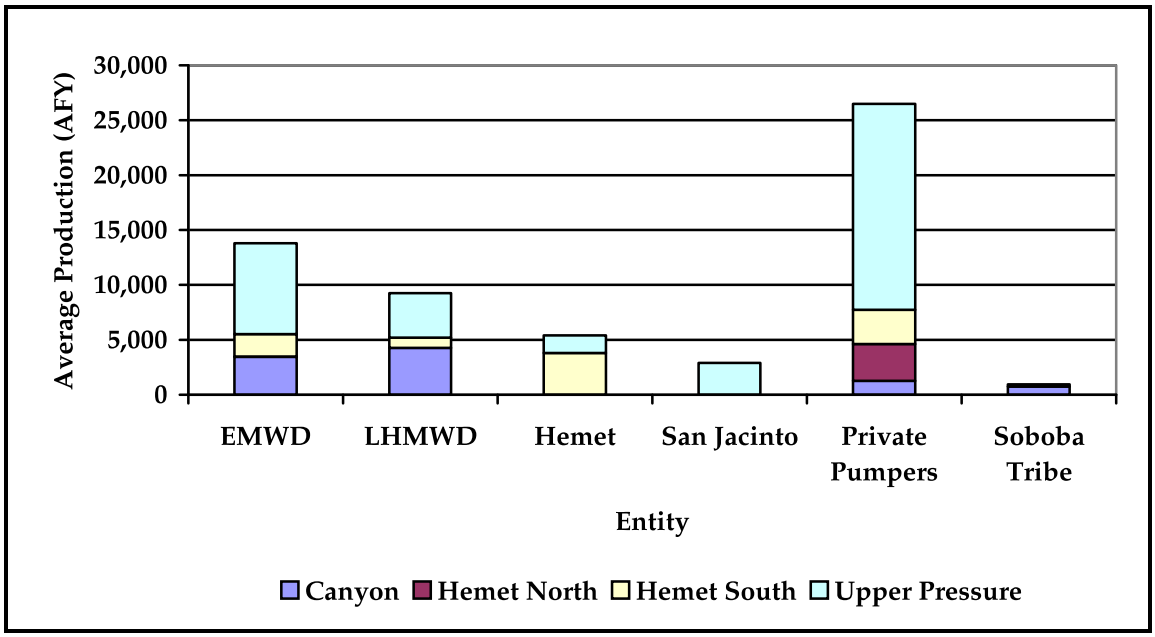


Figure 4.27 Average Annual Entity Groundwater Production, by Management Zone, 1984-2004

Since 1984, each entity except for the City of San Jacinto has pumped groundwater from multiple Management Zones. San Jacinto's pumping during that time period has always been from the Upper Pressure Management Zones. The percentage of the water supply from groundwater for each remaining entity, compared to other components of the water supply, is shown in Figures 4.28a-e as a pie chart breaking down the entity's 2004 groundwater supply by

Management Zone. Additionally, Figure 4.29a-e presents stacked area charts showing the historical annual percentage of groundwater supply from each Management Zone.

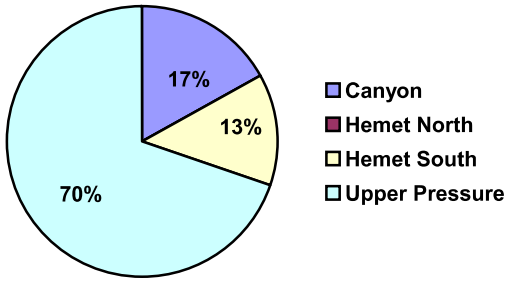


Figure 4.28a EMWD 2004 Groundwater Production, Percentage by Supply Source

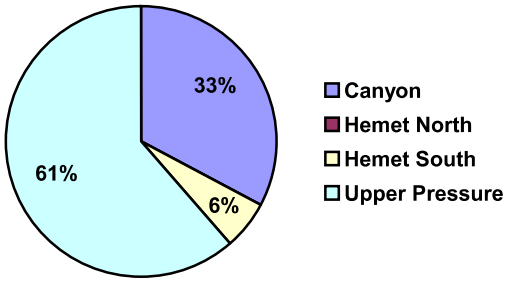


Figure 4.28b LHMWD 2004 Groundwater Production, Percentage by Supply Source

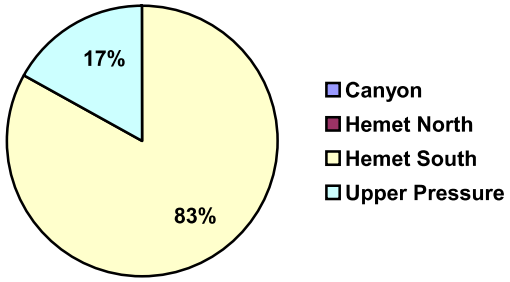


Figure 4.28c City of Hemet Water Service Area 2004 Groundwater Production, Percentage by Supply Source

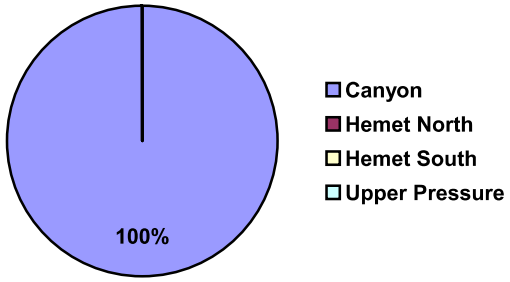


Figure 4.28d Soboba 2004 Groundwater Production, Percentage by Supply Source

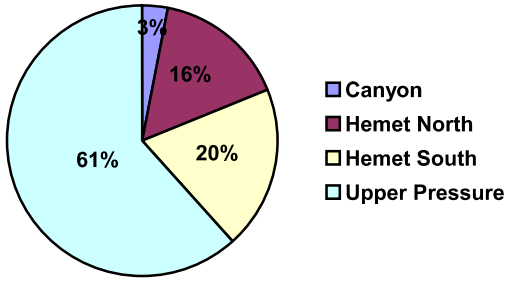


Figure 4.28e Private Water Producers 2004 Groundwater Production, Percentage by Supply Source

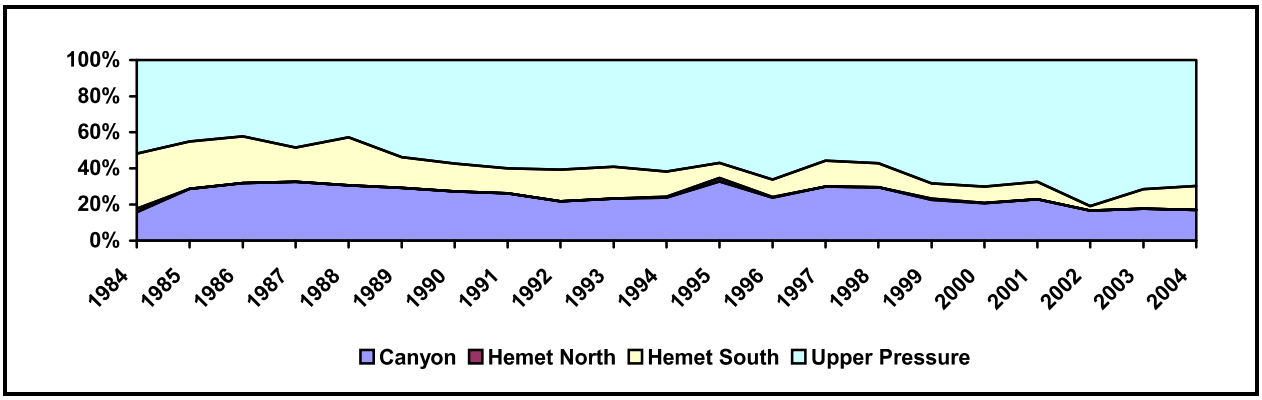


Figure 4.29a EMWD Historical Groundwater Production, Percentage by Supply Source

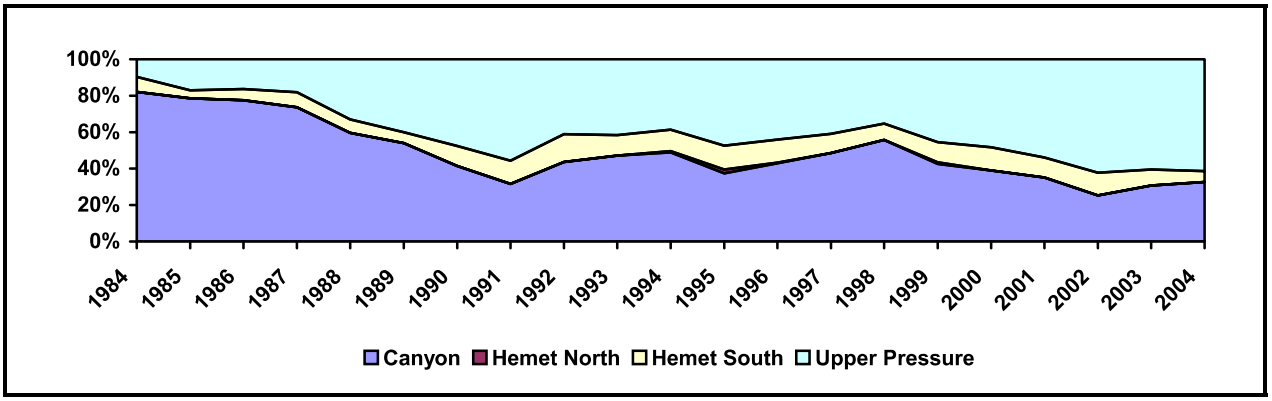


Figure 4.29b LHMWD Historical Groundwater Production, Percentage by Supply Source

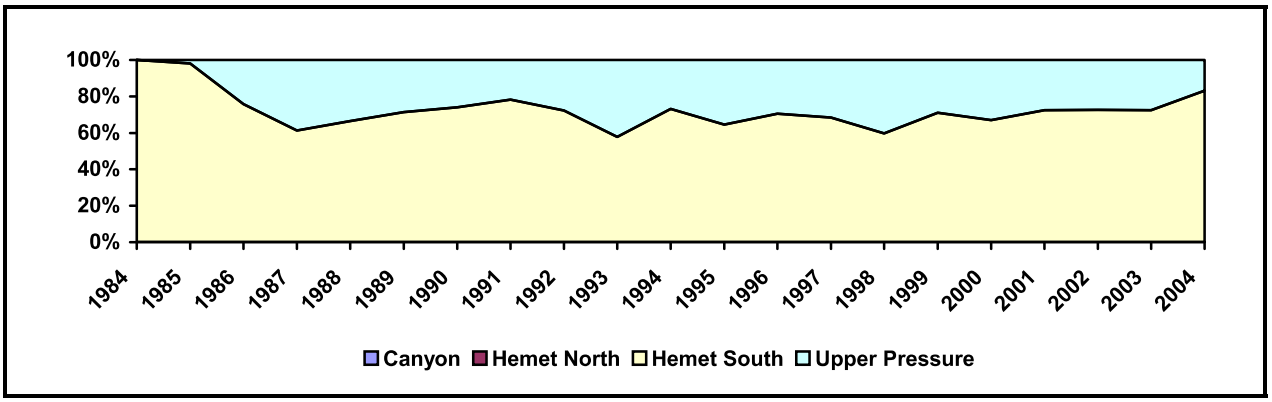


Figure 4.29c City of Hemet Water Service Area Historical Groundwater Production, Percentage by Supply Source

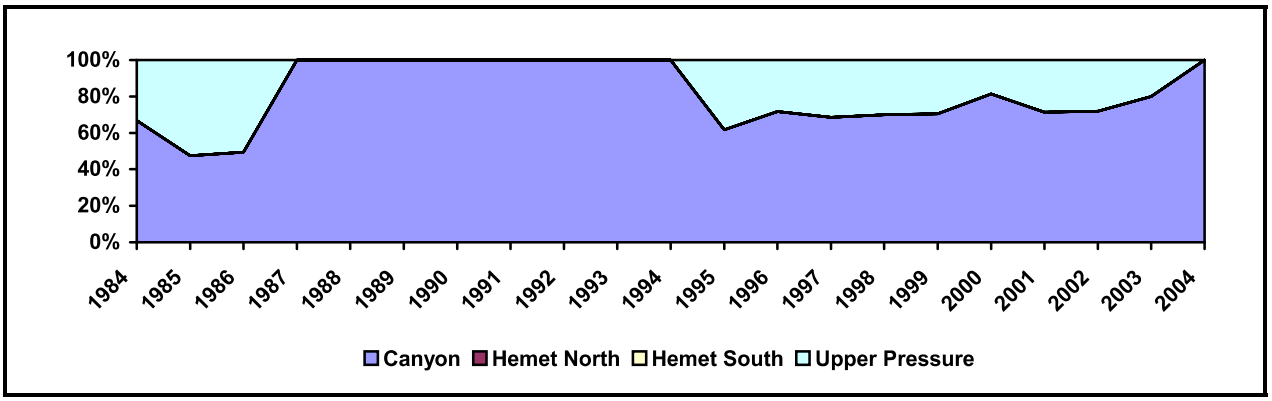


Figure 4.29d Soboba Historical Groundwater Production, Percentage by Supply Source

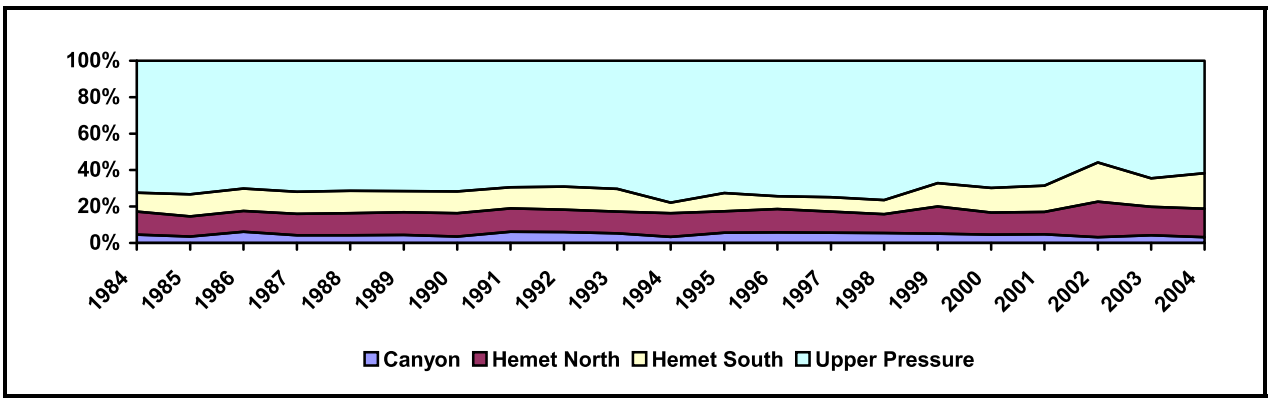


Figure 4.29e Private Water Producers Historical Groundwater Production, Percentage by Supply Source

The pie charts show that in 2004 the Upper Pressure Management Zone provided the majority of groundwater for four of the six entities. The Hemet South Management Zone provided the majority of water to the City of Hemet Water Services Area and The Canyon Management Zone provided all groundwater for the Soboba Tribe.

The only significant trend seen in the 1984 - 2004 historical annual charts is LHMWD's shift in groundwater sources from majority Canyon Management Zone water in the mid-1980s to mostly Upper Pressure Management Zone water recently. These charts also emphasis the importance of the Upper Pressure Management Zone, as it was a component of the groundwater supply for all entities over the 1984 – 2004 time period.

4.8.2 IMPORTED WATER

EMWD is a member agency of the MWD, and, as such, is able to import water from Northern California via the State Water Project and from the Colorado River Aqueduct. Imported water is used for supply as well as for groundwater recharge; this section only discusses imported

water for supply, imported water for recharge is discussed in Section 4.6.1. District-wide, imported water comprises 80% of EMWD's total potable water supply. However, imported water is a small portion of EMWD's water supply in the Management Area due to the availability of high quality groundwater, which is less common in the rest of the EMWD service area. Over the 1984-2004 period, imported water represented 13% of EMWD's supply and 2% of the total Management Area supply (WRIME, 2003a). In 2004, imported water represented 41% of EMWD's supply and 9% of the total supply for the Management Area (EMWD, 2005a,b).

The usage of imported water for direct use has been variable over the past decades, as shown in Figure 4.30. The volume of water imported was reduced in 1991 as the importation of unfiltered Colorado River water to the Management Area was curtailed to meet the requirements of the Surface Water Treatment Rule, part of the Safe Drinking Water Act.

Imported water usage in recent years has increased, which in turn reduced the stress on groundwater resources in the Management Area.

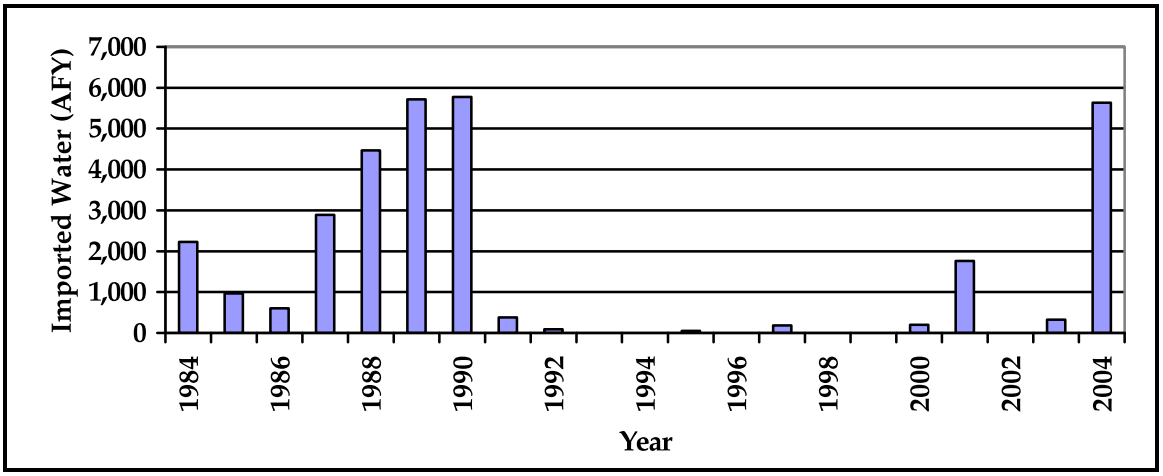


Figure 4.30 Annual Imported Water Supply

4.8.3 RECYCLED WATER

Recycled water is treated at EMWD's San Jacinto Valley Regional Water Reclamation Facility and is currently used primarily for irrigation in the public municipal areas, industrial uses, and agricultural irrigation purposes in the Management Area and for habitat creation at the California Fish and Game San Jacinto Wildlife Area outside the Management Area. Recycled water is a highly reliable source of supply and will increase in availability as the population of the Management Area increases. Most of the recycled water is sold by EMWD to private land owners for agricultural irrigation. Recycled water usage in the Management Area has been fairly stable over the past decades, with approximately 5,000 AF supplied in 2004. Annual amounts of recycled water use are presented in Figure 4.31.

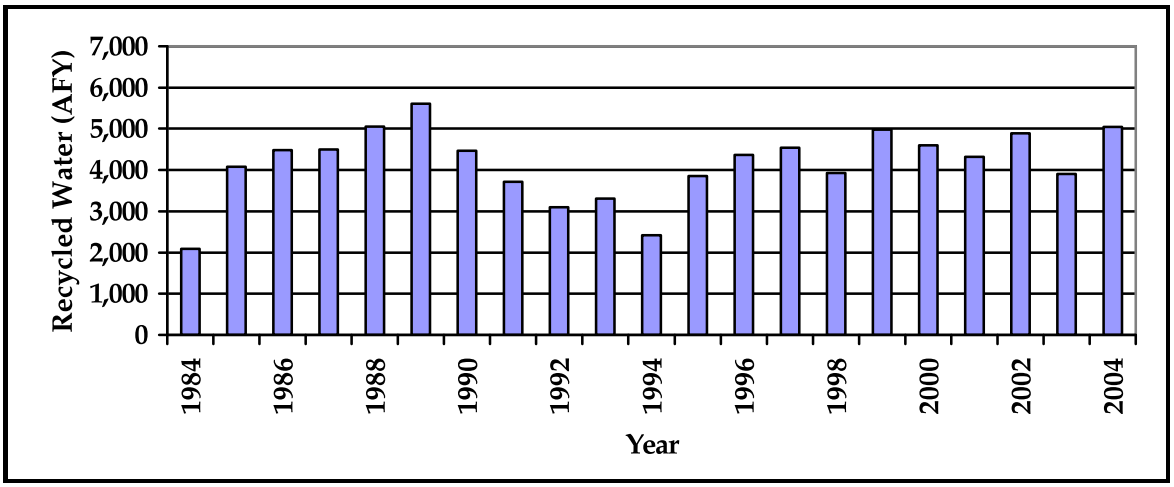


Figure 4.31 Annual Recycled Water Supply

4.8.4 SURFACE WATER

LHMWD has pre-1914 rights for the diversion and storage of surface water from the San Jacinto River and its tributaries. These rights date back to the late 1800s, and the diversion amounts are filed each year with the Division of Water Rights, State Water Resources Control Board on Annual Notices of Groundwater Extraction or Diversion, numbers G330016, G330017, and G330018.

When available, LHMWD diverts surface water for direct use. It should be noted that the San Jacinto River is an ephemeral river. The river may not flow every year and, therefore, there may be occasional years where diversion is not possible. Annual surface water diversions for 1985-2004 are shown in Figure 4.32. Details of the surface water rights are discussed in Section 7.1.

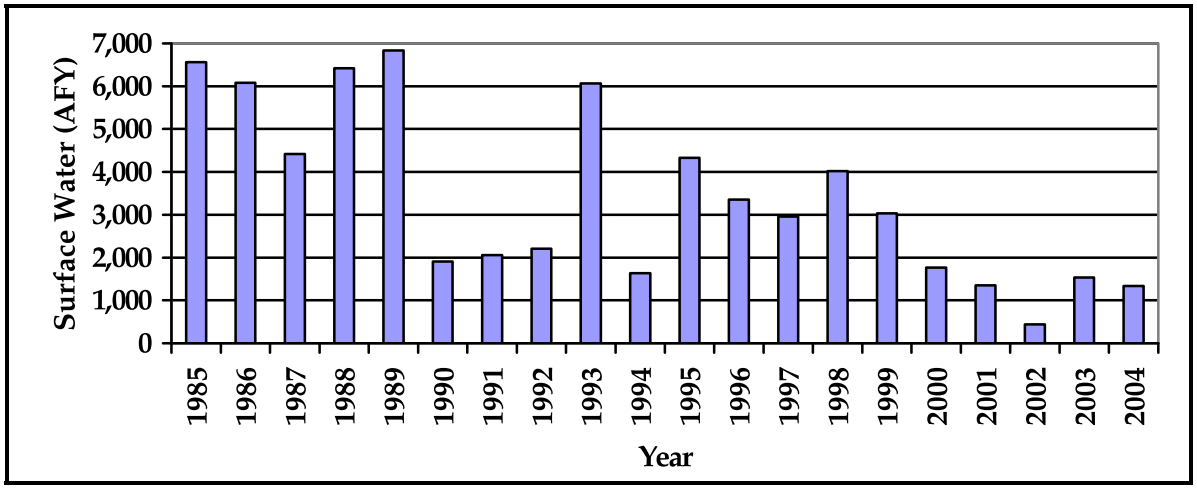


Figure 4.32 Annual Surface Water Supply

EMWD's surface water diversions are not utilized for direct use and are therefore not considered part of the water supply. More information on EMWD's surface water diversions is included in Section 7, Surface Water Rights.

4.8.5 PURCHASES FROM EMWD

LHMWD, City of Hemet, and City of San Jacinto purchase water from EMWD to supplement their water supplies. The annual volume of water sold to the other agencies by EMWD is shown in Figure 4.33. In addition to these sales, EMWD sells recycled water to private land owners for agricultural irrigation.

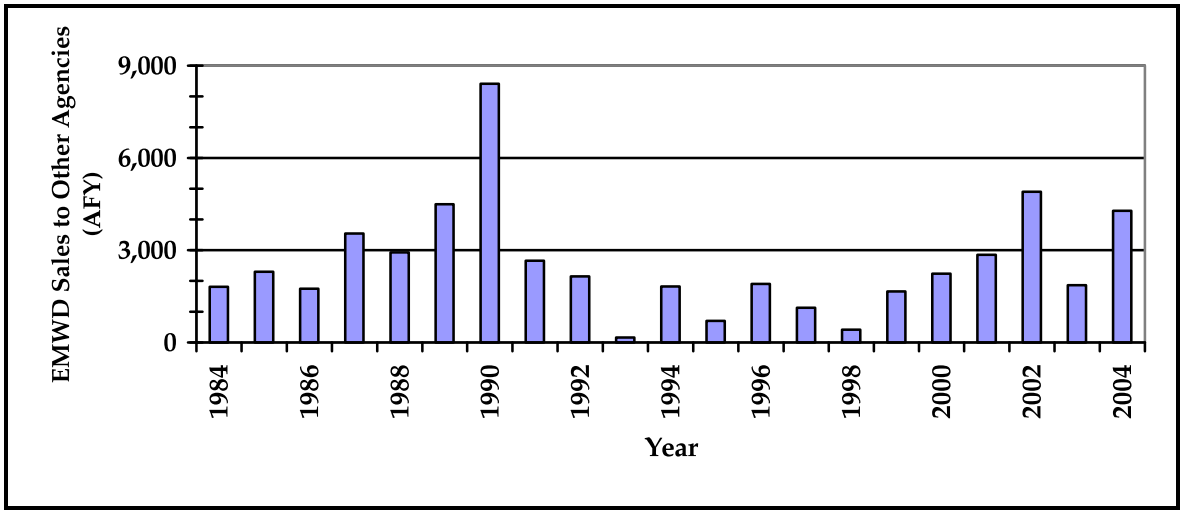


Figure 4.33 Annual Sales by EMWD to Other Agencies within Management Area

4.9 ESTIMATES OF SAFE YIELD AND OVERDRAFT

4.9.1 SAFE YIELD

The Safe Yield of the Management Area is defined in the Stipulated Judgment as the long term, average quantity of water supply in the Management Area that can be pumped without causing undesirable results, including the gradual reduction of natural groundwater in storage over long-term hydrologic cycles.

The following clarifying notes are presented to better define the Safe Yield definition:

- **Period of Record:** Safe Yield is a function of annual variability of the hydrology, but should reflect long-term average conditions, including wet and dry replenishment conditions. Identification of "long term, average" is important, but difficult to determine, as precipitation is highly variable from year to year and subject to long-term climatic changes. As hydrologic data will continue to be

collected and a greater understanding of the hydrology will be gained, the period of record for determining the Safe Yield will be subject to change over time.

- **Water Supply Components:** The following components of water supply are considered in the definition of Safe Yield:
  a. Natural recharge from infiltration of precipitation,
  b. Recharge from infiltration of streamflow and other surface water runoff,
  c. Recharge from infiltration of irrigation applied water on agricultural lands,
  d. Recharge from infiltration of outdoor irrigation in the urbanized areas,
  e. Artificial recharge, such as replenishment programs, historically operated, using imported, recycled, and surface water diversions,
  f. Subsurface groundwater inflows, such as from the Lower Pressure Management Zone and the boundaries of the basin, and
  g. Subsurface groundwater outflows, such as to the Lakeview portion of the Lakeview/Hemet North Management Zone.
- **Study Area:** Safe Yield is calculated for the Management Area as one unit, and not by the smaller units of Management Zones.
- **Undesirable Effects:** The definition of Safe Yield emphasizes protection of groundwater in storage. It is assumed that potential undesirable effects on water quality are indirectly addressed, and therefore are not included in the analysis.

The Safe Yield of the Management Area has been estimated in a number of studies in the past. A summary of methods, hydrologic periods, and results from each study is presented in Table 4.5.

Two major methodologies have traditionally been used to estimate the Safe Yield: (1) Water Balance methodology, and (2) Change in storage methodology. These methods are briefly described below.

Table 4.5 Published Estimates of Safe Yield for the Management Area

Yield Study	Method	Time Period	Safe Yield (AFY)	Pumping (AFY)	Overdraft (AFY)
Fritz and Rosell*, 1947	Water Balance (Conventional)	1920-1945	27,400 (35,100 w/o trees/brush)	32,400	4,800
Schwartz*, 1967	Water Balance (Conventional)	1923-1960	26,100	n/a	12,100
EMWD White Paper, 2000	Water Level Recovery Analysis	Variable	50,000	60,600	10,600
GIS Recharge Estimates	Change in Storage (GIS)	1998-2003	39,700	n/a	n/a
WRIME, 2003d	Water Balance (Conventional)	1984-2001	44,700	59,000	14,300
Based on TechLink, 2002a	Water Balance (Model-based)	1984-1999	41,300	58,000	16,700

* Fritz and Rosell (1947) and Schwartz (1967) both used a larger geographic area that roughly included what is today called the San Jacinto-Lower Pressure Management Zone. This additional area is the area northwest of Bridge Street to Redlands Boulevard in Moreno Valley.

4.9.1.1 Method 1 - Water Balance Method

The water balance method utilizes inflows and outflows from the basin to estimate change in storage and the Safe Yield of the basin. The amount of pumping that can be sustained with little or no long-term change in storage is the Safe Yield of the basin. The Safe Yield estimate may be calculated by

Safe Yield = Change in Groundwater Storage + Groundwater Production,

where Change in Groundwater Storage is Inflows less Outflows. The estimate must be over a long-term base period which reflects a number of wet, normal, and dry periods. Groundwater production values are based on historical data as reported by the Public Agencies and estimated for the Private Water Producers. The TC has reviewed and agreed to the data for use in the Water Balance Method. The following inflow and outflow components are used to calculate Change in Groundwater Storage for the Management Area:

Inflows

- Recharge from Retail Water Sales,
- Recharge from Irrigation Return Flow,
- Recharge from Precipitation,

- Grant Avenue Ponds Diversion Recharge,
- Reclaimed Ponds Recharge,
- Recharge from Recycled Water Sales,
- Subsurface Inflow from Other Management Zones,
- Bautista Creek Recharge,
- San Jacinto River Recharge, and
- Boundary Inflow.

Outflows

- Subsurface Outflow to Other Management Zones,
- Boundary Outflow, and
- Groundwater Production.

4.9.1.2 Method 2 - Change in Storage Methodology

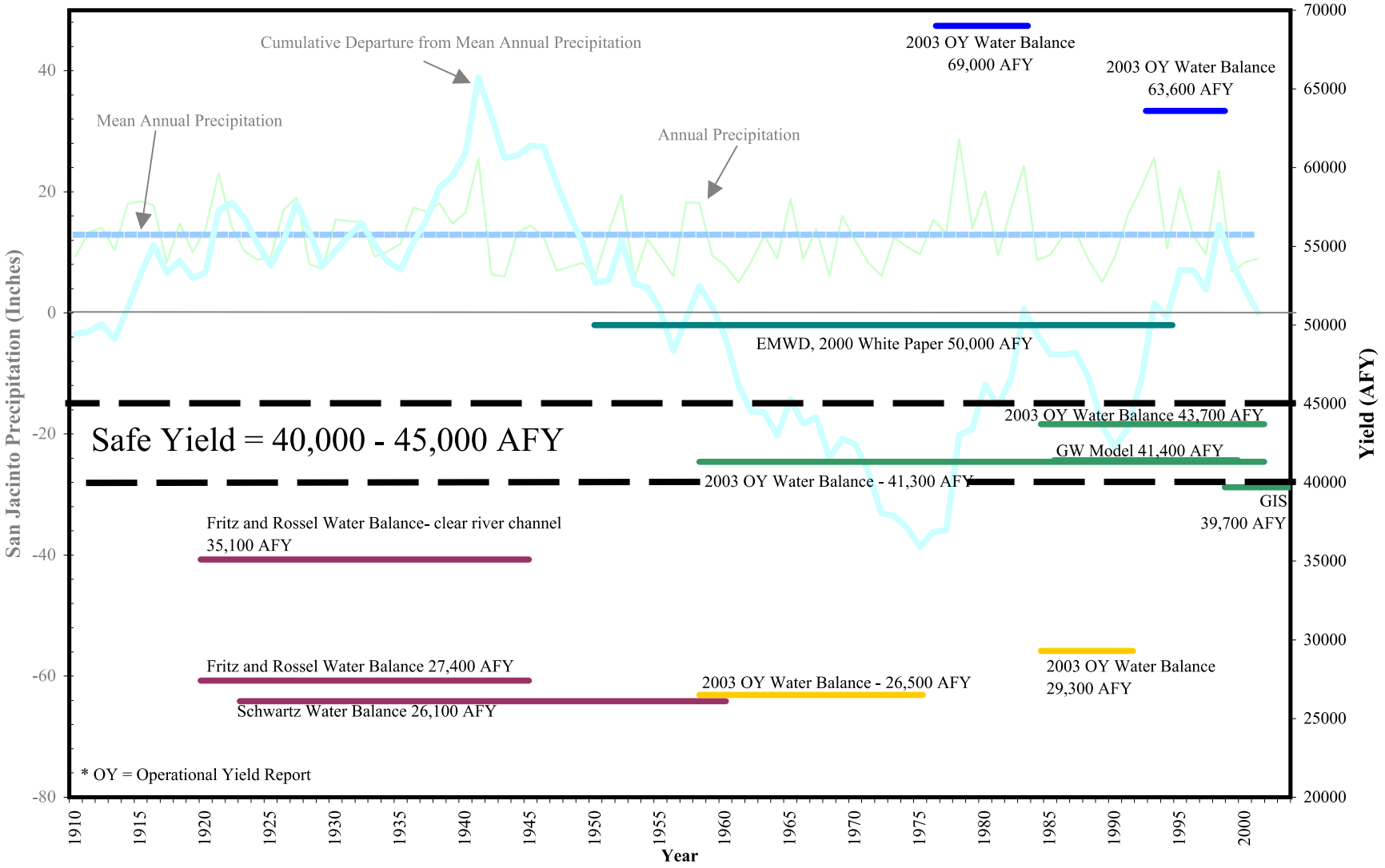
This method uses a GIS database to develop surfaces of groundwater elevations based on observed groundwater levels at multiple control points (i.e., wells) throughout the Management Area for two different time periods. The product of change in volume between the two surfaces at two different times and the specific yield of the aquifer determines the change in storage between those two time points. The Safe Yield is then calculated as the sum of the calculated change in storage and the groundwater production during the same time period. Variations of this method are used based on the spatial distribution, including vertical distribution, of the specific yield in the aquifer system.

4.9.1.3 Summary of Previous Yield Estimates

Calculation of Safe Yield is a function of the hydrologic period used in the analysis. Figure 4.34 presents the long-term hydrologic conditions as precipitation at San Jacinto gaging station (RCFC&WCD Site #186), along with estimates of the Safe Yield. As indicated in the figure, the Safe Yield estimates range from 26,400 to 44,700 AFY. Since the two estimates made by Fritz & Rosell (1947) and Schwartz (1967) are based on much older data sets and short-term hydrologic records, and the geographic area may not be consistent with some of the more recent estimates, the TC decided in its August 25, 2005 meeting not to use these estimates. Instead, the TC concluded that the Safe Yield of the Management Area ranges from approximately 40,000 to 45,000 AFY based on the most recent analyses.

The TC also concluded that the following guidelines for estimation of Safe Yield of the Management Area be considered by the Watermaster when calculating Safe Yield in the future:

Figure 4.34 Safe Yield Estimates



- Review and modify Safe Yield, if necessary, upon the recommendation of the TC or as the Watermaster may determine.
- Use latest available data with consideration for proper spatial, temporal, and vertical characteristics of the aquifer system.
- Consider a long period of record that includes above average, below average, and normal conditions.
- Consider latest methodologies that can provide more flexibility based on the available data and information, as necessary.
- Consider using the San Jacinto Watershed Groundwater Model, with appropriate updates and calibration, for re-estimation of groundwater conditions, as needed.

4.9.2 OVERDRAFT

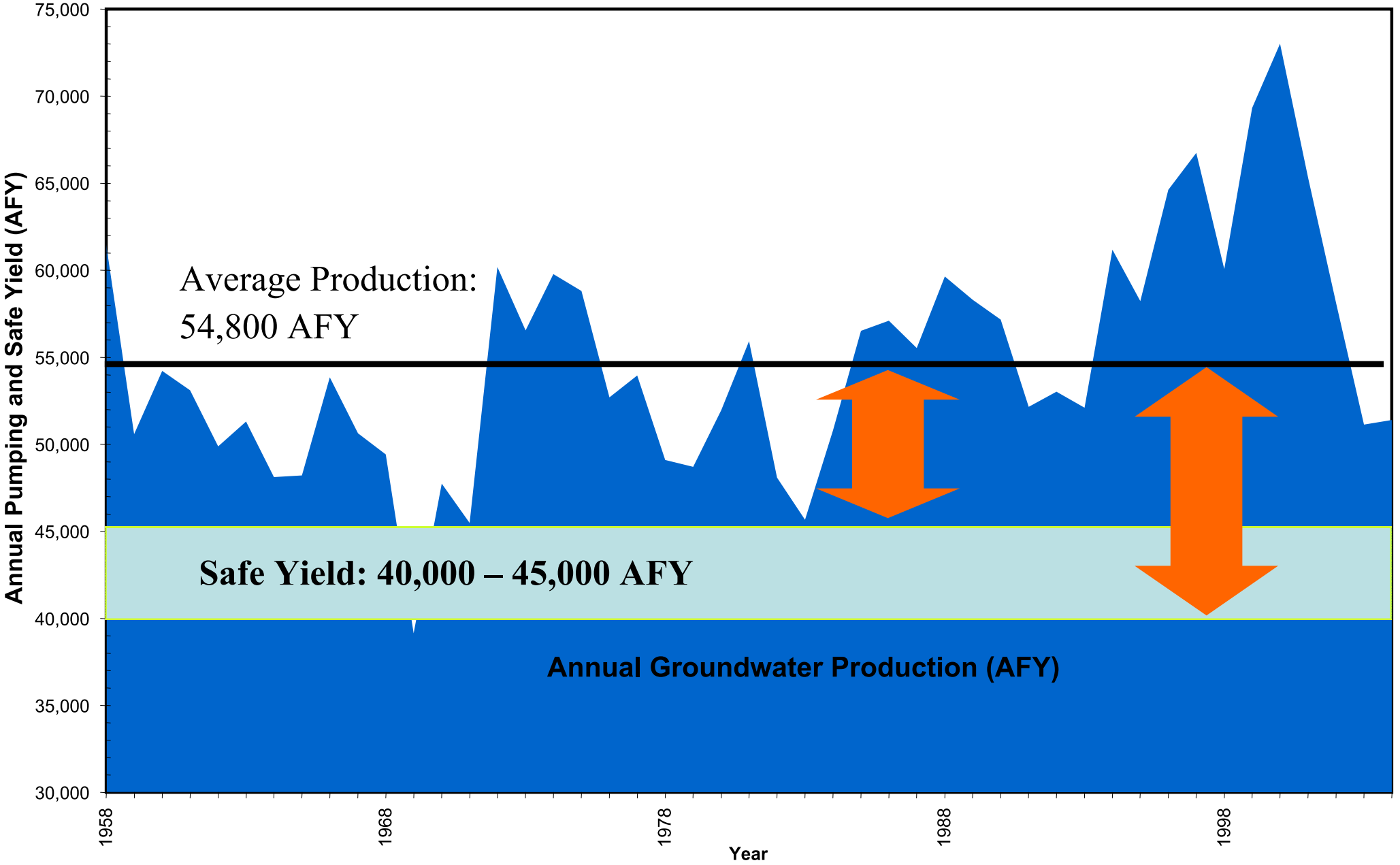
Overdraft is defined in the Stipulated Judgment as the condition whereby groundwater production in the Management Area exceeds the Safe Yield, creating undesirable conditions in the basin. The amount of overdraft is calculated as the difference between long-term average annual groundwater production in the Management Area and Safe Yield. Figure 4.35 shows the estimated annual groundwater production in the Management Area, along with the range of Safe Yield. Based on this figure, the overdraft in the Management Area is estimated to be 10,000 to 15,000 AFY. For planning purposes and to evaluate options to reduce the overdraft, this Plan assumes that the overdraft is at least 10,000 AFY.

4.10 WATER QUALITY CONDITIONS

This section presents a summary of the groundwater quality conditions in the Management Area. This description will assist in establishing a baseline condition for future water management efforts to maintain or improve groundwater quality in the Management Area. The TC has decided that the water quality conditions in the Management Area would be evaluated based on TDS and nitrate levels. This is consistent with the TIN/TDS studies (Wildermuth, 2000) and the emphasis on TDS and nitrate in the Basin Plan as amended (RWQCB, 2004).

The Management Area lies within the jurisdiction of the RWQCB, Santa Ana Region 8. The RWQCB implements state and federal laws through adoption of Water Quality Control Plans or Basin Plans (RWQCB, 1995). The Basin Plan establishes both the legal beneficial use designations and sets the standards to protect these uses. The Basin Plan was recently amended (RWQCB, 2004) to incorporate an updated TDS and Nitrogen Management Plan for the Santa Ana Region, including revised groundwater Management Zones (combining Hemet North and Lakeview into one Management Zone; Hemet North remains treated separately from Lakeview

Figure 4.35 Groundwater Production and Range of Safe Yield Estimates



in this Plan), TDS and nitrate quality objectives for groundwater, TDS and Nitrogen waste load allocations, and stream reach designations.

Within the Santa Ana Watershed, which includes the Management Area, a statistical method has been developed to use nitrate (as N) and TDS to evaluate the status of water quality; to compare sub-basin concentrations; and to trigger management actions (RWQCB, 2004; Wildermuth, 2000, 2005). Point statistics were used to show (i) historical ambient water quality conditions as represented by the 1954-1973 time period, (ii) 1997 Current ambient water quality conditions as represented by the 1978-1997 time period, and (iii) 2003 Current ambient water quality conditions as represented by the 1984-2003 time period. A summary of the data is shown in Table 4.6, revealing nitrate (as N) levels below the MCL of 10 mg/L for all cases. TDS exceeds the recommended secondary MCL of 500 mg/L in Hemet South (current and historical) and Hemet North (current and historical), and TDS exceeds the maximum secondary MCL of 1000 mg/L in the 1997 current levels in Hemet South.

Table 4.6 Historical (1954-1973), 1997 Current (1978-1997), and 2003 Current (1984-2003) Ambient Nitrate as N and TDS Concentrations (mg/L)

Sub-basin	Nitrate as N [1]				TDS[2]			
	Basin Plan Objective[3]	Historical	1997 Current	2003 Current	Basin Plan Objective[4]	Historical	1997 Current	2003 Current
Canyon	2.5	2.5	1.6	2.1	230	**234**	220	**420**
Upper Pressure	1.4	1.4	**1.9**	**1.7**	320	**321**	**370**	**370**
Hemet South	4.1	4.1	**5.2**	**5.4**	**730**	**732**	**1030**	**850**
Hemet North	1.8	1.8	**2.7**	**3.4**	520	519	**830**	**840**

Source: Wildermuth, 2005. 2003 update 1984-2003)
[1] Table 3-2
[2] Table 3-1
[3] Basin Plan Amendment, 2004 (Table 5-4)
[4] Basin Plan Amendment, 2004 (Table 5-3)

The point statistics and water quality objectives were used by the RWQCB to develop estimates of assimilative capacity. Areas with assimilative capacity are able to accept waters with higher concentrations of a constituent than the concentration in the receiving waters because natural processes such as recharge and dilution will allow for the water quality objectives to continue to be met. The most recent computations indicate that Hemet South, Hemet North, Canyon, and Upper Pressure Management Zones do not currently have assimilative capacity for TDS. For nitrate, the Hemet South, Hemet North, and Upper Pressure Management Zones do not have

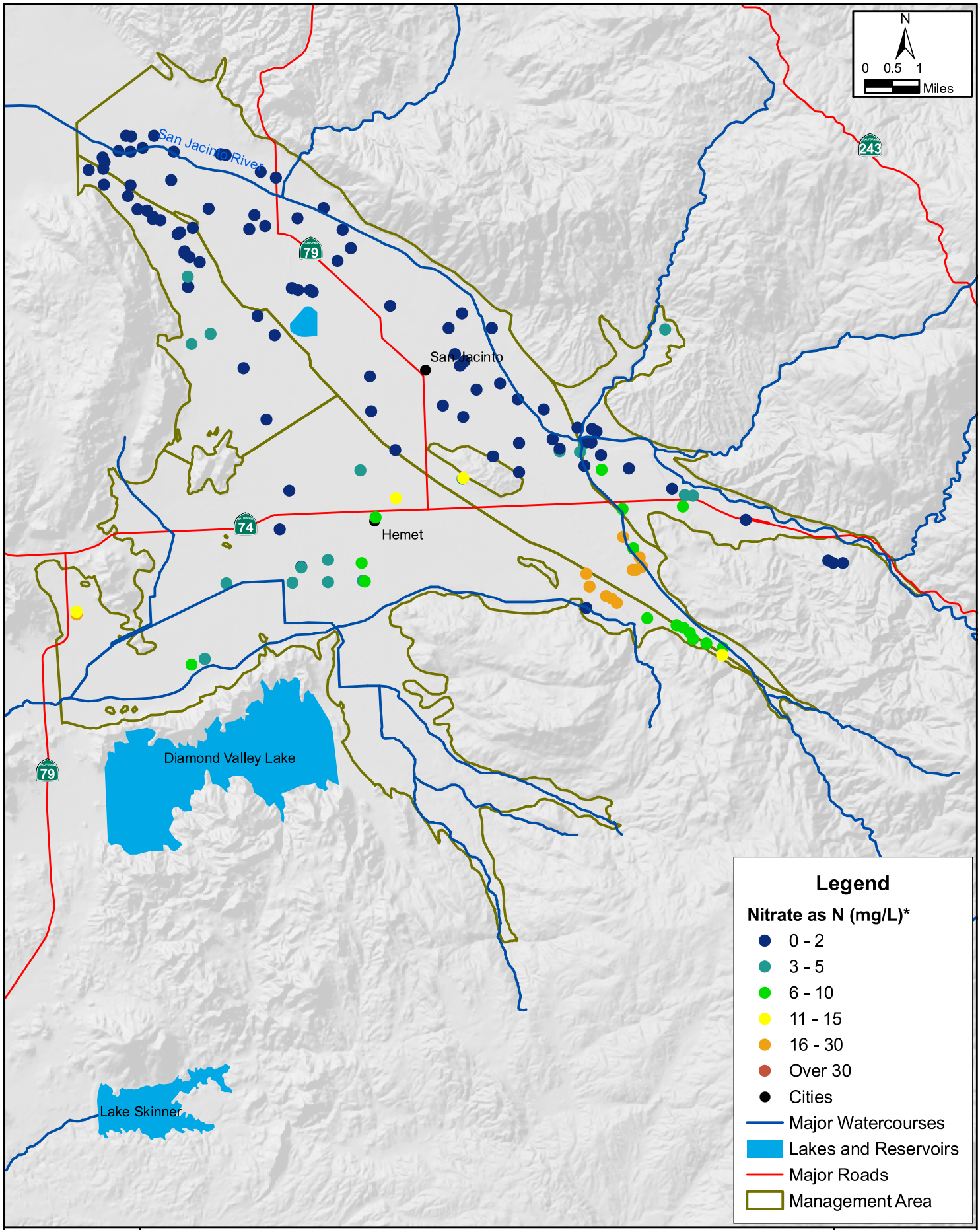
assimilative capacity remaining, and the Canyon area has only a very small amount of nitrate that it can assimilate (0.4 mg/l nitrate as N; Wildermuth, 2005).

Table 4.7 shows the changes seen over the 30-year time period between the historical and 2003 Current time periods. The Canyon Management Zone shows a decrease in nitrate as N concentrations while all other nitrate (as N) and TDS concentrations for all other Management Zones show increases in concentrations of between 0.3 and 1.6 mg/L nitrate (as N) and 49 to 321 mg/L TDS. It should be noted that changes seen between these time periods are a combination of true changes in ambient water quality and artificial changes due to limitations in monitoring data and the estimation technique (Wildermuth, 2005). In the future, as current monitoring programs assemble more data, a long-term record of analytical data at specific wells will be available to better show changes over time at specific locations.

Table 4.7 Change in Ambient Concentration (mg/L) of Nitrate as N and TDS, Between Historical (1954-1973) and 2003 Current (1984-2003) Time Periods

Sub-basin	Change in Nitrate as N (mg/L)	Change in TDS (mg/L)
Canyon	-0.4	186
Upper Pressure	0.3	49
Hemet South	1.3	118
Hemet North	1.6	321

The most recent data from public and private wells, as complied by EMWD, were used to plot the 2004 nitrate (as N) and TDS conditions as shown in Figures 4.36 and 4.37. While these values are taken from wells screened at different depths, the plots show the general variability in concentrations across the Management Area.



2004 Nitrate as N Concentrations in Groundwater (mg/L)

Hemet / San Jacinto Water Management Plan

*Source: EMWD

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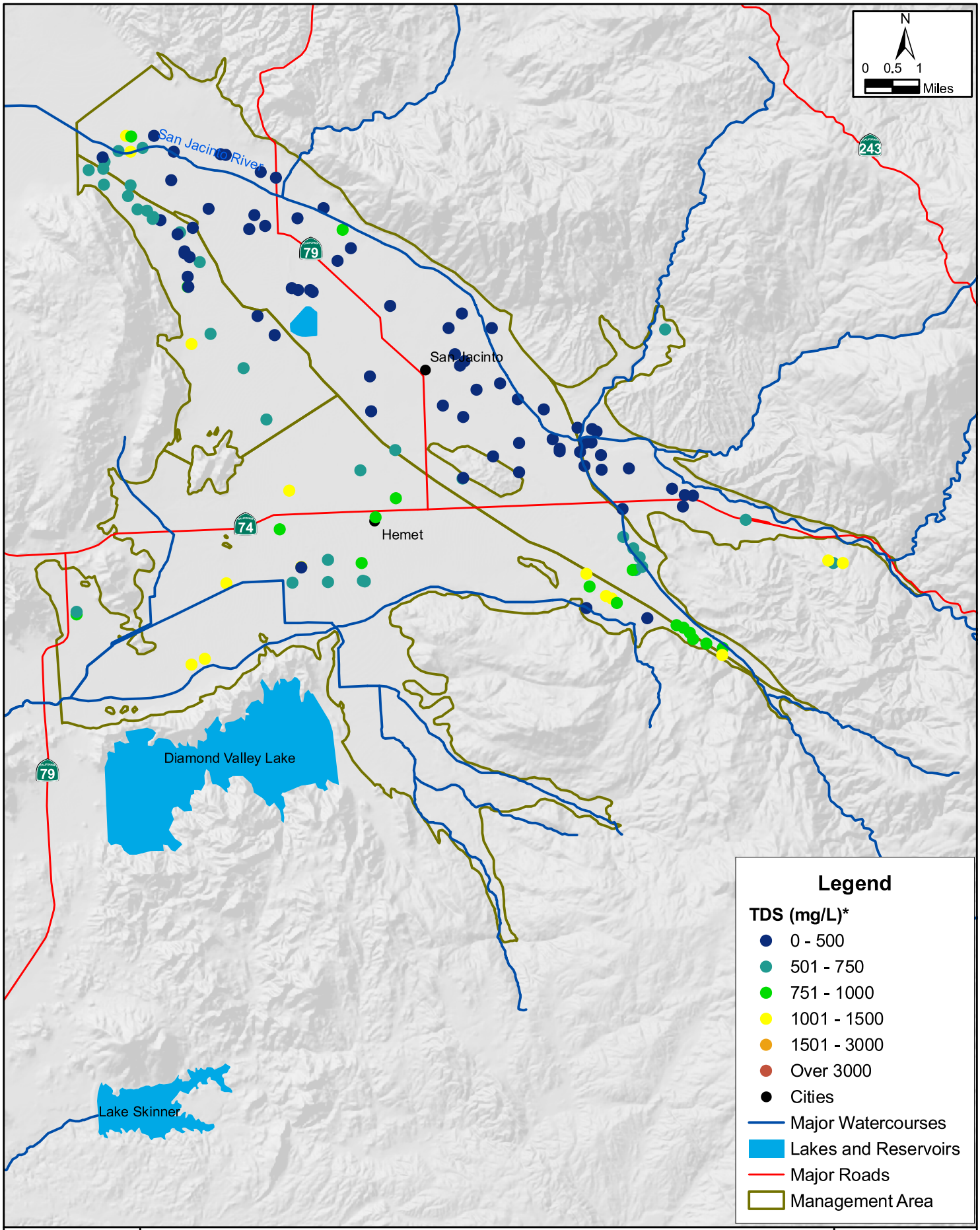
Figure 4.36



2004 TDS Concentrations in Groundwater (mg/L)

Hemet / San Jacinto Water Management Plan

*Source: EMWD

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Figure 4.37

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SECTION 5 PROJECTED WATER DEMANDS AND FUTURE PLAN PHASES

5.1 PROJECTED LAND USE CONDITIONS

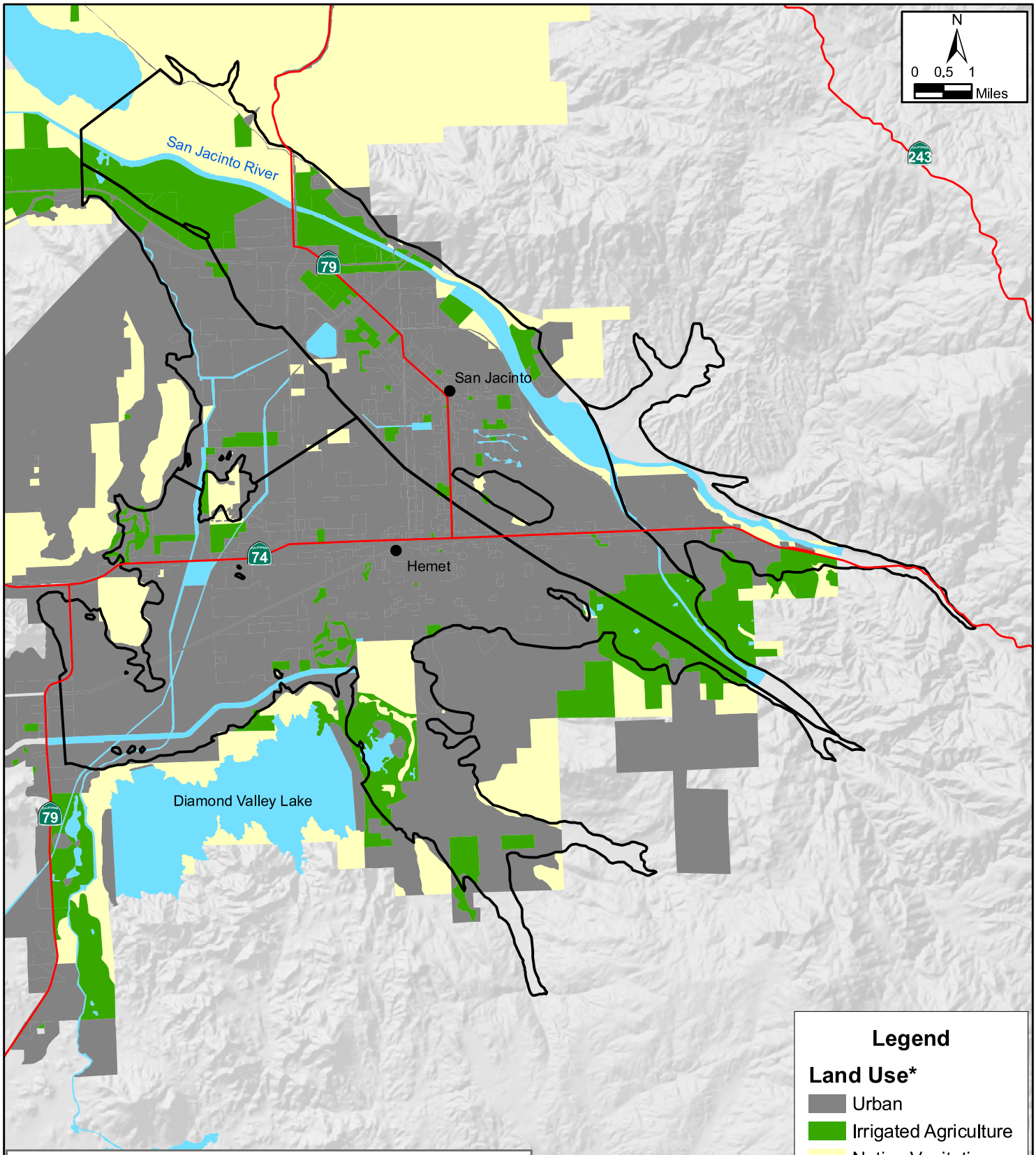
This Section presents a brief description of the projected land use conditions in the Management Area. Figure 5.1 shows the general land use categories at build-out.

Area UWMPs echo the projected urban growth indicated in the build-out land use:

- EMWD UWMP – EMWD service area population, including areas outside the Management Area, projected to increase from 494,000 in 2005 to 830,000 in 2025. (EMWD, 2005a)
- LHMWD UWMP – LHMWD service area population projected to increase from 39,100 in 2005 to 49,500 in 2025. (LHMWD, 2005)
- Hemet UWMP:
  - City of Hemet population projected to increase from 78,600 in 2005 to 154,000 in 2025; and
  - City of Hemet water system service area population projected to increase from 20,200 in 2005 to 22,300 in 2025. (Hemet, 2006)
- San Jacinto UWMP:
  - City of San Jacinto population projected to increase from 34,100 in 2005 to 63,600 in 2025; and
  - City of San Jacinto water system service area population projected to increase from 13,200 in 2005 to 24,000 in 2025. (San Jacinto, 2005)

The total land use acreage for each category is estimated and presented in Table 5.1.

Based on Tables 5.1 and 4.3, the urban area is projected to increase from 28% in the 1998 survey to 65% at build out. This increase is due to a combination of conversion of agricultural land and undeveloped land to urban uses. These future conversions have significant implications on the total projected water demand in the Management Area, as well as impacts on the precipitation, runoff, and recharge conditions. This concept is further discussed in the following sections.



*Urban includes: Commercial, Residential, Industrial, Homes/Trailer Parks, Public Infrastructure, and Public Institutions.
Irrigated Agriculture includes: Dairy/Livestock, Irrigated Cropland, Orchards & Vineyards, and Recreation.
Native Vegetation includes: Non-irrigated Cropland, Open Space, Other Agriculture/Ranches, and Vacant
Source: EMWD

2025 Projected Ultimate Land Use

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Figure 5.1

Table 5.1 Generalized Projected Acreage in the Management Area

Land Use	Total Acreage	Percent
Urban	37,100	65%
Irrigated Cropland	8,100	14%
Non-Irrigated Cropland	4,500	8%
Water	3,600	6%
Unmapped*	4,000	7%
Total	57,300	100%

*Unmapped areas are outside EMWD's service area and were not included in the EMWD ultimate land use dataset.
Source: EMWD ultimate land use (1998), based on city general plans

5.2 PROJECTED WATER DEMANDS

Projected water demands are based on information contained in 2005 UWMP, the *Hemet/San Jacinto Water Management Area 2004 Annual Report* (EMWD, 2005b), and *Basin Assessment Report Technical Memorandum No. 1* (WRIME, 2003a). The projected water demands of each of the stakeholders and of the Management Area as a whole are described below.

5.2.1 EMWD

Projected retail water demand for the portion of EMWD's service area within the Management Area is based on the *Hemet/San Jacinto Water Management Area 2004 Annual Report*. Projected total demand is shown together with recent historical demand in Figure 5.2. Estimates of projected demand are also presented in the EMWD's 2005 UWMP, but these values are for the entire EMWD service area; the UWMP system-wide projections show a similar rate of increase in water demand of approximately 50% from 2005 to 2020.

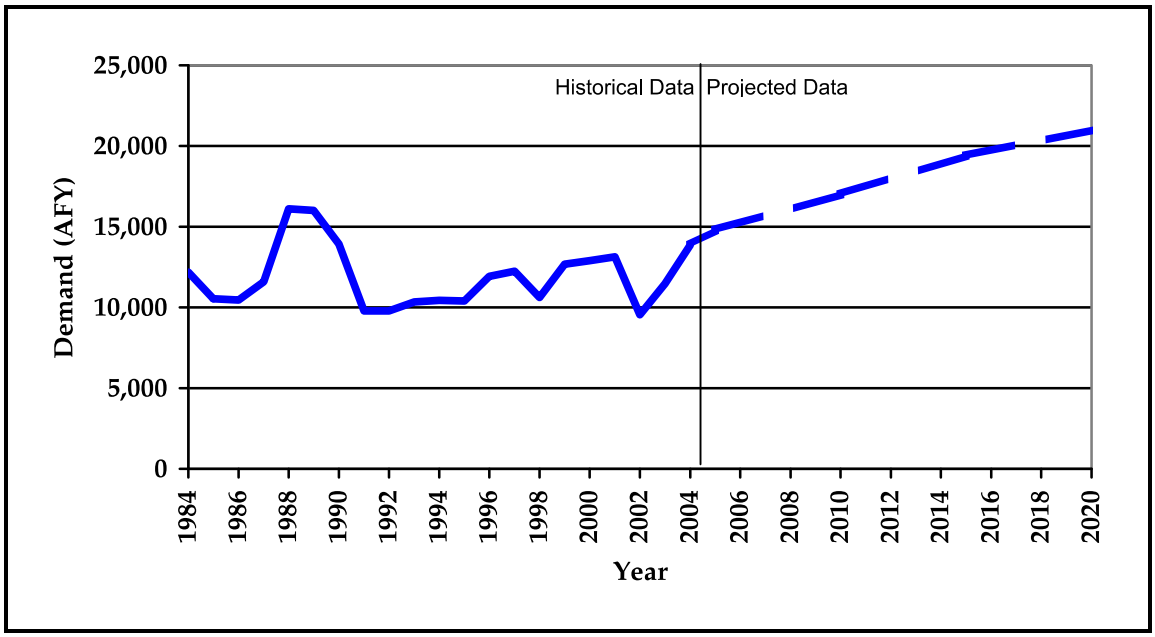


Figure 5.2 EMWD Historical and Projected Demand

5.2.2 LHMWD

Projected water demand is based on *Lake Hemet Municipal Water District 2005 Urban Water Management Plan* (LHMWD, 2005). Projected total demand is shown together with recent historical demand on Figure 5.3.

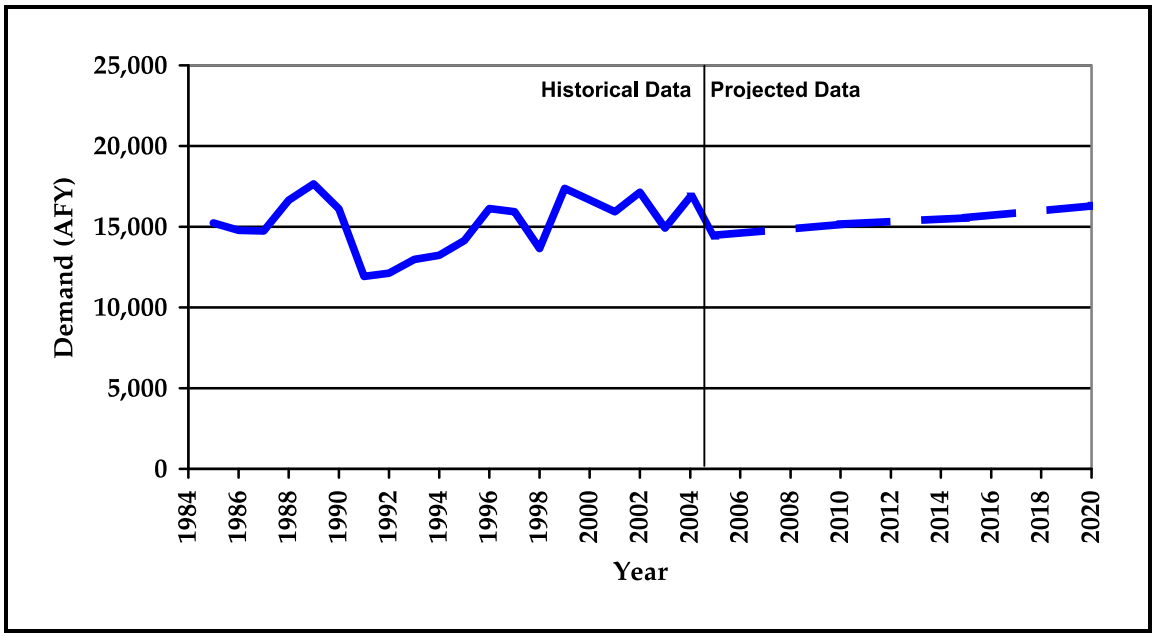


Figure 5.3 LHMWD Historical and Projected Demand

5.2.3 CITY OF HEMET WATER SERVICE AREA

Projected water demand in the City of Hemet's water service area is based on *City of Hemet 2005 Urban Water Management Plan* (Hemet, 2006). Projected demand is shown together with recent historical demand on Figure 5.4.

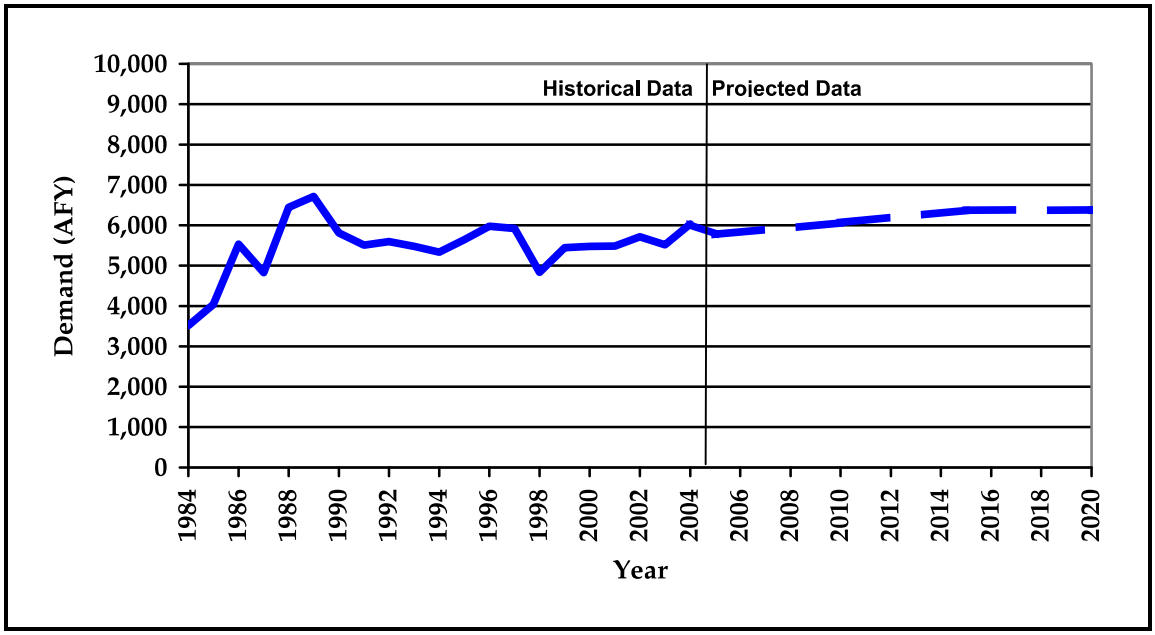


Figure 5.4 City of Hemet Water Service Area Historical and Projected Demand

5.2.4 CITY OF SAN JACINTO

Projected water demand in the City of San Jacinto's water service area is based on *City of San Jacinto 2005 Urban Water Management Plan* (San Jacinto, 2005). Projected demand is shown together with recent historical demand on Figure 5.5.

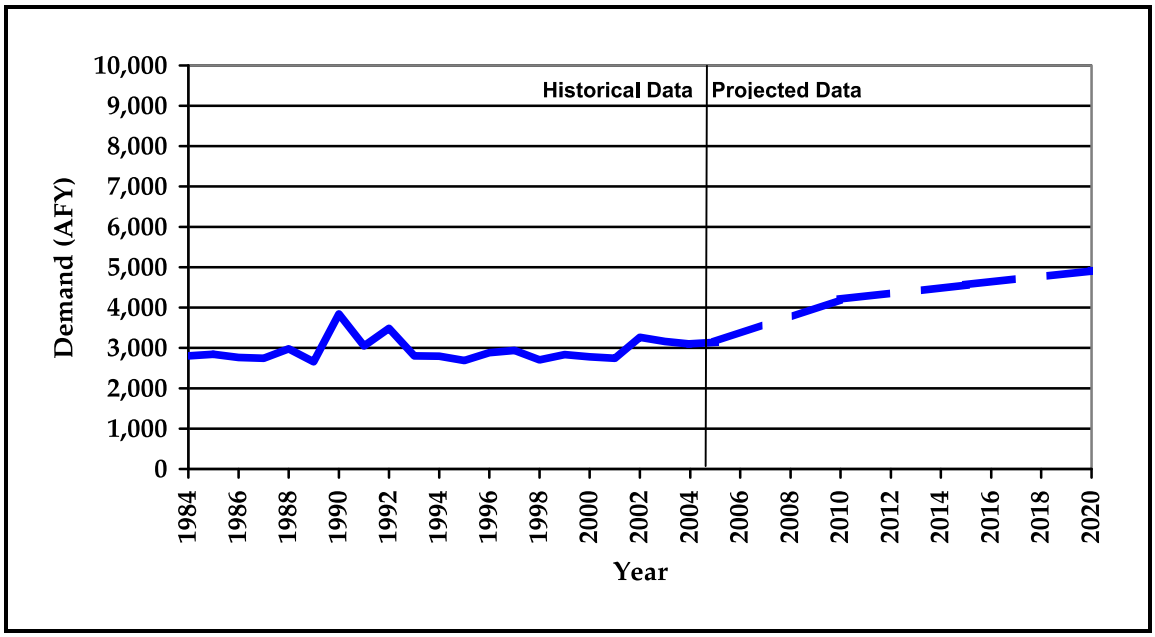


Figure 5.5 City of San Jacinto Water Service Area Historical and Projected Demand

5.2.5 SOBOBA TRIBE

Projected water demand for the Soboba Tribe is taken from the Settlement Agreement, assuming that the Settlement Agreement is implemented in 2008. Projected total demand is shown together with recent historical demand on Figure 5.6.

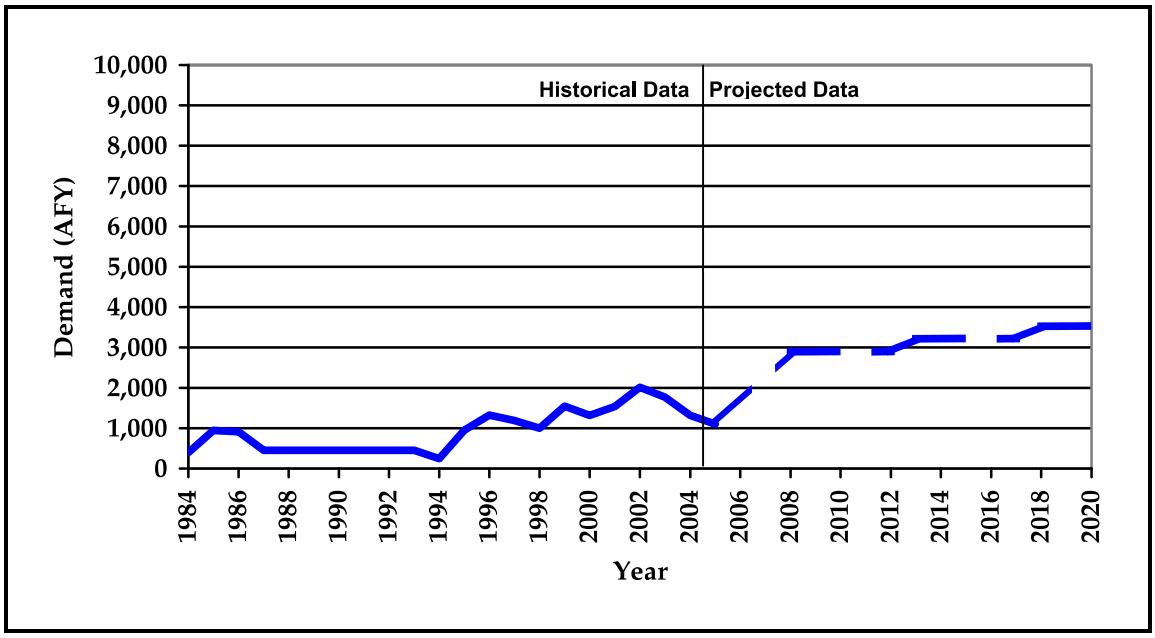


Figure 5.6 Soboba Tribe Historical and Projected Demand

5.2.6 PRIVATE WATER PRODUCERS

Projected water demand for the Private Water Producers is a refinement of estimates presented in the Operational Yield Study (WRIME, 2003d) based on updated information on current and future development and their impact on water demand. Figure 5.7 shows the assumed future agricultural water use by local producers together with recent historical demand.

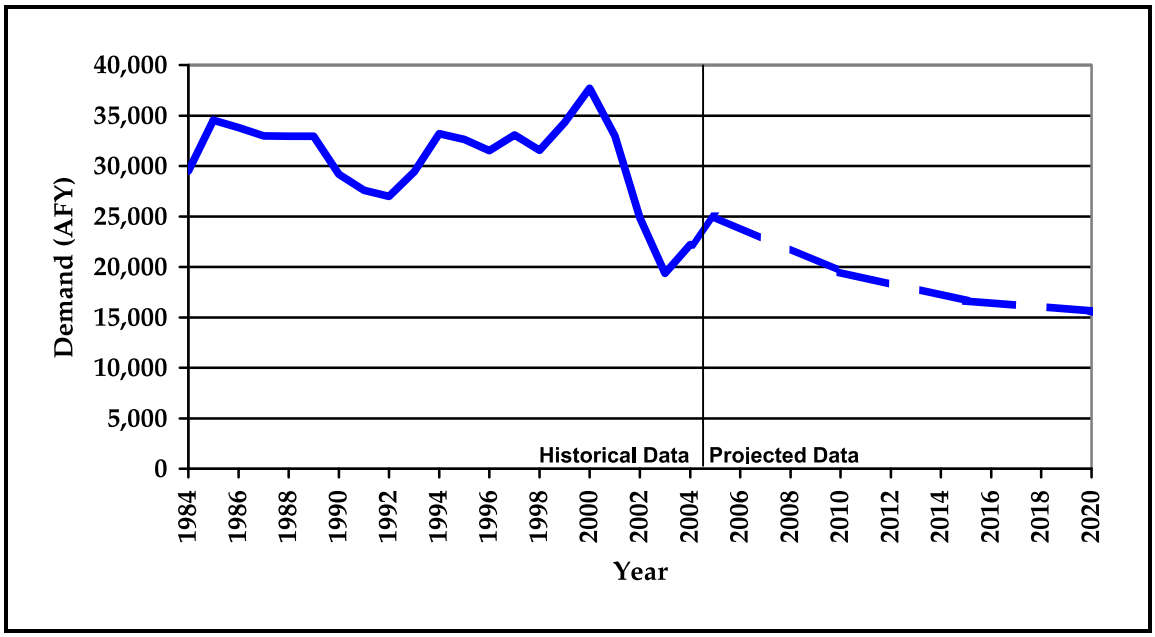


Figure 5.7 Private Water Producers Historical and Projected Demand

5.2.7 MANAGEMENT AREA

Projected and historical water demand for the Management Area as a whole presented in Figure 5.8 as the sum of the demand for the individual entities presented in the previous subsections.

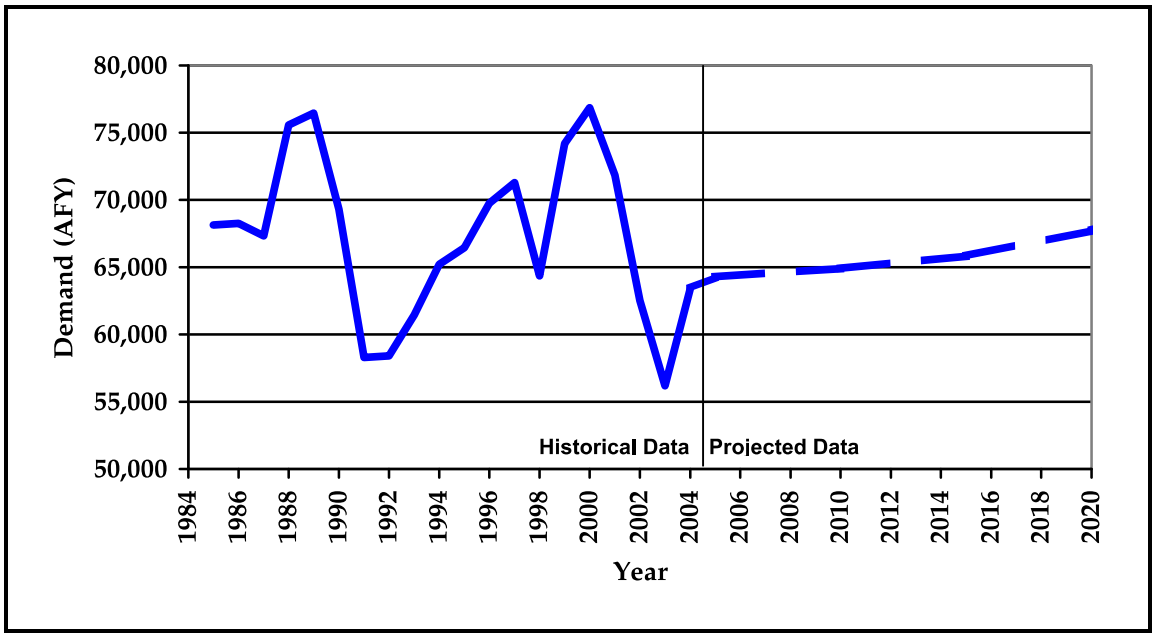


Figure 5.8 Management Area Historical and Projected Demand

5.3 FUTURE PLAN PHASES

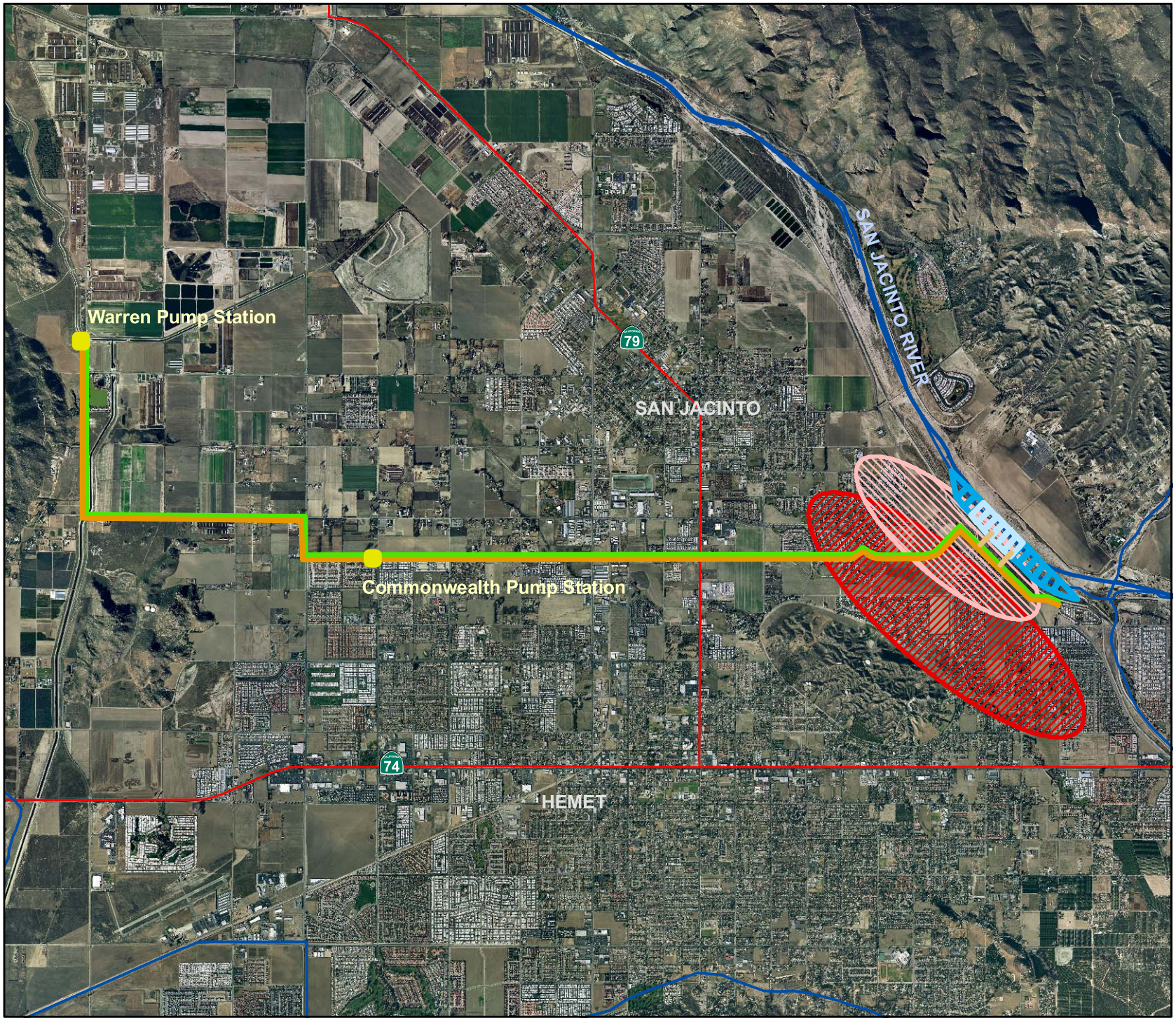
The Integrated Recharge and Recovery Project is considered to be the core of the Physical Solution. The project is designed and implemented in two Phases. Phase I is described in Section 3 of this Plan. While Phase II facilities are described at the conceptual level, and the EIR is certified, there are additional projects that have been considered by the TC and will need to be evaluated for possible design and implementation. Following is a discussion of Phase II of the IRRP, along with other potential projects.

5.3.1 SAN JACINTO RIVER INTEGRATED RECHARGE AND RECOVERY PROJECT, PHASE II

Phase II of the project consists of construction of the remaining portions of the San Jacinto Integrated Recharge and Recovery Project. The information presented here is based on previously published documents adjusted based on the latest knowledge at the time of publication from ongoing negotiations with regulators. Phase II will provide up to 110 cfs of recharge water capacity and will cost approximately $50 million*. A schematic of Phase II is shown in Figure 5.9. Major activities during Phase II are:

1. **Construction of Recharge Basins -** This activity includes construction of nine additional recharge ponds within the San Jacinto River bed in three clusters of

* Number has been updated since the publication of the IRRP Feasibility Report.



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Schematic of Integrated Recharge Recovery Program - Phases I and II

Figure 5.9

Legend

- Pump Station
- Phase I Pipeline
- Phase II Pipeline
- Phase I Ponds
- Phase II Ponds
- Existing Pipeline
- Phase I Well Field
- Phase II Well Field

Source: EMWD

N

0 0.5 1 Miles

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ωRIME

three basins each, covering approximately 35 acres. Combined Phases I and II will have 15 basins covering approximately 70 acres*.

2. **Construction of Pipelines -** This includes design and construction of a 7.7 mile water supply pipeline from the EM-14 turnout to the proposed recharge basins. Included is increasing the capacity of the EM-14 turnout structure from 40 cfs to 110 cfs; replacing 200 feet of 48-inch-diamater pipeline with 63-inch-diamater pipeline; constructing 15,800 feet of new 54-inch-diamater pipeline paralleling the existing 39-inch-diamater pipeline; and constructing 24,800 feet of new 57-inch-diameter pipeline paralleling the existing 33-inch-diamater pipeline.
3. **Pump Station Upgrades –** Upgraded or new pump stations would be built to increase capacity at the Warren Road and Commonwealth pump stations.
4. **Drilling of Extraction Wells -** This includes construction and testing of up to five additional extraction wells designed and operated identically to those constructed in Phase I. The construction of these new wells will result in a total of up to eight Phase I and II extraction wells.
5. **Design and Construction of Monitoring Wells –** Up to three additional monitoring wells will be constructed, bringing the total number of Phase I and II monitoring wells to up to six wells.

Only Phase I has been designed in detail and funding sources are being secured.

5.3.2 POTENTIAL CONJUNCTIVE USE PROJECTS

Conjunctive use is the coordinated operation of surface water storage and use, groundwater storage and use, and conveyance facilities to meet water management needs. This recognizes that there is a hydrologic connection between the surface water resource and the groundwater resource (DWR, 2006). In the Management Area, conjunctive use helps utilize available subsurface storage along with seasonally available water (imports and local surface water) or recycled water. Methods currently being considered include direct recharge and in-lieu recharge.

As part of the basin planning process, the TC identified and selected seven potential direct recharge sites and two potential in-lieu recharge projects for further evaluation and prioritization out of a pool of 15 direct recharge sites and two in-lieu projects initially considered. Further information is provided in *Hemet/San Jacinto Basin Assessment – Basin Assessment Report/Integrated Water Management Plan, Technical Memorandum No. 2, Analysis of Impacts of Conjunctive Use Projects* (WRIME, 2003c).

The recharge sites were selected based on screening criteria that included:

* Number has been updated since the publication of the IRRP Feasibility Report.

- General site characteristics (size, recharge needs, ownership, etc.),
- Hydrogeologic suitability,
- Sub-basin interaction,
- Engineering suitability,
- Land use suitability, and
- Environmental impacts.

The seven potential direct-recharge sites and two in-lieu projects are shown on Figure 5.10. In general, the direct recharge sites would utilize imported water, surface water, or recycled water to recharge the groundwater through surface spreading; the in-lieu projects (Upper Pressure In-Lieu Project and Hemet-Simpson CU Area) were designed to reduce the amount of groundwater production by delivering imported water, from either the Colorado River or the State Water Project, to be used in conjunction and coordination with local groundwater.

A preliminary description of the recharge sites is presented based on information from City of Hemet, City of San Jacinto, LHMWD, and EMWD, along with a brief review of available reports. Table 5.2 summarizes the findings for the nine potential projects. All findings are tentative planning-level data and should not be used in any intensive analysis without further research.

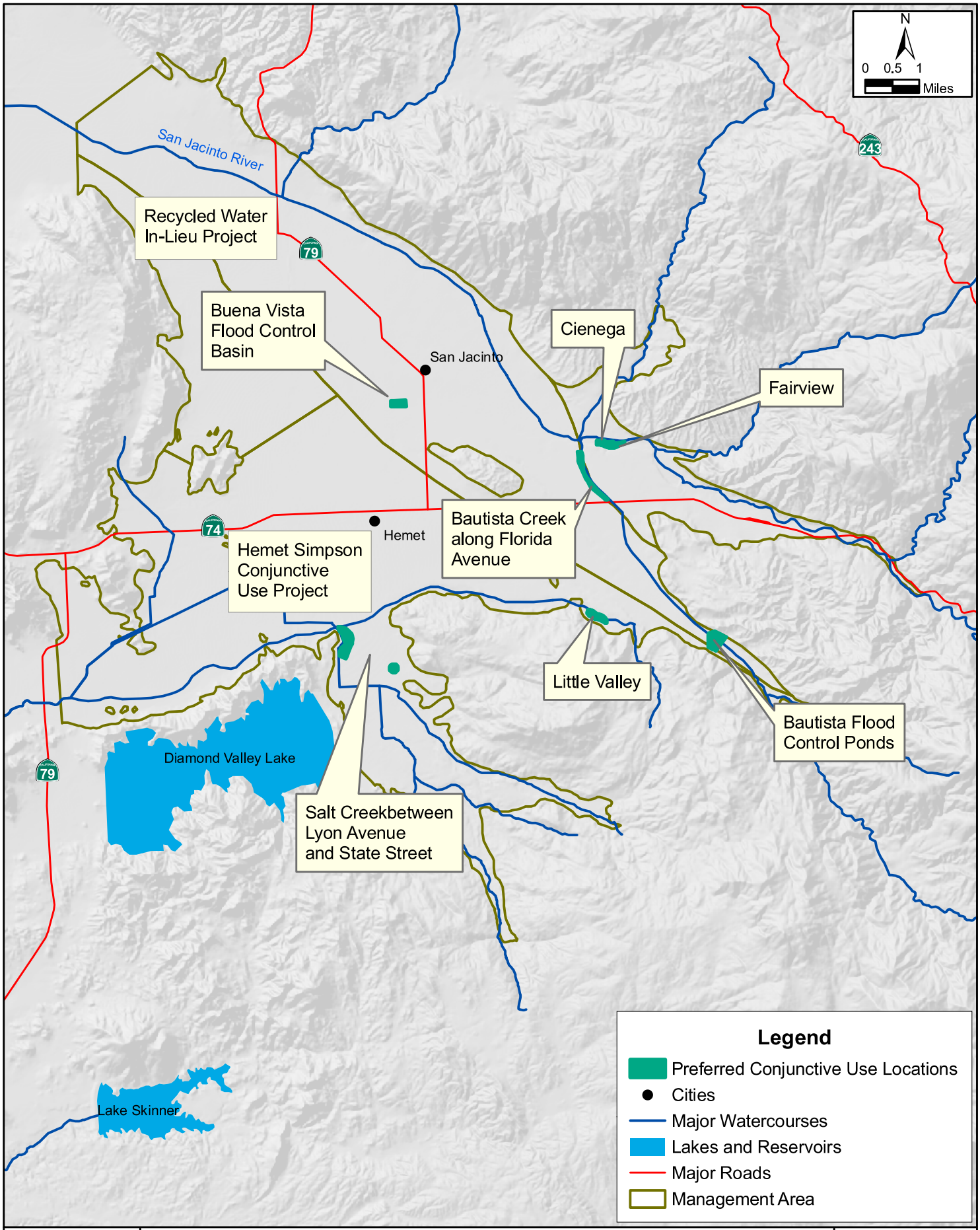
The identification of the potential sites allows for the concentration of future work on these sites. The future work includes:

- Evaluation of the general site conditions;
- Evaluation of water supply availability and reliability;
- Preparation of an environmental checklist; and
- Evaluation of the effectiveness of the projects in meeting the goals and objectives of the Management Area.

A more detailed description of each site is provided below.

5.3.3 DIRECT RECHARGE PROJECTS

Direct recharge projects involve utilizing available imported, surface, or recycled water in a constructed basin for percolation to groundwater. Successful projects require a site with high permeability to allow for water to quickly percolate to groundwater; compatible nearby land uses; an available and accessible water supply; and the ability to either recapture the water or allow the water to raise groundwater levels. The Plan supports the use of direct recharge of water of suitable quality.



Location of Nine Preferred Projects

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Figure 5.10

Table 5.2 Summary of Selected Conjunctive Use Site Conditions

Site	Project Type	Water Source	Annual Water Availability	Soils Infiltration Rate	Approximate Depth to Water (ft)	Potential Constraints
Buena Vista Flood Control Basin	Recharge	Runoff, recycled, or imported	600 AF	n/a	200 – 250	Groundwater quality
Cienega	Recharge	River diversion	n/a	High	210 - 240	Kangaroo Rat, water rights
Fairview	Recharge	River diversion	n/a	High	210 - 240	Kangaroo Rat, water rights
Bautista Creek along Florida Avenue	Recharge	Irrigation water, Bautista Creek, imported	n/a	Moderate	n/a	n/a
Salt Creek between Lyon Avenue and State Street	Recharge	Salt Creek diversion/runoff	1,000 AF	Moderate	200 - 250	n/a
Little Valley	Recharge	Runoff, LHMWD flume, imported	n/a	High and variable	85	Potential archeological sites, shallow bedrock
Bautista Flood Control Ponds	Recharge	Surface runoff/ river diversion	n/a	n/a	180 - 210	No proponent
Upper Pressure In-lieu Project	In-lieu	Imported (Colorado River)	n/a		n/a	Must gain agreements between many parties
Hemet-Simpson Conjunctive Use Project	In-lieu	Imported (Colorado River and State Water Project)	n/a		n/a	Must gain agreements between many parties

5.3.3.1 Buena Vista Flood Control Basin

The existing Buena Vista flood control basin has been identified as a potential recharge project site. Buena Vista basin, located at the end of Buena Vista Street north of Esplanade Avenue, is located in the Upper Pressure Management Zone and is owned and operated by RCFC&WCD.

The site would initially use storm water for recharge purposes. Recharge water would be conveyed to the site from the 2,700-acre drainage area by existing drainage facilities that are owned by RCFC&WCD. It is estimated that approximately 600 AF of water could be delivered to the basin via runoff, with a first flush volume of approximately 20 AF. Surface water quality is good, with some elevated levels of oil and grease, suspended residues, and iron, based on sampling on March 6, 1992 (Singh, 1992). The basin can be enlarged through excavation to provide an additional 36 AF of storage volume, approximately equal to the average storm event runoff.

There is an existing EMWD raw water pipeline that runs nearby along Oakwood Street. This pipeline could potentially be used to supply the project with recycled or imported water (if supplies were to be available) in the future, although it would require the construction of an approximately 4,000-foot pipeline to connect to the basin.

The following items should be considered before moving forward with this project:

- Availability of the site for use and coordination with flood control needs;
- Surface water quality;
- Water infiltration potential;
- Deep percolation potential;
- Availability of imported water to augment surface runoff;
- Subsurface conditions; and
- The clogging potential of surface soils with local runoff.

5.3.3.2 Cienega and Fairview

The Cienega and Fairview sites are adjacent, thus conditions are essentially the same and described together. Preference between the two sites would be based on political, engineering, environmental, and operational factors.

The Cienega and Fairview sites are located in the Canyon Management Zone. Fairview was first used in the early 1990s by LHMWD. LHMWD cut basins near the riverbed and placed a diversion dam in the river. Water was diverted into the basins during the rainy season, typically the 1st quarter of the year. Future use of Fairview, potentially by LHMWD and/or EMWD, would likely involve an expansion of the basin area. Water would be supplied from the river during periods of increased flow, typically January through March. Imported water could also be used if water becomes available and the infrastructure could be built. Infiltration rates are considered high based on monitoring well responses during LHMWD's use, a study by EMWD at the Cienega blowoff pond, and the prevalence of coarse-sand riverbed deposits.

Potential problems for development of the project include San Bernardino Kangaroo Rat habitat, water rights, and limited available underground storage.

5.3.3.3 Bautista Creek along Florida Avenue

Bautista along Florida is located along the boundary between Upper Pressure and Canyon Management Zones. There is an existing recharge site located along the west side of Bautista Creek. The creek was placed in a concrete channel in the 1970s and 1980s, reducing recharge to the aquifer system. The current recharge facility was installed in the 1960s and consists of 3 ponds located along the creek. The three ponds cover approximately 15–20 acres. Future use of the site could include increasing the pond area through expansion to the north and increasing the supply of water to the ponds. Water for the existing project is provided by a turnout that captures agricultural runoff of acceptable quality from Bautista Creek. In general, creek water is not diverted into the ponds. Currently, approximately 200-300 AFY is recharged. Future recharge activities could take advantage of the nearby imported (State Project Water) raw water line on Cedar Avenue. Percolation rates at the site are considered reasonable based on field observations of surface sediments.

5.3.3.4 Salt Creek between Lyon Avenue and State Street

Two potential sites are identified along Salt Creek for a recharge project. One site, State Street Basin, is at the State Street crossing of Salt Creek; a second site, Lyon Basin, is downstream of State Street, near Lyon Avenue. Both sites are located in Hemet South Management Zone. Lyon Basin is the preferred location and is planned to be approximately 40 acres in size and approximately 5 feet deep, resulting in a maximum storage volume of 200 AF. The volume of the State Street Basin would likely be similar to that of the Lyon Basin. Both sites would initially use storm runoff for recharge purposes. Recharge water to both sites would be conveyed to the site via Salt Creek. It is estimated that five storm events per year could each fill the Lyon Basin, resulting in delivery of approximately 1000 AF/year for recharge. Anticipated future development of the watershed will likely increase the amount of available runoff. The State Street site would likely have slightly lower volumes due to its upstream location. Due to limited upstream development, water quality is anticipated to be good.

Potential problems for development of the project include water rights, relatively shallow depth to water and relatively shallow depth to bedrock that may limit the amount and rates of recharge at the sites.

5.3.3.5 Little Valley

Little Valley is located in Hemet South Management Zone. Previously in a pilot project, water was supplied over 2 or 3 years via a LHMWD flume to the area. Water for the recharge basin would be provided by local surface runoff, the LHMWD flume, or from imported water. Infiltration testing in the past has shown rates between 0.6 and 1.4 ft/day in the central part of the valley and 2.0 and 4.6 ft/day in the eastern part of the valley (Rees, 1994).

The following items should be considered before moving forward with this project:

- Potential environmental constraints including possible archeological sites; and
- Shallow depth to bedrock may limit the amount and rate of recharge at the site.

5.3.3.6 Bautista Flood Control Ponds

The Bautista Flood Control Ponds are located in the Upper Pressure Management Zone, very close to the boundary with the Hemet South Management Zone.

The existing ponds are owned and operated by RCFC&WCD and are comprised of a debris dam that creates the 49-acre pond. Future use of the site, apart from continued flood control, would likely be for water harvesting.

5.3.4 IN-LIEU PROJECTS

In-lieu recharge projects involve reducing the usage of groundwater and substituting it with available imported, surface, or recycled water. Successful projects require water users whose needs coincide with the availability and quality of the alternate water supply. The Plan supports the use of quality direct recharge projects.

5.3.4.1 Raw Water In-Lieu Projects

Imported raw water is available from MWD and provides opportunities for in-lieu recharge projects for agricultural users or landscape irrigation. Raw water is available from the State Water Project via EM-14 and from the Colorado River Aqueduct via EM-1. Proximity to these connections is an important factor for keeping costs low for in-lieu projects. One hurdle for such projects is that the period when there is the most availability of raw water, winter, coincides with the period of lowest demand for most agricultural users. Another hurdle is the need for blending the raw water with higher quality groundwater supplies to meet the needs of some of the more sensitive users, such as dairies.

5.3.4.2 Recycled Water In-Lieu Projects

Recycled water is a reliable source of water year round and offers an opportunity for in-lieu use. Public perception generally limits the usage of recycled water to agricultural and landscape irrigation uses. The nearest source of recycled water is the San Jacinto Valley Regional Water Reclamation Facility. Proximity to this source is an important factor for keeping costs low for in-lieu projects.

One project already in the planning stages would deliver between 3,500 and 8,000 AFY of recycled water to Rancho Casa Loma and the Scott Brothers Dairy, both located roughly between Ramona Expressway and Gilman Springs Road and between Sanderson Avenue and Bridge Street in the northwestern-most portion of the Upper Pressure and Hemet North Management Zones. The delivered recycled water would coincide with an equivalent reduction in groundwater pumping by both Rancho Casa Loma and Scott Brothers Dairy. Details of the project include construction of approximately 13,000 linear feet of 24-inch pipeline, and acquisition of property in fee title and easement. Project costs would be split between the Public Agencies based on the pro-rata share of proposed production rights. Agreements with Rancho Casa Loma and the Scott Brothers Dairy would set limits on groundwater production and provide for payment of a portion of the O&M costs.

5.3.4.3 Hemet-Simpson Conjunctive Use Project

Currently MWD delivers treated water from Colorado River and State Water Project to its wholesale customers using the Skinner Water Treatment Plant. Although the Skinner plant is at full capacity, during wet years there appears to be excess water available from the plant for other potential wholesale customers.

The Simpson pump station is currently capable of pumping water to both the west and east. The treated water available from the Skinner plant would be used by customers such as the City of Hemet in lieu of groundwater pumping. The Simpson pump station has a capacity of approximately 14.5 cfs.

The following issues and constraints should be evaluated for this project:

- Quantity and timing of water available from the Skinner Plant;
- Quality of Skinner Plant water in relation to the groundwater quality used by customers such as City of Hemet, and any blending issues;
- Use of chlorinated water from Skinner Plant versus well water that does not contain chlorine;

- Transmission pipeline from Skinner line to the Simpson pump station and from Simpson pump station to local distribution system;
- Connections to the local distribution system and their impacts on the distribution system pressure zones; and
- Cost of MWD water and the cost distribution of such delivery.

5.3.4.4 Hemet Water Filtration Plant

Availability of treated imported water for distribution, in-lieu of groundwater production, has become a significant source for reducing stress on the groundwater system. One of the limiting factors in the substitution of imported water for groundwater is the ability to treat the imported water, which requires more treatment than groundwater. To allow for increased use of imported water, EMWD is building the 10 mgd (11,000 AFY) Hemet Water Filtration Plant near the intersection of Commonwealth Avenue and Kirby Street in Hemet. The plant will utilize State Water Project supplies.

The purpose of this Section is to document the background and settings in establishing the groundwater production rights for each Public Agency. The Base Production Rights and the method for determining Adjusted Production Rights have been established in a collaborative manner among the agencies, and have been the basis for the distribution of costs in a number of occasions during the development of the Plan.

6.1 PUBLIC AGENCIES BASE PRODUCTION RIGHTS

6.1.1 GENERAL

Together, the Public Agencies agreed upon some basic principles as a basis for allocating Base Production Rights. The base period for documenting actual pumping was determined to be calendar years 1995 through 1999. Figure 6.1 shows the average annual groundwater production by each Public Agency for 1995 – 1999. It was also recognized that, as a result of various operational activities of the Public Agencies, several adjustments would need to be made to the raw pumping data for 1995-1999. It was ultimately agreed to finalize all appropriate adjustments and to make one comprehensive adjustment to each Public Agency's raw 1995-1999 recorded pumping.

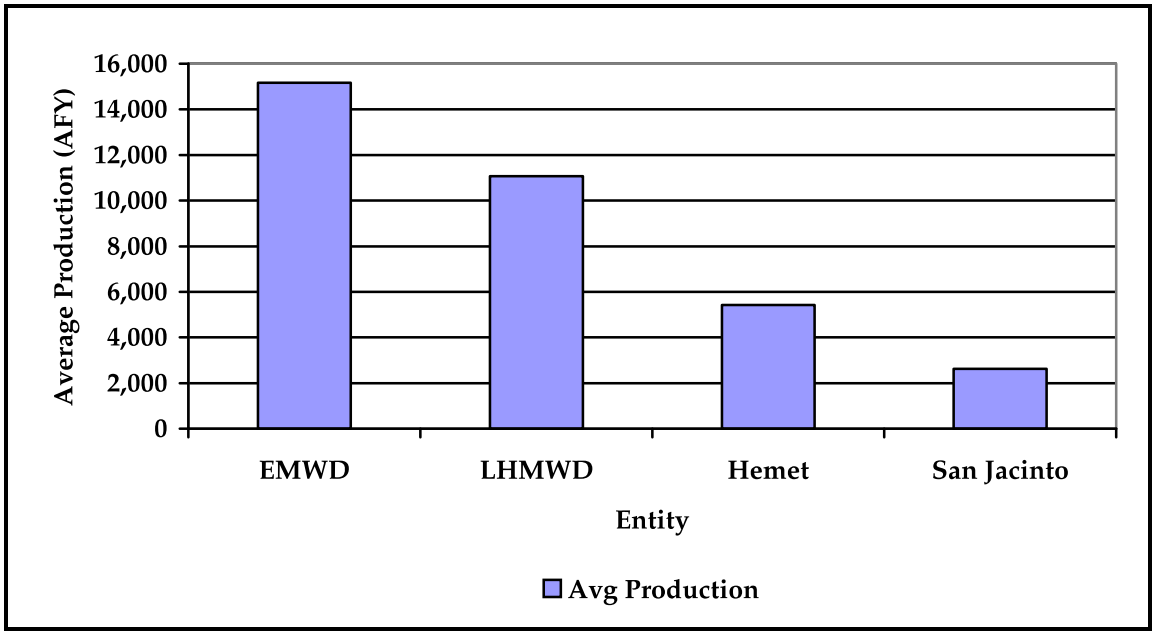

Figure 6.1 Average Annual Groundwater Production, 1995 - 1999

The operational activities that impacted groundwater resources, and therefore were used to make appropriate adjustments to raw 1995-1999 pumping data, include:

- Recharge Activities;
- MWD San Jacinto Tunnel Seepage;
- Fruitvale Entitlement Water Sold by EMWD to LHMWD, City of Hemet and City of San Jacinto;
- River Diversions;
- Conveyance Water Deliveries; and
- Other Considerations.

The Fruitvale Entitlement allocation amount was determined to be a total of 597 acre-feet for LHMWD, and Cities of Hemet and San Jacinto. The Tunnel Seepage allocation amount was determined to be 1,800 AFY, and the river diversions were determined to be 3,635 AFY for pro-ration to the four agencies. The Public Agencies have, therefore, been assigned the pro-rata shares of Base Production Rights as shown in Table 6.1:

Table 6.1 Base Production Rights

Public Agency	Base Production Rights (AFY)	Base Production Rights (Percent)
EMWD	10,869	33.7%
LHMWD	11,063	34.2%
City of Hemet	6,320	19.6%
City of San Jacinto	4,031	12.5%
Total	**32,283**	**100 %**

The details of the Public Agencies Base Production Right, with their corresponding adjustments, are described below:

6.1.2 EMWD BASE PRODUCTION RIGHTS

For EMWD, the 1995-1999 actual average annual pumping was determined to be 15,166 AFY. After consideration of all appropriate adjustments, it was determined that EMWD's Base Production Right would include a deduction of 2,497 acre-feet for conveyance water and an additional net deduction of 1,800 acre-feet for other operational activities, including tunnel seepage, export, and Fruitvale Entitlement water sales. Therefore, EMWD's Base Production Right was set at 10,869 AFY.

6.1.3 LHMWD BASE PRODUCTION RIGHTS

For LHMWD, the 1995-1999 actual average annual pumping was determined to be 11,063 AFY. There were no net adjustments for LHMWD as their credit for the Fruitvale entitlement water purchase tunnel seepage was deemed to be equivalent to their surface water diversion. Thus, the Base Production Right for LHMWD is set to 11,063 AFY.

6.1.4 CITY OF HEMET BASE PRODUCTION RIGHTS

For the City of Hemet, the 1995-1999 actual average annual pumping was determined to be 5,420 AFY. After consideration of all appropriate adjustments, it was agreed that the City of Hemet's Base Production Right would include an additional 900 AFY pumping right to account for Fruitvale Entitlement water purchase tunnel seepage credit, and surface diversion water. Therefore, the City of Hemet's Base Production Right was set at 6,320 AFY.

6.1.5 CITY OF SAN JACINTO BASE PRODUCTION RIGHTS

For the City of San Jacinto, the 1995-1999 actual average annual pumping was determined to be 2,631 AFY. However, review of the city's historic pumping showed the 1995-1999 base period was not as representative as other historic pumping periods. Therefore, it was agreed for the City of San Jacinto to receive an additional 500 AFY of pumping rights. In addition, after consideration of all other appropriate adjustments, it was determined that San Jacinto's Base Production Right would include an additional 900 AFY pumping right to account for Fruitvale Entitlement water purchase tunnel seepage credit and surface diversion water. Therefore, the City of San Jacinto's Base Production Right was set at 4,031 AFY.

6.2 PRIVATE WATER PRODUCER'S PRODUCTION RIGHTS

6.2.1 GENERAL

Development of the Hemet-San Jacinto Water Management Plan recognizes the rights of the overlying pumpers to pump and beneficially use needed groundwater. The overlying pumpers within the management area include Private Water Producers (and the Soboba Band of Luiseño Indians, discussed later). In recognition of the Private Water Producers' overlying rights, the management plan does not adversely impact or affect these rights and uses that are consistent with historical uses.

The Plan provides for the Private Water Producers to be Non-participants, Class A Participants, or Class B Participants. For Non-participants, the private producer(s) may elect to not participate and/or not acknowledge the Plan's existence. Non-participants are free to continue their past practices of pumping groundwater for beneficial uses according to state law. Non-participants are also excluded from future participation in the Plan. Class A and Class B Participants are described below.

6.2.2 CLASS A PRODUCTION RIGHTS

Class A Participants in the Plan have agreed to cooperate with the administrative and pumping accounting portions of the Plan. While historic pumping and beneficial uses may continue, the Class A Participants' pumping facilities are subject to metering, testing, and water level and water quality sampling at no cost to the owner. This information is valuable for successful implementation of the Plan. Class A participants are eligible to convert to Class B Participant status during the first three years of formal Plan implementation (Entry of the Judgment), with the payment of all past assessments (without interest) that would have been incurred as a Class B Participant.

6.2.3 CLASS B PRODUCTION RIGHTS

Class B Participants become participants to the Plan and have their water rights determined. The annual Base Production Right shall be determined based upon the average annual production from 1995 to 1999, less any amount of water that had been used on land that was developed for non-agricultural purposes after 1999, which is the Participant's Base Production Right. The Class B Participant shall pay Replenishment Water Assessments for pumping in excess of the individual Base Production Right. Class B Participants are not subject to Administrative Assessments, and until conversion to a Public Agency, not subject to reduction in Safe Yield. Class B Participants may sell or lease unused groundwater to the Watermaster or one of the Public Agencies, under terms and conditions approved by the Watermaster. Upon conversion of a Class B Participant's land from agricultural to a use that requires water service from a Public Agency, the Public Agency shall credit, to the extent legally permissible, the Class B Participant's Base Production Right, adjusted pursuant to certain reductions, against any requirement then in effect for any water supply assessment requirements, or against any fees associated with water supply that the Public Agency may then have in effect. The Public Agency serving the converted land shall receive a credit added to its Base Production Right as set forth in the Judgment. Class B Participants to the Plan have also agreed to participate in the groundwater monitoring and pumping accounting portion of the Plan, at no cost to the owner.

6.3 SOBOBA TRIBE WATER RIGHTS

Section 8 of this document provides a detailed description of the Soboba Indian Tribe water rights.

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This Section provides a description of the surface water rights and licenses held by LHMWD and EMWD. The contents of this Section are provided for general information and documentation of the surface water rights only; such rights are not affected by the Stipulated Judgment or this Plan.

7.1 LHMWD'S DIVERSION RIGHTS

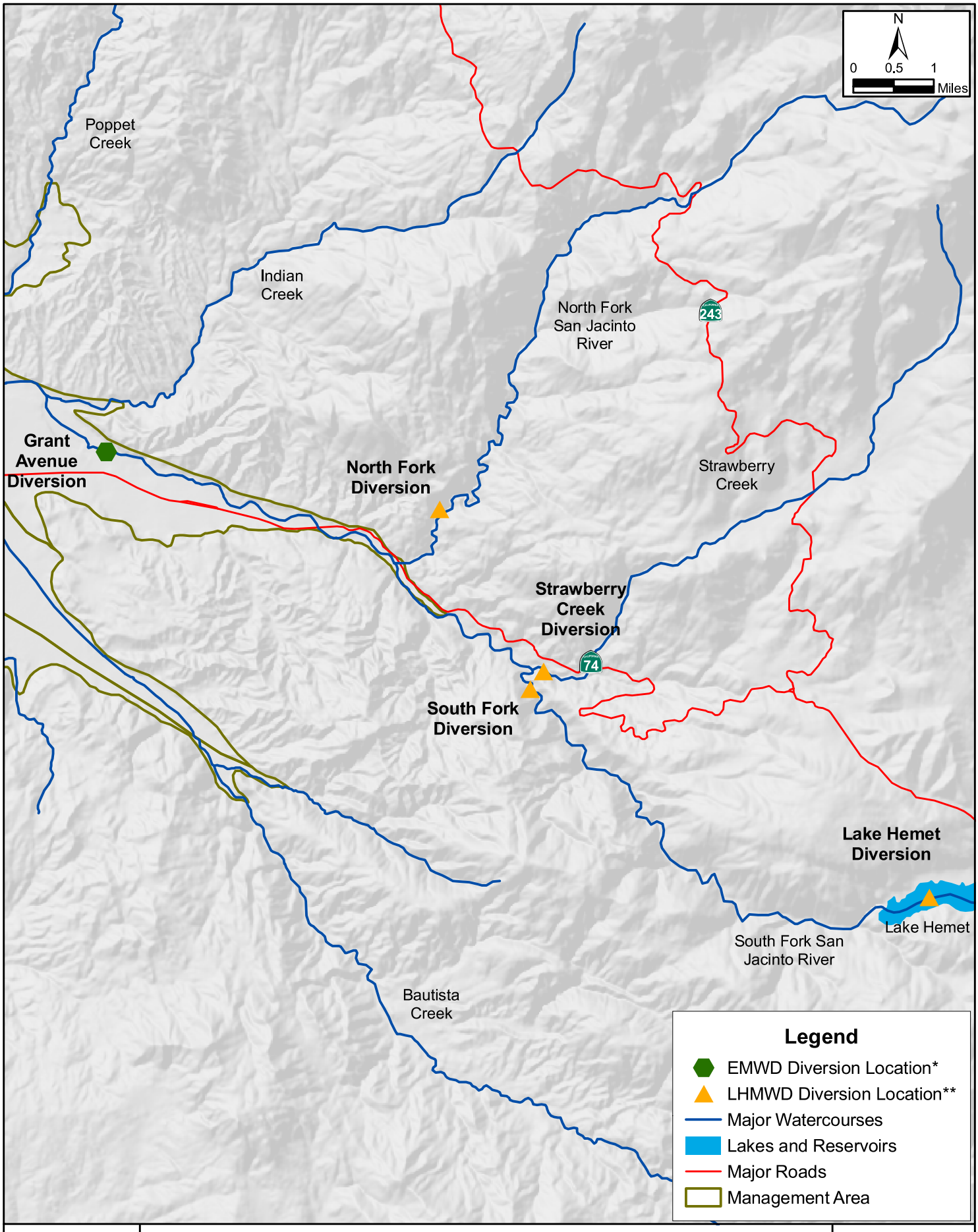
LHMWD holds pre-1914 rights to divert and store water in Lake Hemet, and to divert water from Strawberry Creek, and from the North and South Forks of the San Jacinto River (See Figure 7.1). These rights have been acquired as the successor-in-interest to rights established by the Fairview Land and Water Company, the Lake Hemet Company, the Lake Hemet Water Company, the Florida Water Company, Charles Thomas, H. M. Johnston, E. L. Mayberry, W. F. Whittier, William B. and Mary Webster, and others.

7.1.1 LAKE HEMET

Construction of Lake Hemet Dam began in 1889 and was completed in 1895. The reservoir is located in Township 6S, Range 3E, Sections 7 and 8. Water rights for the diversion and storage of water are based on actual use and upon at least these Notices of Appropriation filed on November 18, 1884 in Book 1 of Water Claims, page 38; on January 19, 1885 in Book 1 of Water Claims, page 47; on December 23, 1885 in Book 1 of Water Claims, page 115; on April 7, 1886 in Book 1 of Water Claims, page 134; and on October 18, 1890 in Book 2 of Water Claims, page 61. The reservoir impounds water from Hurkey Creek and the South Fork of the San Joaquin River, and has a capacity of 12,775 acre-feet. Releases from the reservoir are discharged into the South Fork of the San Jacinto River.

7.1.2 SOUTH FORK OF THE SAN JACINTO RIVER

This diversion site is located about a quarter of a mile upstream of the river's confluence with Strawberry Creek. A wooden diversion dam was originally constructed in 1888, but later replaced with a concrete diversion dam, taking water through a tunnel on the right bank of the stream into a 30-inch pipeline. Water rights are based on actual use and upon at least these Notices of Appropriation filed on June 6, 1885 in Book 1 of Water Claims, page 61; on August 11, 1886 in Book 1 of Water Claims, page 160; and on the Judgment entered



Location of Surface Water Diversions

Hemet / San Jacinto Water Management Plan

*Source: EMWD
**Source: LHMWD

October 2007

Figure 7.1

November 24, 1894 in the case of Florida Water Company v. Mary Webster, et al., No. 169, Riverside Superior Court.

7.1.3 NORTH FORK OF THE SAN JACINTO RIVER

This diversion site is now located on the North Fork of the San Jacinto River near the "Falls" in Section 17, T5S, R2E. The original facilities consisted of a small rock dam and a 10-inch sheet iron pipe constructed in about 1887. Current facilities, constructed in 1969-1970, consist of a concrete diversion dam, concrete intake and control structure, and 24-inch steel pipeline. Water rights are based on actual use and upon at least these Notices of Appropriation filed on September 14, 1886 in Book 1 of Water Claims, page 173; on May 19, 1897 in Book 1 of Water Claims, page 159; and on the Judgment described above.

7.1.4 STRAWBERRY CREEK

LHMWD's diversion site on Strawberry Creek is located in Section 28, T5S, R2E, about 1,300 feet upstream of its confluence with the South Fork of the San Jacinto River. Original construction of a concrete diversion dam and flume, carrying the water over the South Fork and into the main water line, occurred in about 1905. Current facilities consist of a concrete diversion dam, intake structure, and 28-inch pipeline. Water rights are based upon actual use and at least on these Notices of Appropriation filed on January 27, 1885 in Book 1 of Water Claims, page 49; on August 11, 1886 in Book 1 of Water Claims, page 160; and on deeds recorded July 24, 1885 in Book 51, page 145; on August 25, 1886 in Book 64, page 223; on February 21, 1887 in Book 73, page 235; on April 21, 1887 in Book 79, page 264; on April 27, 1887 in Book 79, page 266; and on the Judgment described above.

7.2 EMWD'S DIVERSION RIGHTS

EMWD holds a license to divert water from the San Jacinto River (see Appendix G). EMWD currently does not divert surface water for direct use, but recharges the water, when available, into the aquifer to augment groundwater supplies. Thus, the diversion is not directly part of EMWD's water supply. However, it plays an indirect role in groundwater resources. Information on these diversions is presented here.

EMWD's recharge of surface water from the San Jacinto River to the Canyon Management Zone takes place at EMWD's Grant Avenue Ponds in the Valle Vista area (See Figure 7.1). An application for a permit to appropriate water from the San Jacinto River and Indian Creek, Application 924, was filed on February 14, 1918 by the Citizens Water Company. Permit 468

was subsequently approved on August 15, 1918. On November 23, 1920, the filing was assigned to the FMWC as the successor-in-interest to the Citizens Water Company. Upon its 1971 acquisition of the FMWC, EMWD became the successor-in-interest to the filing.

Based on Application 924 and Permit 468, the State Water Resources Control Board issued License No. 10667 for the Diversion and Use of Water to EMWD on June 8, 1976. This license, still held by EMWD, allows for the diversion, underground storage by spreading, and subsequent extraction and beneficial use of 5,760 AFY of San Jacinto River water to be collected from November 1 of each year to June 30 of the succeeding year at a rate of 41 cfs. Additionally, the rate of diversion may be increased to a maximum of 100 cfs provided that the total quantity in any 30-day period does not exceed 2,442 AF.

SECTION 8 SOBOBA TRIBE SETTLEMENT REQUIREMENTS

8.1 ORIGINAL SOBOBA CLAIM

In 1995 the Soboba Tribe filed claims against EMWD and LHMWD for an alleged infringement of their water rights, and for damages in the sum of $70 million related to the alleged historical interference with the Tribe's rights and the unauthorized use of its water. EMWD and LHMWD denied any such interference or wrongful use of Tribal water, but agreed to negotiations to determine the water rights of the Tribe.

8.1.1 EARLY NEGOTIATIONS

Negotiations with the Tribe began in 1995 and in time involved the active participation of the United States.

8.1.2 UNITED STATES SETTLEMENT PROPOSAL

In 1998, the United States proposed a settlement whereby the Tribal Water Right would be determined to be 9,000 AFY, and the Federal government would provide a supply of 7,500AFY. Subsequently this proposal proved not to be feasible.

8.1.3 TRIBAL CLAIM AGAINST MWD

In 2000 the MWD was brought into the dispute when the Tribe filed suit against MWD in the U.S. District Court in Los Angeles, Case No. 00-04208 (GAF) (MANx) ("Los Angeles case"). The complaint alleged that the MWD tunnel drilled through Mt. San Jacinto in the 1930's had dried up springs on the Reservation and otherwise interfered with the Tribe's water supply.

8.1.4 MWD'S CROSS COMPLAINT

MWD brought EMWD into the Los Angeles action based upon an indemnity agreement signed by EMWD when the District was annexed to MWD, and in return for seepage water that continued to flow into the San Jacinto tunnel.

8.1.5 FINAL NEGOTIATIONS

After lengthy negotiations among the Tribe, United States, EMWD, LHMWD and MWD, the parties reached an Agreement in 2004, subject to approval of Congress.

8.1.6 STATUS OF CONGRESSIONAL APPROVAL

The Agreement has not yet been approved by Congress, and it expires if such approval is not obtained by December 31, 2007.

8.2 FRAMEWORK OF THE SETTLEMENT AGREEMENT

The Agreement determines the water rights of the Tribe, and settles all claims among the parties, including those made in the Los Angeles case. The Agreement will be incorporated into a Stipulated Judgment in the Los Angeles case, and made subject to the continuing jurisdiction of the Court.

8.3 TRIBAL WATER RIGHT

Under the Agreement, the Tribe has a prior and paramount right, superior to all others, to pump 9,000 acre-feet annually from the Canyon Sub-basin and the Intake portion of the Upper Pressure Sub-basin for any use on the Reservation, and on lands now owned or hereafter acquired by the Tribe contiguous to the Reservation or within the above-mentioned Sub-basins. The Tribe's right is subject to an agreement to limit its pumping according to a yearly schedule, with a maximum of 4,100 AFY, for 50 years after the effective date of the Agreement.

8.4 PAYMENTS TO THE TRIBE

The United States agrees to pay $11 million to the Tribe, and EMWD and LHMWD are obligated to pay $17 million to the Tribe.

8.5 FUNDS RECEIVED BY THE LOCAL AGENCIES

The United States agrees to contribute to EMWD, on behalf of the participants in this Water Management Plan, the sum of $10 million for construction and operation of recharge facilities to accommodate deliveries of Imported Water.

8.6 IMPORTED WATER

MWD agrees to provide an average supply of 7,500 AFY of Imported Water to recharge the Canyon Management Zone and Intake portion of the Upper Pressure Management Zone, at untreated replenishment rates, until 2035, and to negotiate in good faith for an extension of the supply for a total of 50 years after the effective date of the Agreement.

8.6.1 MWD STORAGE RIGHT

The local agencies are obligated to provide groundwater recharge facilities to accommodate a flow rate of 42 cfs and to store up to 40,000 acre feet of Imported Water.

8.6.2 USE OF MWD SUPPLY

The supply of Imported Water provided by MWD is to supply water for the Tribe, and to reduce overdraft. Water not used by the Tribe is available for use by the participants in the Water Management Plan, pursuant to the terms hereof.

8.7 WATER QUALITY REQUIREMENTS

The Agreement provides that all water recharged shall conform to all applicable State water quality regulations and recharge in the Canyon Sub-basin and shall not exceed Federal or State primary or secondary drinking water quality standards (except for turbidity, color or coliform bacteria), nor 0.3 mg/l boron, or 0.05 mg/l lithium.

8.8 PROPERTY TRANSACTIONS

EMWD shall convey to the Tribe approximately 106 acres of land at Domenigoni Parkway and Highway 79. MWD shall convey to the Tribe approximately 21.7 acres of land. LHMWD shall make available for environmental mitigation purposes approximately 12 acres in the San Jacinto River bed. The Tribe shall make available up to 98 acres of land for habitat preservation and/or environmental mitigation in connection with the recharge facilities.

8.9 APPROVAL OF WATER MANAGEMENT PLAN

The Agreement provides that EMWD and LHMWD, with the cooperation of other groundwater producers, shall develop and implement a Water Management Plan for the Canyon

Management Zone and Intake portion of the Upper Pressure Management Zone that will address the current overdraft, and recognize and take into account the Tribal Water Right. This Plan is intended to meet such requirements of the Agreement, and is subject to the approval of the Soboba Tribe and the United States. No implementation or subsequent modification of this Plan shall threaten or adversely affect the rights of the Tribe under the Agreement, and the Tribe and the United States shall have the right under the continuing jurisdiction of the Court in the Los Angeles case to litigate any such issue.

9.1 PURPOSE

The purpose of the Watermaster is to implement the Water Management Plan (The Plan) as embodied in the Stipulated Judgment (JUDGMENT) in Eastern Municipal Water District v. Lake Hemet Municipal Water District, et al.; said implementation may be by Watermaster actions alone, actions undertaken through or in conjunction with one or more Public Agency Members or through a Joint Powers Authority (JPA) composed of some or all of its Public Agency Members.

9.2 WATERMASTER

9.2.1 COMPOSITION

The Watermaster Governing Board will consist of one (1) elected official representing each of the Public Agencies, namely, EMWD, LHMWD, and the Cities of Hemet and San Jacinto (collectively, Public Agencies), and one (1) representative selected by the Class A and Class B private groundwater producers (Private Water Producers).

9.2.2 TERMS OF OFFICE

Each member of the Watermaster shall serve until replaced by the Public Agency or Private Water Producers that made the original appointment.

9.2.3 REMOVAL AND REPLACEMENT

Any Watermaster member may be removed and replaced by the same procedure used in his or her appointment.

9.2.4 VOTING

Each member of the Watermaster shall have one (1) vote. All actions by the Watermaster shall require three (3) affirmative votes, except actions in the following matters that shall require four (4) affirmative votes:

- Any change sought in the form of governance;

- Any change in voting requirements;
- Establishing, levying, increasing or decreasing all assessment amounts;
- Determining the extent of overdraft and quantifying safe yield;
- Determining Adjusted Production Rights;
- Decisions regarding the financing of supplemental water or facilities, other than any financing provisions included in the Judgment;
- Decisions regarding ownership of facilities, other than ownership of the Phase I facilities (described in Section 3.2.2.1), which facilities shall be owned by EMWD, subject to a right of use by those parties participating in the financing thereof;
- Policies for the management of the Management Area;
- Any decision that involves a substantial commitment by the Watermaster, including any contracts for conserved water;
- Retaining the services of legal counsel or Advisor; and
- Adoption or amendment of an annual budget.

9.3 RULES AND REGULATIONS

The Watermaster may make such rules and regulations as may be necessary for the implementation of the Water Management Plan and Judgment, and for its own operations and procedures, subject to Court approval.

9.4 MEETINGS

The meetings of the Watermaster and standing committees will be subject to those provisions of the California Government Code known as the Brown Act (also popularly known as the Open Meeting Laws).

9.5 WATERMASTER ORGANIZATION

In carrying out its development and implementation responsibilities, the Watermaster may hire full-time or part-time personnel, such as managers, engineers, attorneys, hydrologists, geologists, accountants, operators, secretaries, clerical or others; may retain outside consultants on a full-time, part-time, or as-needed basis; and may contract with other agencies to perform some or all of the development and implementation tasks.

The Watermaster shall retain the services of an independent attorney or law firm to act as the Watermaster's legal counsel.

The Watermaster shall retain the services of a qualified independent individual or engineering firm with appropriate experience in hydrology to serve as Advisor to the Watermaster. The Advisor shall assist the Watermaster in the performance of the Watermaster's responsibilities as follows:

- Provide advice to the Watermaster on all matters within the authority and jurisdiction of the Watermaster;
- Provide recommendations for action to the Watermaster on all matters within the authority and jurisdiction of the Watermaster;
- Evaluate proposals for projects and/or recommendations for action received from members of the Watermaster regarding matters within the authority and jurisdiction of the Watermaster;
- Propose and/or evaluate contracts and other agreements to be entered into by the Watermaster necessary to the performance of its responsibilities;
- To administer all contracts and agreements entered into by the Watermaster;
- Assist the Watermaster in evaluating and analyzing data, the collection of which is required under the Judgment and/or Water Management Plan;
- Coordinate the evaluation and analyses of data, proposals, projects, and recommendations by the TC with members of the Watermaster and other consultants of the Watermaster;
- Serve as the Chairman of the TC; and
- Perform such other services, and take such actions, as may be approved by the Watermaster, that are necessary to implement and execute the directions and policies of the Watermaster.

The Watermaster retains the authority to assign or contract the performance of any task or function necessary to consider or perform any matter within the authority and jurisdiction of the Watermaster to any member of the Watermaster, the TC, or any other independent engineering firm or qualified individual. Such assignment or contract shall be coordinated and administered by the Advisor.

As used herein, the term independent means that the Consultant's or Advisor's representation of the Watermaster does not create any actual or potential conflict of interest between the Consultant or Advisor and any other member entity under applicable California statute, regulation, or court decision, or under the common law. Nothing in this definition shall prohibit the Watermaster and affected entity, after appropriate vote, from waiving such conflict in writing.

9.6 GENERAL DUTIES

The general duties of the Watermaster in order to implement the Judgment fall into three categories, as follows:

9.6.1 POLICY

The Watermaster is responsible for the administration of the Judgment and for the development of policies necessary to carry out the implementation of the Water Management Plan, and for additions and modifications thereof.

9.6.2 WATER MANAGEMENT PLAN IMPLEMENTATION

The Watermaster shall implement a water management plan; its responsibilities in that regard include the following:

- Calculating and making determinations regarding the following: (i) safe yield of the Management Area; (ii) each member's share of safe yield; (iii) necessary reductions in each member's Base Production Right to ensure production ultimately equals safe yield; (iv) unused storage capacity which may be used for put and take operations of recycled or imported water; and (v) whether replenishment of exported water is accomplished with an appropriate amount of similar or better quality water.
- Approving projects to be undertaken by the Watermaster in collaboration with member entities as proposed by members of the Watermaster or by the Advisor.
- Providing for the recharge of the Management Area. This includes: (i) implementing a replenishment program for the Management Area; (ii) acquisition of supplemental water supplies (imported, recycled, and Soboba Tribe water); and (iii) providing for the construction and operation of all necessary facilities (including surface and sub-surface percolation and injection facilities).
- Determining the amount of, and levying, billing, and collecting the administrative and replenishment assessments.
- Budgeting and appropriating funds collected by or on behalf of the Watermaster and paying, or authorizing the payment of, costs and expenses of the Watermaster consistent with the Judgment and Water Management Plan.
- Initiating and performing such planning and study activities as may be necessary to implement the Judgment and Water Management Plan, including, but not limited to, preparation of a Watermaster's Annual Report.

- Initiating necessary conservation and drought management measures, and developing water conservation agreements with the Private Water Producers and/or Soboba Tribe for local conservation measures.
- Identifying and participating in the in-lieu replenishment projects.
- Performing all other tasks and taking all other actions as may be necessary to carry out the purpose and intent of the Judgment and the Plan.

9.6.3 TECHNICAL OVERSIGHT

9.6.3.1 Technical Committee Composition

The Stipulated Judgment provides for the operation of a TC, consisting of representatives named in a written designation by EMWD, LHMWD, the Cities of Hemet and San Jacinto, and the Private Water Producers (as one entity). The representative(s) of an entity may be changed by that entity by written notice of the change to the Watermaster.

9.6.3.2 Technical Committee Purpose

The TC will provide such technical assistance as the Watermaster may request and should make recommendations to the Advisor and to the Watermaster on all matters requiring four votes for Watermaster action as outlined in the Voting section above, and on such other matters as requested by the Watermaster. The TC members shall also keep their respective City Councils and Boards of Directors of the Public Agency parties and the Private Water Producers fully informed about the implementation of the Plan.

9.6.3.3 Technical Committee Chairperson

The Advisor will act as the TC's Chairperson and fulfill all the necessary administrative functions required on behalf of the TC.

9.6.3.4 Technical Committee Costs

Costs incurred by individual TC members are the responsibility of the entity appointing that member, and Watermaster funds cannot be used to cover the costs and expenses incurred as a result of the TC activities and functions.

9.7 WATERMASTER INTERACTION WITH EMWD

9.7.1 CONTRACT FOR SERVICES

The Watermaster will contract with EMWD to provide the following services:

- Collection and maintenance of all production, water level, water quality, and other technical data necessary under or required by the Water Management Plan and the transmittal of such data to the Watermaster, its Advisor, and the TC as directed by the Watermaster; the foregoing shall not restrict the Watermaster from entering into other agreements with other members of the Watermaster and/or private firms and individuals for the collection of data.
- Obtaining imported water from MWD or other sources as requested by the Watermaster for replenishment or direct delivery; the foregoing shall not restrict the Watermaster's ability to enter into other agreements with other members of the Watermaster and/or private firms and individuals for the purchase and delivery of imported and/or supplemental water.
- Construct and operate the Phase I facilities (existing EMWD facilities, expansions thereof, and newly constructed facilities) in a manner consistent with the Water Management Plan.
- Perform the accounting functions necessary under the Judgment, i.e., the levy, billing, and collection of all assessments provided for under the Judgment; the payment of costs and expenses of the Watermaster; and related and required accounting and related functions. All funds collected shall be held in a segregated account. All expenses and disbursements shall be separately accounted for. The foregoing shall not restrict the Watermaster from entering into other agreements with other members of the Watermaster and/or private firms and individuals to perform some or all of the accounting functions.

9.7.2 FINANCIAL RESPONSIBILITIES

EMWD will establish restricted accounts and hold all funds collected on behalf of the Watermaster separate from other EMWD funds. All expenditures, encumbrances, and use of funds from these accounts are subject to Watermaster authorization and will be limited to activities related to the Plan. EMWD will transmit periodic reports regarding its financial activities to the Advisor, including annual reporting summarizing the preceding fiscal year financial activities for the approval of the Advisor and the Watermaster.

10.1 ANNUAL BUDGET

The Advisor shall prepare an Annual Budget for review, approval, and adoption by the Watermaster. This Budget shall identify each Public Agency member's financial obligations and assessments and a description of budgeted expenditures, including:

- Replenishment water purchase;
- Operation and maintenance;
- Data collection and evaluation;
- Plan implementation administration;
- Project planning and reporting;
- Billing and assessment collection;
- Capital facilities financial obligations; and
- Preparation of an Annual Audit.

10.2 OWNERSHIP OF FACILITIES

Each Public Agency will continue to own its existing capital facilities for water management. However, in some situations, it may be necessary and/or convenient to form a JPA to finance and build specific capital facilities. Responsibility for the cost of any existing and future capital facilities of the Management Plan should be apportioned among the Public Agencies based on relative benefit to be derived by each Public Agency.

10.2.1 EXISTING FACILITIES

The existing groundwater recharge facilities in the Management Area are owned by EMWD. The Phase I project which is an upgrade of the existing recharge facilities is defined in Section 3.2.2 of this document, and EMWD will own these upgraded facilities. However, the use of the upgraded facilities and the benefits of the low-cost MWD water deliveries through this system will be shared by all agencies based on the level of construction funding contributions for the Phase I facilities and level of participation in the Soboba Settlement financing.

10.2.2 FUTURE PROJECTS

Any of the participating Public Agencies may propose water supply projects to the Watermaster for inclusion in the Plan. Such proposals, after evaluation by the Advisor and the TC, shall be presented to the Watermaster for approval or rejection. If the Watermaster chooses to reject the proposal, the proposing Public Agency may implement the rejected project as long as it does not significantly impact the implementation of the Plan and/or interfere with ongoing groundwater production by the Public Agencies.

10.2.3 USE OF MEMBER AGENCY ASSETS

It is the intent of the Member Agencies that their respective facilities shall be used in a manner that facilitates the implementation of the Plan, on terms that are equitable to all parties and consistent with each agency's obligations to its customer base.

10.3 ASSESSMENTS

Public agencies participating in the Plan are subject to two different assessments:

- Administrative Assessment; and
- Replenishment Assessment.

The purpose and use of these assessment funds are described in the following two sections:

10.3.1 ADMINISTRATIVE ASSESSMENTS

Administrative Assessments will be levied on each acre-foot pumped by each Public Agency up to the agency's Adjusted Production Right. These assessments can be used to pay costs associated with:

- Advisor's activities and his/her administrative expenses;
- Billing and assessment collection costs;
- Data collection and evaluation projects;
- Plan implementation administration, including monitoring plan, and associated salaries and overhead; and
- Project planning and reporting expenses.

Initially, the Administrative Assessment shall be Fifty Dollars ($50.00) per AF, subject to adjustment by the Watermaster.

At the discretion of the Watermaster, any excess funds not used for the above expenditures at the end of the fiscal year can be used to purchase, deliver, and recharge the groundwater within the Management Area. These recharge waters are above and beyond groundwater replenishment waters purchased using the replenishment assessments, and should not be credited to individual Public Agencies as part of their required replenishment obligations. This shall not prohibit the development of a program or plan to provide credits for water purchased above and beyond that needed to satisfy a party's replenishment obligation.

Subject to the Watermaster's approval, funds may also be used to acquire and deliver water for direct use in lieu of pumping.

10.3.2 REPLENISHMENT ASSESSMENTS

Replenishment Assessments will be levied on each acre-foot of water pumped in excess of each Public Agency's or Class B Participant's Adjusted Production Right. Replenishment Assessments will be in amounts equal to the cost of importing or acquiring supplemental water to recharge the Management Area. The component costs will include the cost of the water (including conveyance, transportation and energy costs, operations and maintenance costs, a reserve for replacement and other administrative costs). These assessments will be levied on a per AF of water in excess of each respective member's adjusted Base Production Right. The revenue received for the replacement component shall be placed in a separate reserve fund to be used to fund the replacement cost of the existing system. New and/or expanded facilities will be financed from other resources.

10.3.3 COLLECTIONS AND ACCOUNTS

All the collected assessments and accounts associated with the Plan will be administered by the EMWD and are subject to the policies set by the Watermaster. All payments made to the Watermaster shall be maintained in a separate restricted account established by EMWD, and all accounts shall be subject to annual independent financial audits.

All revenues and assessments shall be used exclusively to acquire supplemental water for the recharge of the management Area and for the facilities and operational and administrative expenses associated with the Plan.

10.4 PHASE I FACILITIES CONSTRUCTION AND SOBOBA SETTLEMENT FINANCING

10.4.1 EMWD CONSTRUCTION COST

The initial facilities, Phase I, shall consist of existing EMWD facilities and expansion and additions to be constructed by EMWD at a cost currently estimated at $16.12 million less public grants totaling $5.0 million, for a net cost of $11.12 million. EMWD shall finance the construction of these facilities through a bond issue or cash payment or by combination thereof. Each Public Agency shall be responsible for pro-rata repayment of the bonds through EMWD or reimbursement to EMWD (to the extent EMWD pays cash for said construction) based on that Agency's Base Production Right allocation percentage, i.e., 34.2% for LHMWD, 33.7% for EMWD, 19.6% for the City of Hemet, and 12.5% for the City of San Jacinto.

10.4.2 PAYMENTS TO SOBOBA TRIBE

In addition to the financing of the construction of Phase I facilities referred to in Section 10.4.1 above, the Soboba Settlement requires the payment of an additional $17 million to the Soboba Tribe in return for the right to use low cost MWD water delivered for the benefit of the Tribe but which the Tribe does not use and other unused Tribal water. The $17 million will be financed in the same manner as the construction of the initial Phase I facilities, i.e., by bond issue or cash payment by EMWD or a combination thereof. The $17 million obligation will be partially offset by a $10 million contribution by the United States toward the costs of constructing the Phase I facilities. Each Public Agency shall be responsible for pro-rata repayment of the bonds through EMWD or reimbursement to EMWD (for cash payment) based on that Agency's Base Production Right allocation percentage, as set out in Subparagraph (a) above.

10.4.2.1 Water Cost

The payment described above to the Soboba Tribe for the right to use low-cost MWD water delivered for the benefit of the Tribe but not used by the Tribe does not include the price of the water itself, which must be paid to MWD. Each Public Agency shall contractually agree with EMWD to pay its share of MWD's price for such water that it acquires for use to EMWD to enable EMWD to pay MWD.

10.4.3 EMWD OBLIGATION

Agreements between EMWD and each other Public Agency setting forth that Agency's financial commitment as required under Sections 10.4.1 and 10.4.2 (*citation*) above will be required as a condition precedent to EMWD's obligation to finance the facilities construction and the payment to the Tribe so as to establish a dedicated source of revenue for bond repayment or reimbursement, as appropriate. Said agreements shall also provide that, in return for said financial commitment, the Public Agency shall be entitled to: (1) share in the capacity of the Phase I facilities (those in existence and those to be constructed) and (2) share in the rights to the MWD water not used by the Tribe and other unused Tribal water, in each case based on the Agency's Base Production Right allocation percentage, as set out in Subparagraph (a) above. Each agreement with EMWD shall provide for the Agency's method of pro-rata repayment of bonds or reimbursement to EMWD, provided, however, that no Agency will be required to do so by cash payment without its consent.

10.4.4 RIGHT TO TRANSFER ENTITLEMENT TO USE FACILITIES AND/OR ENTITLEMENT TO SHARE IN RIGHTS TO WATER NOT USED BY TRIBE

Each Public Agency shall have the right to sell, lease or otherwise transfer the rights and obligations it holds to use the Phase I facilities described in Section 10.4.1 above and/or to share in the rights to the MWD water not used by the Tribe or other water not used by the Tribe described in Sections 10.4.2 and 10.4.3 above, provided that the transferee thereof shall be bound by said obligations. The foregoing notwithstanding, the Watermaster shall have the right of first refusal regarding any such transfer proposed by a Public Agency.

10.5 FUTURE CAPITAL FACILITIES

Future facilities may be required to meet the growth needs of the Management Area, which may require that a JPA or other financing conduit be formed. In either case, each Public Agency's contribution toward the cost of acquiring the added facilities shall be established by the Watermaster at the time such facilities will be needed. The use of such facilities shall be at the discretion of the Watermaster and be dedicated to replenishment activities. The foregoing shall not affect the right of a Public Agency to undertake a water supply project pursuant to Section 10.4.2 above.

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The five-member Watermaster Governing Board (Watermaster) will be composed of one elected official each from the City of Hemet, City of San Jacinto, LHMWD, and EMWD (Public Agencies) and one representative elected by the private groundwater producers (Private Water Producers). Each member of the Watermaster will have one vote and will serve until replaced by the entity (Public Agencies or the Private Water Producers) making the original appointment.

The Watermaster is responsible for administering and enforcing the provisions of the Stipulated Judgment and any subsequent instructions or orders of the Court. The implementation of the Management Plan, along with any additions or modifications as may from time to time be appropriate, and all financial matters relating to Management Plan Activities are the responsibility of the Watermaster.

This section describes how the Watermaster is expected to implement different elements of the Physical Solution outlined in the Stipulated Judgment. Information provided in this section should be used for planning purposes and is not intended to set or change any conditions imposed by the Stipulated Judgment. The timelines provided in this section should be used as guidelines and are not meant to imply any obligation to be met by the Watermaster. The Watermaster is expected to use the information provided in this section during the early years after its formation and refine, revise, or redefine the information, as it deems appropriate.

11.1 ORGANIZATION

The Watermaster will receive assistance and support from legal counsel, an Advisor, a Technical Committee (TC), and Eastern Municipal Water District (EMWD). The duties and responsibilities of each entity are outlined in subsequent sections. Figure 11.1 demonstrates the relationships between the Watermaster and its supporting entities.

Within one month of the Stipulated Judgment approval, the Private Pumpers identified as Class A and B participants are expected to develop a procedure for electing their representative. The elected officials from the Agencies and the Private Pumpers serving as the Watermaster should be identified within the first two months of Stipulated Judgment approval, and the Watermaster should conduct its first meeting at a mutually acceptable location within one month after that.

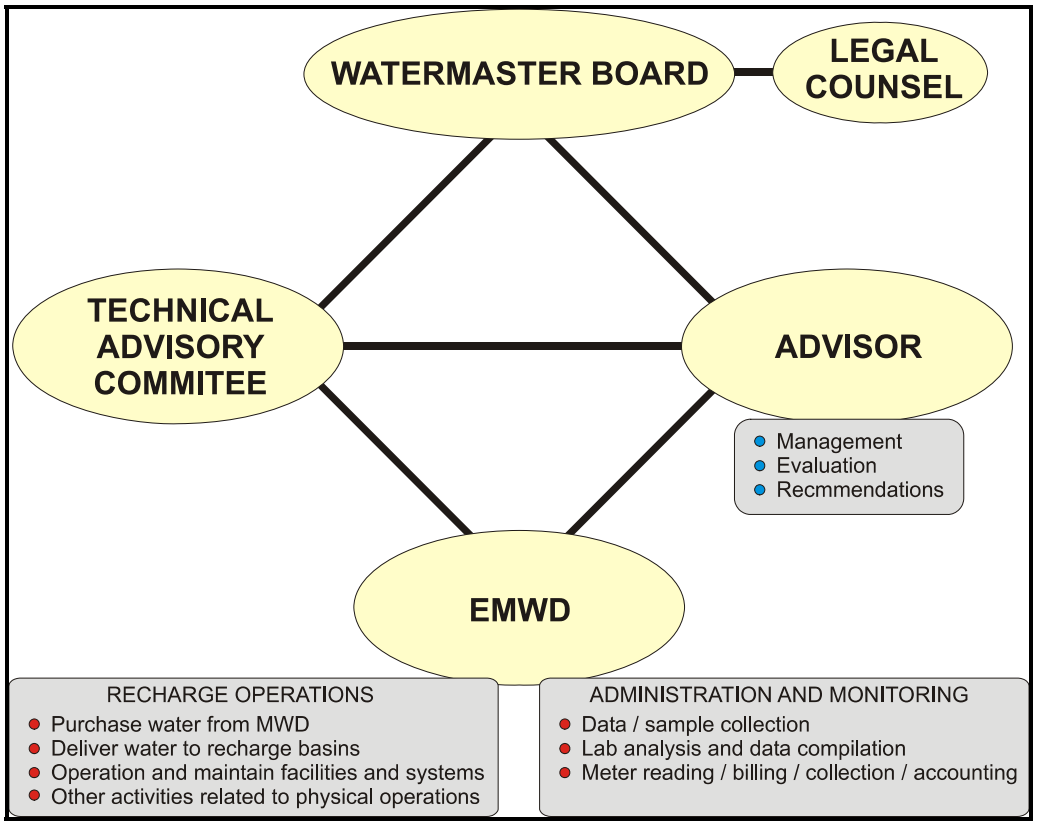


Figure 11.1 Relationships between Entities

Within three months of the Watermaster's first meeting, the Watermaster will retain the services of an independent attorney or legal firm (Legal Counsel) to provide assistance with legal matters and to provide ongoing advice and recommendations in legal areas appropriate to the Watermaster carrying out its duties

Also within three months of the Watermaster's first meeting, the Watermaster will contract with either an independent engineering firm or a qualified individual (Advisor) experienced in hydrology to evaluate and analyze the data collected by EMWD and any conclusions based on that data, and to make recommendations to the Watermaster. The Advisor will provide general coordination between the Watermaster, the Technical Committee, and EMWD with respect to their respective functions, and will also perform such executive functions as the Watermaster may direct. The Watermaster may refer any matter it chooses to any person it may select for assistance in carrying out its duties under the Judgment.

The TC will consist of managerial and technical representatives of the Agencies and Private Water Producers. The Advisor will serve as the TC chairman. The TC will provide technical assistance at the request of the Watermaster. The TC will make recommendations to the Advisor and to the Watermaster on all matters requiring four votes for Watermaster action, which are:

- Any change in the form of governance;
- Any change in voting requirements;
- Retaining the services of legal counsel and Advisor;
- Establishing, levying, increasing or decreasing all assessment amounts;
- Adopting or amending the annual budget;
- Determining the extent of overdraft and quantifying safe yield;
- Determining Adjusted Production Rights;
- Decisions regarding the financing of Supplemental Water or facilities;
- Decisions regarding ownership of facilities, other than ownership of the Phase I facilities, which will be owned by EMWD, subject to a right of use by those parties participating in the Phase I financing;
- Management policies for the Management Area; and
- Any decision that involves a substantial commitment by the Watermaster, including any contracts for conserved water.

In addition, the TC will receive all Monitoring Program and associated data from EMWD for review and evaluation. The TC members are anticipated to keep the City Councils, Agency Boards of Directors, and participating Private Pumpers informed about the Watermaster activities and the Water Management Plan's status.

Within six months of Stipulated Judgment approval, the Watermaster will prepare and adopt Rules and Regulations for its own operation as well as for the operation of the Water Management Plan and Judgment. A dispute resolution process will be included in the Rules and Regulations.

11.2 MONITORING PROGRAM IMPLEMENTATION

The Monitoring Program was initiated with the execution of the September 2003 *Agreement to Develop a Groundwater Monitoring Program in the Hemet/San Jacinto Management Area* between the Cities of Hemet and San Jacinto, EMWD, and LHMWD. Its purpose was to measure and monitor groundwater levels to assist in the accurate evaluation of conditions of overdraft and the evaluation of the operational safe yield in the Management Area. In addition to water levels, the program included water quality and production monitoring. The agreement for 2005 added surface water monitoring of San Jacinto River flows in conjunction with the U.S. Geological Survey. Funded equitably among the agencies, the Monitoring Program has been managed by EMWD. The monitoring locations currently are sampled annually for quality and are measured semi-annual for water levels. The locations are presented in Figure 11.2. These

locations may be updated based on the recommendations in the annual monitoring program as discussed later in this Section.

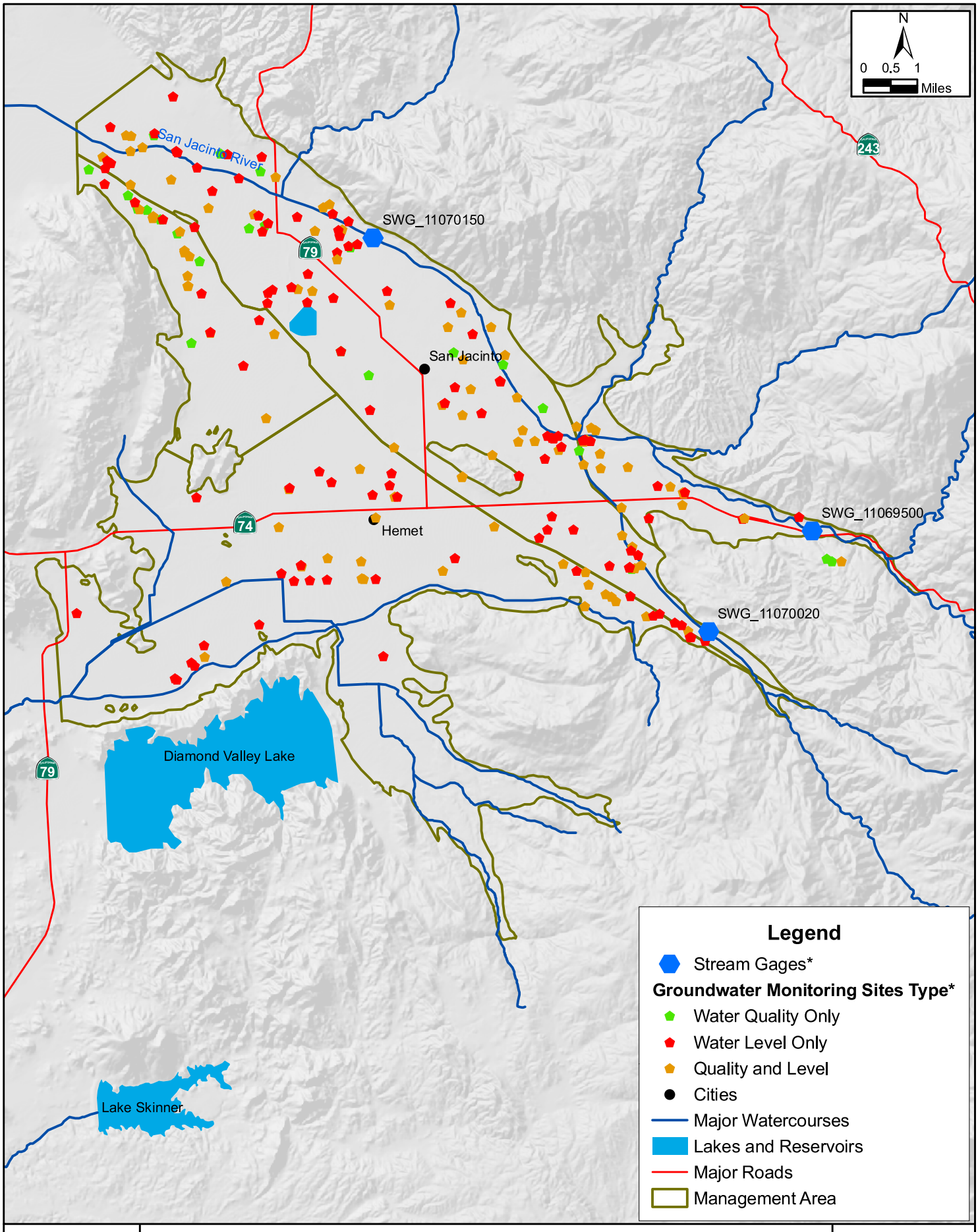
To protect groundwater supplies, an Inactive Well Capping/Sealing Program is included in the Monitoring Programs. Under this program, an inactive well or open casing will be capped/sealed at no charge to the well owner. These wells may still be used for water level and, in some cases, water quality monitoring. Priority is given to those wells that are potentially dangerous open holes (16-18" casings) or those located in areas where flooding resulting from precipitation might carry manure, fertilizers, or other contaminants into the well.

Any Agency or well owner can provide the Watermaster or Monitoring Program personnel with the location of an unused well or open casing for consideration for the Inactive Well Capping/Sealing Program.

Under a contract with the Watermaster, EMWD will lead the Monitoring Program effort. Prior to January 1st of any given year, EMWD staff will present a proposed Monitoring Program to the Advisor. The program is anticipated to include:

1. Estimated number of wells to be monitored for groundwater levels;
2. Estimated number of wells to be sampled for water quality;
3. Number of meters to be read monthly or installed or repaired;
4. Estimated number of inactive wells to be capped;
5. Any changes or variation from the previous year's activities; and
6. Estimated budget to include cost for the field activities and development of the annual report.

The Advisor will review, revise, approve or reject the proposed monitoring program and initiate the annual monitoring program before the end of January of each year. The annual Monitoring Program budget must be approved by the Watermaster before the end of February of each year. The Monitoring Program is run on a calendar year basis and each annual report and associated budget will reflect such a calendar year time period.



Stream Gages and Groundwater Monitoring Sites

Hemet / San Jacinto Water Management Plan

*Source: EMWD

October 2007

Figure 11.2

Data to be considered for collection and inclusion in the Hemet/San Jacinto Water Management Area Annual Reports to assess the status of the basins and to monitor the responses for future management activities may include, but is not limited to:

- Groundwater level monitoring results;
- Groundwater quality monitoring results;
- Groundwater production;
- Surface water flow monitoring results;
- Surface water quality;
- Surface water diversions;
- Imported water;
- Hydrologic data (rainfall and evaporation);
- Recycled water production;
- Recycled water sales/use;
- Conveyance water;
- Water conservation measures;
- Population growth and development; and
- Land use and crop mix.

EMWD will submit the Annual Hemet/San Jacinto Water Management Area Report resulting from the Monitoring Program to the Advisor for review within four months after completion of each calendar year's monitoring program. The Advisor will then provide the Watermaster with recommendations on how best to operate the Management Area as well as provide a proposed determination of Administrative and Replenishment Assessments for each agency based on previous year's activities. Within the first six years, the Watermaster, with input from its Advisor and the TC, will make a determination of the safe yield of the Management Area. Thereafter, the safe yield shall be reviewed and modified, if necessary, upon the recommendation of the TC or as the Watermaster may determine.

The Watermaster will use information provided in the Annual Hemet/San Jacinto Water Management Area Report and Advisor's recommendations to decide on how to meet the goals for the upcoming year(s).

11.3 MANAGEMENT PLANNING TOOLS

In the future, the Watermaster may want to develop or use databases and other numerical models as planning tools. EMWD maintains a RWRD. Data from the Groundwater and Surface

Water Monitoring Programs, as well as other water and groundwater-related data, are stored in this database. These data form the basis of the Hemet/San Jacinto Water Management Area Annual Reports and can be made available to the Advisor.

EMWD's groundwater flow/transport numerical model can also be made available to assist the Advisor and the Watermaster in evaluating different water resources management alternatives for future projects, for planning purposes, for analysis as in the Regional Water Quality Control Board permitting process, and for determining safe yield. The model is capable of calculating the water budget, exhibiting trends, evaluating regulatory constraints, and can be used as a planning tool. It is recommended that the model be updated every three to five years at the discretion of the Watermaster.

To use EMWD's RWRD and groundwater flow/transport numerical model, the Watermaster is anticipated to enter into a contract with EMWD to cover the Watermaster related cost of software upgrades, necessary hardware, and resources required for maintenance of these tools.

11.4 FINANCIAL ADMINISTRATION

The Watermaster is responsible for the levying, billing, and collection of all assessments provided for under the Judgment, for the payment of all costs and expenses of the Watermaster, and for the performance of accounting and related functions required in connection with performing the Watermaster's duties. The Agencies' groundwater production will be subject to Administrative and Replenishment Assessments. Class B participants are only subject to Replenishment Assessments.

The Watermaster will determine the amount of the Administrative Assessments. For the first year of implementation these assessments are set at $50 per acre-foot. The amount of the Replenishment Assessments will equal the cost of providing a like quantity of supplemental water to recharge the Management Area. The cost of providing a like quantity of water will include the costs of water, operations and maintenance costs of the replenishment system; capital recovery, and other administrative costs as defined in the Stipulated Judgment. An Administrative Assessment will be levied on each acre foot pumped by an Agency up to its adjusted base production right excluding any adjustments as outlined in the Stipulated Judgment.

In order to obtain operating funds for the Watermaster, the Agencies will advance payment of their share of the Administrative Assessments. These payments are anticipated to be paid within the first quarter of each year. Replenishment Assessments due will be determined on the basis of production during the prior calendar year, and are expected to be paid within the first

quarter of the year following the prior calendar year's production. Replenishment Assessments will be collected prior to actual recharge by the Watermaster.

In addition, the Agencies will be required to make payments as required under other obligations with EMWD, such as, Phase 1 Facilities and Construction Cost and Use, and delivery and use of recycled water agreements.

Starting with the second year, the Watermaster's invoices should reflect the balance of the Administrative and Replenishment Assessment payments from the previous year as a credit or debit on the invoices.

Within three months of Stipulated Judgment approval, the Watermaster is anticipated to contract with EMWD to perform the Watermaster's accounting functions including billing, collection, and accounting. EMWD will maintain a restricted account for such activities as the operation of the Monitoring Programs and purchase of replenishment water. In addition, EMWD will invoice the Watermaster for its share of imported water costs. EMWD's restricted accounts will be included in the Watermaster's year-end audits to be conducted in accordance with accepted accounting principles.

Funding for the monitoring program, development and use of the management planning tools, and the financial management of the accounts are anticipated to come from Administrative Assessments.

All funds collected by EMWD must be held in a segregated account and all expenses and disbursements must be separately accounted for.

11.5 STIPULATED JUDGMENT ADMINISTRATION

The Watermaster shall prepare, file with the Court, and distribute to relevant parties a Watermaster Annual Report including a summary of all activities during the preceding calendar year, an audited statement of all accounts and financial activities of the Watermaster, and a summary of extractions and replenishments as well as all other pertinent information. The Watermaster will provide the Court updated estimates of the groundwater budget, safe yield, and overdraft as required.

During the development of the Water Management Plan, a number of Agreements and MOUs were initiated among and between the Agencies. Within three months of the Stipulated Judgment approval, the Watermaster will review and re-issue the Agreements and MOUs in the name of the Watermaster if necessary and appropriate. The current MOUs are presented in Appendix H.

Upon Settlement Agreement implementation, the Watermaster will recognize the Tribal Water Rights, as set forth in the Stipulated Judgment and the applicable provisions of the Soboba Tribe Settlement Agreement.

11.6 FACILITIES AND PROJECTS

Each Agency shall continue to own its existing capital facilities for water management. However, capital facilities may be jointly constructed and owned by the Management Plan. Joint financing of such facilities may be funded by regional capital fees, loans and grants, municipal bonds, and contributions for storage by The Metropolitan Water District of Southern California or other third parties. Responsibility for the costs of any existing and future capital facility of the Management Plan should be apportioned among the Agencies based on the relative benefit to be derived by each Agency. Any Agency may propose a project to be included in the Management Plan to increase Management Area water supply. Such proposals, after evaluation by the Watermaster, shall be included or rejected. If the Watermaster chooses to reject a proposal, the proposing Agency may implement the rejected project as long as it does not significantly impact the implementation of the Management Plan and/or interfere with the ongoing production by the Agencies. The maintenance and upgrading of facilities currently owned by any Agency, and used to further the goals of the Management Plan, will be considered by the Watermaster for funding.

The Agencies have been evaluating and developing a number of programs to mitigate overdraft. The stakeholders agreed that the primary project, the core of the Physical Solution, is the IRRP. This project involves the artificial recharge of imported water into the basin along the San Jacinto River. An agreement that documents the ownership, financing, and operation of the facilities for Phase I of the IRRP is anticipated to be executed after completion of the California Environmental Quality Act (CEQA) process.

The Recycled Water In-Lieu Program identifies large agricultural pumpers in the Management Area that can use recycled water as their source of supply instead of producing groundwater. Providing recycled water to these producers will reduce the stress on groundwater resources and will reduce the community's long-term need for imported replenishment water.

The Watermaster, with assistance from the Advisor, TC, and EMWD, will develop recycled water strategies. The operational feasibility of these strategies will be assessed and determined by the Advisor and EMWD. The Advisor will recommend economically feasible projects to the Watermaster for implementation. It is anticipated that EMWD, as the sole recycled water provider in the Management Area will, own, operate and administer facilities required for these projects.

11.7 SPECIAL PROJECTS AND STUDIES

It will be necessary to conduct technical or other investigations such as hydrogeologic investigations, GIS analyses, field investigations, numerical modeling, or feasibility studies. The Watermaster may act individually or participate with other entities to conduct such investigations or to collect data necessary to accomplish the main goals of the Management Plan. In addition, any Agency may propose investigations or studies that are appropriate to the goals of the Management Plan. Such proposals, after review by the Advisor and evaluation by the Watermaster, shall either be accepted or rejected. If the Watermaster rejects a study, the proposing Agency may still implement the investigation or study so long as it does not significantly impact the implementation of the Management Plan or interfere with the ongoing activities by the Agencies.

11.8 CONSERVATION PROGRAMS

Each agency maintains its own individual Conservation Program. Additional conservation measures can be designed and implemented using Best Management Practices by the agencies and/or implemented by the agricultural producers and dairy water users. The Watermaster has the discretion to expand its involvement in local conservation programs and if appropriate, lead any collaborative conservation program amongst the agencies.

11.9 WELL CONSTRUCTION, ABANDONMENT, AND DESTRUCTION

Riverside County regulates the construction, reconstruction, abandonment, and destruction of community water supply wells, individual domestic wells, and agricultural wells. Through the offices of the Department of Environmental Health, the County is responsible for issuing permits for well drilling or abandonment.

Section 10 of the Ordinance No. 682.3 states, *"Standards for the construction, reconstruction, abandonment, or destruction of wells shall be the standards recommended in the Bulletins of the California Department of Water Resources as follows: Bulletin NO 74-81 Chapter II Water Wells, and Bulletin NO 74-90 (Supplement to Bulletin 74-81) and as these Bulletins may be amended by the State of California from time to time."*

To oversee management of the groundwater resources in the area, the Watermaster is expected to coordinate with the County of Riverside, and track new developments in the area. This will help the Watermaster to identify critical groundwater monitoring wells that are located in areas to be developed. A plan for proper abandonment and/or destruction, and replacement of the well as a monitoring well, if appropriate, will then be set in motion.

If the well is critical in providing data for the Management Area Monitoring Program, the Watermaster will work with the appropriate jurisdictional agency and the well owner to save the well for monitoring or to replace it with a new monitoring well in an area adjacent to a retention basin, park, green belt, or other community area in the vicinity of the original well location.

The Advisor, with the concurrence of the Watermaster, will arrange meetings with the Agencies to discuss and review future construction of any facilities that may be of value or interest to the Management Plan area. The Watermaster will work with the project proponent with regard to enhancing and or modifying the facilities to maximize the benefit to the Management Plan effort.

11.10 PUBLIC PARTICIPATION

The process by which interested and affected individuals, organizations, agencies and government entities are consulted and included in decision making, has been the driving force in the development of the Water Management Plan. Stakeholders in the Hemet/San Jacinto basins have recognized for several years that their groundwater basins are in a state of overdraft. The Soboba Water rights Proposal presented in February of 1995 provided the impetus for the examination of the overdraft problem. The topic of discussion of a public meeting held on December 13, 2000 was the state of the Hemet/San Jacinto groundwater basins.

EMWD sponsored community discussions in early 2001 entitled: "Groundwater Management: Avoiding Political Pitfalls", "State of the Hemet/San Jacinto Basins", and "Cooperate to Self-govern". The Principles for Water Management were drafted as the basis for a starting point to develop solutions, both for the Soboba proposal and for the overdrafted basin. The Principles were circulated to the general public in February 2001.

In June, 2001, EMWD, LHMWD, City of Hemet and City of San Jacinto signed a conjunctive management Memorandum of Understanding (MOU) with DWR. Two committees were organized to work cooperatively to address the issues. The policy committee, comprised of elected officials and staff members of the four agencies, plus local private pumpers, and a technical advisory committee with representatives from the four agencies, the private pumpers and a neutral consultant provide by DWR. The policy committee meetings are open to the public and are frequently attended by agricultural pumpers, local business owners, local residents, and tribal members, attorneys and technical consultants of the Soboba Band of Luiseño Indians.

Water Outreach Public Information Programs hosted by EMWD have been held at a local restaurant in Hemet in October 2001 and August 2002 to discuss the progress of the Groundwater and Technical Committees in the development of a Water Management Plan.

The Watermaster will continue this process of public involvement and community outreach during Management Plan implementation. Meetings of the Watermaster will be public meetings and will, therefore, be subject to the Brown Act.

11.11 GROUNDWATER MANAGEMENT PLAN COMPONENTS AND CONSISTENCY WITH THE CALIFORNIA WATER CODE

Groundwater management is the planned and coordinated local effort of sustaining the groundwater basin to meet future water supply needs. With the passage of AB 3030 in 1992, local water agencies were provided a systematic way of formulating groundwater management plans (California Water Code, Sections 10750 et seq.). AB 3030 also encourages coordination between local entities through joint-power authorities or MOUs. SB 1938, passed in 2002, further emphasized the need for groundwater management in California. SB 1938 requires AB 3030 groundwater management plans to contain specific plan components to receive state funding for water projects.

The Water Management Plan includes the seven mandatory components that are required to be eligible for the award of certain funds administered by DWR for the construction of groundwater projects or groundwater quality projects. The Plan also addresses the 12 specific technical issues identified in the California Water Code along with the seven recommended components identified in DWR Bulletin 118 (DWR 2003). Appendix I lists the required and recommended components and identifies the specific location within this Plan where the information can be found.

11.12 SCHEDULE

The Plan Implementation Schedule is shown in Table 11.1.

Phase I of the Integrated Recharge and Recovery Program is scheduled to be constructed in two phases, Phase A and Phase B. The schedule for activities related to these phases is shown in Table 11.2.

Table 11.1 Plan Implementation Schedule

Task No.	Description	Time Required	Estimated Completion
1	Retain Services of Legal Counsel	3 Mos.	Within 6 mos. of Stipulated Judgment Approval (S.J.A.)
2	Retain Services of Advisor	3 Mos.	
3	Review and Re-issue Existing Agreements and MOUs in the Name of the Watermaster if Appropriate and/or Necessary	3 Mos.	
4.	Watermaster Enter into Contract(s) with EMWD to: a) Manage/administer the Groundwater and Surface Water Monitoring Programs and prepare the *Hemet/San Jacinto Water Management Plan Annual Report* containing Monitoring Program results and related information; b) Compile all data and maintain the Regional Water Resources Database; c) Operate, maintain, and update the Groundwater Model. d) Provide Accounting Functions. e) Manage Recharge Facilities and any Other Field Operations.	3 Mos.	
6	First Watermaster Annual Report to the Court	3 Mos.	Within 14 mos. of S.J.A.
7	Develop and Adopt Rules and Regulations	3 Mos.	Within 6 mos. of S.J.A.
8	Administrative Assessment Payment	1st Quarter of Each Year	On-going
9	Replenishment Assessment Payment	1st Quarter of Each Year Following the Actual Production	On-going

Table 11.2 Phase I Project Construction

Task No.	Description	Time Required	Estimated Completion
PHASE A			
1	Environmental Process (EIR)	---	Completed
2	Land Acquisition		Within 6 mos. of Settlement Agreement Approval (S.A.A.)
3	Grant Approval, Advertising, Award	7 Mos.	
4	Extraction Well Drilling	17 Mos.	
5	Extraction Well Pump & Chlorination Equipping	12 Mos.	
6	Pump Station Modifications	12 Mos.	
PHASE B			
1	NEPA/Permitting Process	---	Before S.A.A.
2	Extraction Well Drilling	6 Mos.	Within 12 mos. of S.A.A.
3	Extraction Well Pump & Chlorination Equipping	19 Mos.	
4	Recharge Basins	5 Mos.	
5	Pipelines	5 Mos.	
6	Monitoring Wells	6 Mos.	

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APPENDIX A SETTLEMENT AGREEMENT

SOBOBA BAND OF LUISEÑO INDIANS

SETTLEMENT AGREEMENT

THIS SETTLEMENT AGREEMENT is entered into by the Soboba Band of Luiseño Indians on behalf of itself and its members (collectively, the "Soboba Tribe"); the United States of America solely in its capacity as trustee for the Soboba Tribe (the "United States"); the Eastern Municipal Water District ("EMWD"); the Lake Hemet Municipal Water District ("LHMWD"); and The Metropolitan Water District of Southern California ("MWD").

ARTICLE 1- RECITALS

1.1 The Soboba Tribe has made claims against EMWD and LHMWD (collectively, the "Local Districts") for alleged infringement of its water rights in the San Jacinto River ("River") and the Canyon Sub-basin and the Intake portion of the Upper Pressure Sub-basin associated therewith (collectively "Basin") in Riverside County, California, and for damages related to historical interference with the Soboba Tribe's rights and the unauthorized use of its water. Specifically, the Soboba Tribe alleges that the Local Districts, through their longstanding diversion of waters from the River and pumping of Groundwater from the Basin, have interfered with the Soboba Tribe's water resources and its rights to the beneficial use and enjoyment of the Reservation.

1.2 The Soboba Tribe also has filed a lawsuit against MWD styled *Soboba Band of Luiseño Indians v. Metropolitan Water District of Southern California*, United States District Court Case No. 00-04208 GAF (MANx) (the "Action"). The Action alleges that MWD, by the construction and operation of the San Jacinto Tunnel (the "Tunnel"), has interfered with the Soboba Tribe's water resources and its rights to the beneficial use and enjoyment of the Reservation.

1.3 The Parties have agreed to settle the Soboba Tribe's claims on the terms set forth in this Settlement Agreement.

1.4 MWD also contends that it has legal indemnification claims and other rights against EMWD for the Action arising out of MWD Board Resolution 3940 (EMWD's Terms of Annexation into MWD). In 1951, EMWD was created and annexed into MWD for the purposes of resolving claims that MWD's construction and operation of the Tunnel interfered with local water rights in the Basin and to obtain a supplemental supply of water for the area. The Terms of Annexation required EMWD to resolve potentially conflicting rights to the Tunnel seepage water and that MWD annually credit EMWD for the entire amount of Tunnel seepage, which MWD has done every year since 1951. In exchange for the benefits of being annexed into the MWD service area and the return of the Tunnel seepage water to EMWD, EMWD was required to defend and indemnify Metropolitan from certain claims seeking recovery for loss or injury as a consequence of the Tunnel seepage, specifically including claims brought by the Tribe. In response to the Tribe's Action, MWD tendered the defense and indemnity of the Tribe's claims to EMWD, which EMWD declined on the grounds that the Action allegedly exceeded the scope of its obligations under the Terms of Annexation. MWD subsequently filed a third party action against EMWD seeking to enforce the defense and indemnity provisions contained in the Terms of Annexation. EMWD and MWD dispute each other's contentions.

1.5 EMWD and MWD have agreed as part of this settlement to resolve their dispute over the scope of EMWD's defense and indemnity obligations to MWD reflected in the EMWD's Terms of Annexation.

NOW, THEREFORE, in consideration of the promises and agreements hereinafter set forth, the Parties agree as follows:

ARTICLE 2 - DEFINITIONS

This Settlement Agreement employs abbreviated terms that have the meanings below. To the extent that the definitions below conflict with those terms defined in other sections of the Settlement Agreement, the definitions in Article 2 shall prevail.

2.1 "Act" unless otherwise indicated, shall mean the Soboba Settlement Act approving this Settlement Agreement, attached as Exhibit A.

2.2 "Action" means the Soboba Tribe's lawsuit against MWD styled Soboba Band of Luiseño Indians v. Metropolitan Water District of Southern California, United States District Court Case No. 00-04208 GAF (MANx) and includes MWD's third party claim against EMWD.

2.3 "AFA" means acre-foot of water per annum.

2.4 "Basin" means collectively the Canyon Sub-basin and the Intake portion of the Upper Pressure Sub-basin as depicted on Exhibit B (map) and described in Exhibit C.

2.5 "Best Efforts" means that the Districts will take all commercially reasonable actions to fulfill the referenced contractual obligation.

2.6 "Canyon Sub-basin" means the groundwater basin as depicted on Exhibit B (map) and described in Exhibit C.

2.7 "Court" shall mean the Federal District Court for the Central District of California, Central Division, which has exercised jurisdiction over the Action.

2.8 "Decree Court" means the court with jurisdiction over the judgment and decree entered in accordance with this Settlement Agreement.

2.9 "Districts" means EMWD, LHMWD, and MWD.

2.10 "Effective Date" means the date on which the Secretary causes to be published in the Federal Register a statement of findings that the conditions in Section 3.1 have been fulfilled.

2.11 "EMWD" means the Eastern Municipal Water District.

2.12 "Groundwater" for the purposes of this Settlement Agreement means all water beneath the surface of the earth.

2.13 "Imported Water" means water sold by MWD to EMWD pursuant to Section 4.4 and is not intended to have the same meaning as the term "Imported Water" is used in MWD's Administrative Code.

2.14 "Intake Sub-basin" means the portion of the Upper Pressure groundwater Sub-basin as depicted on Exhibit B (map) and described in Exhibit C.

2.15 "LHMWD" means the Lake Hemet Municipal Water District.

2.16 "Local Districts" means EMWD and LHMWD.

2.17 "MWD" means The Metropolitan Water District of Southern California.

2.18 "Party" is the singular form of "Parties," which means the entities represented by the signatories to this Settlement Agreement.

2.19 "Recharge Facilities" means those facilities to be constructed by the Local Districts pursuant to Section 4.4.G of this Settlement Agreement for the purpose of recharging the Imported Water into the Basin.

2.20 "Reservation" means the Soboba Indian Reservation as depicted on Exhibit D (map), comprising approximately 5,935 acres, as established by Executive Order on June 19, 1883; thereafter expanded by Executive Orders on January 29, 1887, and December 29, 1891, the purchase of 709.65 acres known at "Tract 8" in 1911, the issuance of a trust patent for 68.9 acres in 1913, and the transfer of 880 acres pursuant to the Southern California Indian Land Transfer Act, Pub. L. No. 100-581, 102 Stat. 2946 (1988); and, thereafter modified by Executive Orders of March 22, 1886, and January 29, 1887, and the issuance of a fee patent for 32.84 acres in 1900. It does not include the 950 acres northwest of and contiguous to the Reservation known as the "Jones Ranch," purchased by the Soboba Tribe in fee on July 21, 2001, and placed into trust on January 13, 2003, nor the 278.49 acres southeast of and contiguous to the Reservation known as the "Greater Horseshoe," purchased by the Soboba Tribe in fee in five separate transactions in June and December 2001 and December 2004; nor the 478 acres north of and contiguous to the Reservation known as "Kwiili," purchased by the Soboba Tribe in fee on April 4, 2004.

2.21 "River" means the surface flow of the San Jacinto River and its tributaries from its origins in the San Jacinto Mountains into and across the Basin as shown on Exhibit B (map).

2.22 "Secretary" means the Secretary of the Interior or her designee.

2.23 "Settlement Agreement" means this document including all exhibits, which are incorporated by reference.

2.24 "Soboba Tribe" means the Soboba Band of Luiseño Indians, a body politic and federally recognized Indian tribe, and its individual members.

2.25 "Surface Water" means all surface water flows of the River.

2.26 "Terms of Annexation" means Metropolitan Resolution No. 3940 which sets forth the terms of EMWD's annexation to MWD.

2.27 "Tribal Water Right" means the Soboba Tribe's rights to water set forth in Section 4.1.

2.28 "Tunnel" means that portion of the Colorado River Aqueduct known as the San Jacinto Tunnel.

2.29 "United States," unless otherwise indicated, means the United States of America solely in its capacity as trustee on behalf of the Soboba Tribe or its members.

2.30 "Untreated Replenishment Water" means untreated water sold pursuant to the Replenishment Service program as defined by MWD's Administrative Code at sections 4104, 4114 and 4514.

2.31 "Upper Pressure Sub-basin" means the groundwater basin as depicted on Exhibit B (map).

2.32 "WMP" means the Water Management Plan that will be developed by EMWD, LHMWD, the City of Hemet, the City of San Jacinto and other Basin users, pursuant to Section 4.8.A of this Settlement Agreement, to manage the Canyon Sub-basin, the Upper Pressure Sub-basin downstream to Bridge Street, and the Hemet Basins. The principles of the Water Management Plan are attached as Exhibit E. The area covered by the Water Management Plan is depicted on Exhibit F (map) and described in Exhibit G.

ARTICLE 3 – CONDITIONS PRECEDENT AND ENFORCEMENT

3.1 This Settlement Agreement shall become enforceable, and the releases and waivers of Article 5 effective, as of the date the Secretary causes to be published in the Federal Register a statement of findings that the following conditions have been fulfilled:

A. the Act has been enacted;

B. to the extent that the Settlement Agreement conflicts with the Act, the Settlement Agreement has been revised to conform with the Act;

C. the Settlement Agreement, as so revised, and the Waivers and Releases have been executed by the Parties and the Secretary;

D. warranty deeds for the property to be conveyed in fee to the Soboba Tribe pursuant to Section 4.6 have been placed in escrow with instructions that they shall be delivered to the Soboba Tribe by close of business on the first business day following the date that all of the conditions in this paragraph have been fulfilled;

E. the Soboba Tribe and the United States have approved the WMP;

F. the Judgment and Decree attached to the Settlement Agreement as Exhibit H have been approved by the United States District Court, Eastern Division of the Central District of California, and that judgment and decree have become final and nonappealable; and

G. the Congress of the United States has appropriated the funds and the funds have been deposited in the appropriate accounts pursuant to Sections 4.5 and 4.7.

3.2 Other than to take all necessary steps to cause the events described in this Article to occur, no Party shall be required to perform any of the obligations, or be entitled to any of the benefits, under this Settlement Agreement before all conditions precedent have been fulfilled. After the fulfillment of all conditions precedent, the Parties shall be bound by all provisions of this Settlement Agreement.

3.3 If all of the conditions listed in Section 3.1 have not been fulfilled by December 31, 2007, this Settlement Agreement shall be null and void, and any consideration, together with any income earned thereon, shall be returned to the depositing entity.

ARTICLE 4 - TRIBAL WATER RIGHTS

4.1 Water Rights. The Parties ratify, confirm, declare to be valid and agree not to object to or dispute or challenge in any judicial or administrative proceedings the rights of the Soboba Tribe and the United States solely in its capacity as trustee for the Soboba Tribe, to the water rights set forth in this Section. In so doing, the Parties acknowledge that these rights are

the result of bargained for and exchanged concessions, as a result of which the Local Districts have agreed to supply water to the Soboba Tribe if it is unable, except for mechanical failure of its wells, pumps or water facilities, to produce the water to which it is entitled under this Article. Therefore, the Soboba Tribe shall have the following water rights which shall be held in trust by the United States for the benefit of the Soboba Tribe:

A. The prior and paramount right, superior to all others, to pump 9,000 AFA from the Basin for any use on the Reservation and lands now owned or hereafter acquired by the Soboba Tribe contiguous to the Reservation or within the Basin.

B. The Soboba Tribe's right to pump a total of 9,000 AFA from the Basin is without regard to whether the water was naturally or artificially recharged.

C. In the event the Soboba Tribe is unable, except for mechanical failure of its wells, pumps or water facilities, to produce from its existing wells or equivalent replacements up to 3,000 AFA production from the Canyon Sub-basin and the remainder of its Tribal Water Right from the Intake Sub-basin, subject to Section 4.3.A, the Local Districts shall deliver any shortage to the Soboba Tribe. Any shortage shall be delivered at such locations as the Soboba Tribe and the Local Districts may agree, or if there is no agreement, at the wellheads where the shortage occurred. Such water may be supplied from Local District wells in either the Canyon or Intake Sub-basins, or from other sources. For any water delivered pursuant to this paragraph, the Soboba Tribe shall pay an acre-foot charge equal to its then current cost of production, and any avoided cost of treatment, from the wells where the shortage occurred, assuming pumping lifts equal to the Soboba Tribe's averages in the respective Sub-basins over the preceding ten years.

4.2 Water Quality. Recharged water placed in the Canyon Sub-basin by Local Districts and/or the WMP and any replacement water delivered to the Soboba Tribe pursuant to Section 4.3.C shall conform to all applicable State water quality regulations and, without prior written approval from the Soboba Tribe, shall neither exceed (1) any Federal or State of California primary or secondary drinking water standards (except with respect to recharged water, turbidity, color, or coliform bacteria) nor (2) 0.3 milligrams per liter (mg/l) boron or 0.05

mg/l lithium. Recharged water placed in the Intake Sub-basin by EMWD, LHMWD, and/or the WMP shall conform to all applicable State water quality regulations. Nothing in this paragraph shall affect the water quality obligations assumed by Metropolitan for Imported Water set forth in Section 4.4.

4.3 Soboba Tribe's Water Use. Beginning on the Effective Date, the Soboba Tribe's right to pump groundwater in the exercise of its Tribal Water Right shall be subject to the following provisions:

A. The Soboba Tribe agrees to limit its exercise of the Tribal Water Right to 4,100 AFA for a period of fifty (50) years commencing with the Effective Date, according to the schedule set forth in Exhibit I to this Settlement Agreement. Should the Soboba Tribe during that period identify a need for water in addition to the Schedule set forth in Exhibit J, the Soboba Tribe shall have the right to purchase water from the WMP at the rate then being charged to the WMP's municipal producers.

B. Any use of the Tribal Water Right by an individual member of the Soboba Tribe shall be satisfied out of the water resources provided to the Soboba Tribe in this Settlement Agreement.

C. In addition to the limitation in Section 4.3.A, the Soboba Tribe may enter into contracts and options to lease, contracts and options to exchange, or contracts and options to forbear the use of the Tribal Water Right or postpone undertaking new or expanded water uses, provided that any such contract or option for a term greater than five years shall require the approval of the Secretary. Any such water thereby made available to others shall only be used by participants in, or other users within the area of, the WMP. No contract shall be for a term exceeding one hundred (100) years, nor shall any contract provide for permanent alienation of any portion of the Tribal Water Right.

4.4 Purchase of Imported Water [see definition of Imported Water in Section 2.13 of this Settlement Agreement]. In order to provide water to the Soboba Tribe and to reduce the overdraft of the Basin, EMWD and MWD agree to enter into a contract pursuant to which MWD

will sell and EMWD on behalf of the WMP will purchase the Imported Water under the following terms:

A. Price. The Imported Water will be sold by MWD to EMWD at the then prevailing service rate charged by MWD for Untreated Replenishment Water, which rate is reflected in MWD's Administrative Code at section 4401(a)(2). As of the date this Settlement Agreement is signed by MWD, the service rate for such water is $233 per acre foot. Changes in the rates charged for Imported Water shall be effective the same date that the new rates for Untreated Replenishment Water become applicable to MWD's member agencies. Should MWD ever discontinue the delivery of Untreated Replenishment Water, the service rate for water supplied pursuant to this contract shall initially be determined by taking the last published service rate for Untreated Replenishment Water and charged to EMWD under this contract. Thereafter, the rate for Imported Water would continue to be adjusted on the same percentage basis as MWD's service rate for the non-interruptible untreated water deliveries to its member agencies, which adjustments shall become effective on the same date that the new service rates become applicable to MWD's member agencies.

B. Use. For purposes of the Imported Water only, MWD releases EMWD from all covenants that now, or may in the future, require that water purchased at the service rate for Untreated Replenishment Water be left in the ground or otherwise not used for any period of time.

C. Duration. The contract shall commence upon the Effective Date and will expire on December 31, 2035. EMWD and MWD agree to negotiate in good faith a possible extension of this water sale contract for an additional period which, when added to the original term expiring on December 31, 2035, would provide for a total term of 50 years. In determining whether or not to extend the term of this contract for this additional period, MWD will consider the current status of its replenishment water program, the status of MWD's State Water Project contract, the implementation of this Settlement Agreement, and any other information that MWD deems relevant to the possible extension of the water sale contract. Nothing in this paragraph

shall be construed to require MWD to extend the water sale contact.

D. Water Quality. Water sold by MWD pursuant to this contract shall be of a quality that is consistent with MWD's operational and water quality goals. MWD agrees to make Best Efforts to meet water quality objectives set by the Santa Ana Regional Water Quality Control Board for recharged water being put into the Basin. MWD takes no risks associated with any discrepancy between the water quality obligations assumed by MWD pursuant to this paragraph and water quality standards applicable to recharged water set by the Santa Ana Regional Water Quality Control Board or other regulatory body.

E. Deliveries. Deliveries under this contract shall not begin until the Effective Date. Once deliveries are commenced, MWD shall use Best Efforts to deliver 7,500 AFA for the duration of the contract based upon 15-year averages. Annual deliveries shall be calculated on a January 1 to December 31 calendar year and shall be pro rated for any portion of a year during which the contract is in force. MWD reserves the right to deliver water at any time of the year. MWD shall give EMWD advance notice of Imported Water deliveries as provided for in MWD's then current Administrative Code and implementing guidelines for replenishment water deliveries, which presently is reflected in section 4514(c) of MWD's Administrative Code.

F. Point of Delivery. Deliveries shall be made by MWD to EMWD at the connection known as EM-14 or, upon mutual agreement of MWD and EMWD, at one or more additional existing or future connections. The Parties acknowledge that the suspension or termination of deliveries to EM-14 may, at any time, as determined by MWD's Chief Executive Officer, be required to meet MWD's operational needs. If deliveries to this location are suspended or terminated, then EMWD and MWD agree to negotiate in good faith to identify an alternative delivery point or points and, if MWD and EMWD are unable to reach agreement, the dispute shall be resolved by the Decree Court.

G. Recharge Facilities. The Local Districts, through the WMP, shall construct, operate, and maintain facilities for artificial Groundwater recharge and banking of the Imported Water. Said facilities shall be sufficient to accommodate a flow rate of 42 cubic feet per second

and to store up to 40,000 acre feet of Imported Water in the Basin. MWD shall have a paramount right to use capacity in the Recharge Facilities sufficient to accommodate a flow rate of 42 cubic feet per second and a paramount right to store up to 40,000 acre feet of Imported Water to meet its obligations under this Settlement Agreement, provided that MWD's sole remedy if the required storage capacity is not made available is to reduce its obligation by the amount of water that it was prepared but unable to deliver due to the lack of storage capacity. MWD's obligations under this Section 4.4 shall not arise until the Recharge Facilities are capable of meeting the capacity and storage requirements set forth in this paragraph.

H. Postponed Deliveries. EMWD shall have the right to postpone deliveries during periods when the Recharge Facilities are not capable of meeting the capacity and storage requirements set forth in Section 4.4.G, provided that each of the following four conditions are met: (i) the inability to meet capacity and storage requirements is the result of events beyond the control of the Local Districts and/or the WMP; (ii) the inability to meet capacity and storage requirements is not the result of negligence on the part of the Local Districts and/or the WMP; (iii) the inability to meet capacity and storage requirements is not the result of water quality limitations that are more restrictive than those established pursuant to Section 4.4.D, and (iv) that the Local Districts use Best Efforts to make necessary repairs and/or take other actions necessary to make the Recharge Facilities fully operational.

(1) If the conditions for postponed deliveries are met as required herein, MWD shall make up such deferred deliveries at a later time, to the extent that MWD has Untreated Replenishment Water available.

(2) If the conditions for postponed deliveries are not met as required herein, then MWD's obligation to deliver water shall be reduced by the amount of water that MWD was prepared to deliver, subject to the 42 cubic feet per second maximum flow rate, and the existence of unused storage capacity up to the 40,000 acre-foot maximum.

I. Pre-Deliveries. MWD shall have complete discretion concerning use of the 40,000 acre feet of storage capacity for the pre-delivery of Imported Water, including the right

not to use such capacity. As such, MWD makes no commitments to pre-deliver any amount of Imported Water.

4.5 Funding for Infrastructure. In accordance with the Act, the United States shall establish in the Treasury of the United States a fund in the amount of $10,000,000, managed by the Secretary of the Interior, which may be drawn upon by EMWD to pay or reimburse costs associated with constructing, operating, and maintaining that portion of the Recharge Facilities necessary to accommodate deliveries of the Imported Water.

4.6 Land Transfer.

A. EMWD Property. In settlement of the Action, EMWD shall place into escrow a warranty deed conveying to the Soboba Tribe in fee all of the property presently owned by EMWD at Domenigoni Parkway and Highway 79, consisting of approximately 106 acres which is described and illustrated in Exhibit J to this Settlement Agreement. The escrow instructions shall provide that the warranty deed shall be delivered to the Soboba Tribe by close of business on the first business day following the Effective Date.

B. MWD Property. In settlement of the Action, MWD shall place into escrow a warranty deed conveying to the Soboba Tribe in fee property presently owned by MWD at Domenigoni Parkway and Patterson Avenue, consisting of approximately 21.7 acres which is described and illustrated in Exhibit K to this Settlement Agreement. The escrow instructions shall provide that the warranty deed shall be delivered to the Soboba Tribe by close of business on the first business day following the Effective Date.

C. The Secretary shall accept into trust for the benefit of the Tribe the lands conveyed to the Tribe pursuant to this Section.

D. Use of Property. Management and development by the Soboba Tribe of the lands transferred by this paragraph shall comply with all applicable Federal law. Any regulation by the Soboba Tribe of the environment on, under or above such lands that impacts MWD's operations, including but not limited to its operations related to Diamond Valley Reservoir, shall be consistent with, and no more stringent than, comparable regulation by the United States and the

State of California.

4.7 Development Funds.

A. Local Districts. No later than 120 days after the Effective Date and before any funds are released to the Local Districts under Section 4.5, the Local Districts shall pay to the Soboba Tribe the sum of $17,000,000 plus interest at the average daily prime rate (as reported by the Wall Street Journal) plus two and one-quarter percent (2.25%) per annum from the Effective Date until paid. These funds are determined to be non-trust funds and shall be managed by the Soboba Tribe in its sole discretion. The United States shall have no responsibility with respect to the funds provided to the Soboba Tribe pursuant to this paragraph.

B. United States. In accordance with the Act, the United States shall establish in the Treasury of the United States a trust fund in the amount of $11,000,000, managed by the Secretary of the Interior in accordance with the American Indian Trust Fund Management Reform Act of 1994 (25 U.S.C. 4001 et seq.) and this Settlement Agreement. There shall be no expenditures from the trust fund until the conditions in Section 3.1 are fulfilled.

(1) Investment of the Fund**.** The Secretary shall invest amounts in this fund in accordance with the Act of April 1, 1880 (21 Stat. 70, ch. 41, 25 U.S.C. 161), the first section of the Act of June 24, 1938 (52 Stat. 1037, ch. 648, 25 U.S.C. 162a), and this paragraph.

(2) Fund Uses. This fund may be drawn upon by the Soboba Tribe with the approval of the Secretary to pay or reimburse costs associated with constructing, operating, and maintaining water and sewage infrastructure or other water-related development projects.

4.8 Other Terms.

A. The Local Districts, with the cooperation of other Groundwater producers in the Basin, shall develop and implement a WMP for the Basin that will address the current Basin overdraft, and recognize and take into account the Tribal Water Right. The WMP shall not be final or deemed effective for the purposes of this Settlement until it is approved by the Soboba Tribe and the United States. No implementation or subsequent modification of the WMP shall threaten or adversely affect the rights of the Soboba Tribe hereunder, and the Soboba Tribe and

the United States reserve the right under the continuing jurisdiction of the Decree Court to litigate any such issue.

B. EMWD will credit to the Soboba Tribe the sum of $1,000,000 to be deducted from the cost of water and sewage financial participation fees (connection fees) and similar fees charged by EMWD for any property owned by the Soboba Tribe within EMWD's then existing service area for which service is sought pursuant to an agreement for service between the Soboba Tribe and EMWD. The Soboba Tribe and EMWD agree to negotiate in good faith concerning any future agreement for service which shall be funded in whole or in part by the credit established pursuant to this paragraph.

C. LHMWD will make available for habitat preservation and/or environmental mitigation purposes property it owns in the San Jacinto River bed, consisting of approximately 12 acres which is described and illustrated in Exhibit L to this Settlement Agreement. This property shall be used for habitat preservation and/or environmental mitigation to assist in meeting the requirements of applicable Federal and State environmental laws relating to the Recharge Facilities.

D. In consideration for the benefits received under this Settlement Agreement, the Soboba Tribe shall make available, without transfer of title, up to 98 acres of land for habitat preservation and/or environmental mitigation to assist in meeting the requirements of applicable Federal and State environmental laws relating to the Recharge Facilities. The area from which the Soboba Tribe, in consultation with the United States Fish and Wildlife Service, will select the land to be used for these purposes is described and illustrated in Exhibit M of this Settlement Agreement.

E. The Soboba Tribe agrees to provide the Local Districts with all information reasonably available to the Soboba Tribe that the Local Districts and the Soboba Tribe agree is required to implement this Settlement Agreement and the WMP.

F. MWD shall not be joined in any legal proceeding to enforce the Tribal Water Right described in Sections 4.1 through 4.3 or which concerns the duties and obligations

reflected at Section 4.8, paragraphs A through E, unless said proceeding relates to MWD's failure to perform its obligations to deliver water set forth in Section 4.4.

ARTICLE 5 - RELEASES AND WAIVERS

5.1 Soboba Tribe

A. The Soboba Tribe, on behalf of itself and its members, and the United States solely in its capacity as trustee for the Tribe releases EMWD, LHMWD, and MWD for:

(1) All past, present and future claims to Surface and Groundwater rights for the Reservation, from time immemorial through the Effective Date and anytime thereafter;

(2) All past, present and future claims for injury of any kind, whether to person, property, or other right or interest, arising from, or in any way related to, interference with Surface and Groundwater rights and resources of the Reservation, including, but not limited to, all claims for injury to the Soboba Tribe's use and enjoyment of the Reservation, economic development, religion, language, social structure and culture, and injury to the natural resources of the Reservation, from time immemorial through the Effective Date;

(3) All past, present and future claims for injury of any kind, whether to person, property, or other right or interest, arising from, or in any way related to, continuing interference with Surface and Groundwater rights and resources of the Reservation, including the full scope of claims defined in Section 5.1.A(2), to the extent that such continuing interference began prior to the Effective Date, from time immemorial through the Effective Date and anytime thereafter;

(4) All past, present and future claims for injury of any kind, whether to person, property, or other right or interest, arising from, or in any way related to, seepage of water into the Tunnel, including the full scope of claims defined in Section 5.1.A(2), from time immemorial through the Effective Date and anytime thereafter.

B. The Soboba Tribe, on behalf of itself and its members, releases the United States for:

(1) All claims described in Section 5.1.A(1)-(4);

(2) All past, present and future claims for failure to acquire or develop water rights

and resources of the Reservation from time immemorial through the Effective Date and anytime thereafter;

(3) All past, present and future claims for failure to protect water rights and resources of the Reservation from time immemorial through the Effective Date, and any past, present and future claims for any continuing failure to protect water rights and resources of the Reservation, from time immemorial through the Effective Date and, to the extent that such continuing failure to protect began before the Effective Date, anytime thereafter;

(4) All past, present and future claims arising from the failure of any non-federal Party to fulfill the terms of this Settlement Agreement at anytime.

(5) All past, present, and future claims arising out of the negotiation of this Settlement Agreement or the negotiation and enactment of the Act, or any specific terms or provisions thereof, including but not limited to the Soboba Tribe's consent to limit the number of participant parties to this Settlement Agreement.

C. The Soboba Tribe, on behalf of itself and its members, expressly preserves as against all Parties all rights and remedies relating to:

(1) The enforcement of this Settlement Agreement;

(2) The infringement of any water rights arising under Federal or State law which may be appurtenant to property, other than the Reservation, that is now owned or hereafter acquired by the Soboba Tribe, excepting claims identified in Section 5.1.A(4), which relate to Tunnel seepage, and any challenge to approved portions of the WMP.

D. The Soboba Tribe agrees to defend, indemnify, and hold harmless EMWD, LHMWD, MWD, and the United States for any claim seeking damages or other form of relief based upon the rights released by the Soboba Tribe in Section 5.1.A and B, and all of their respective subparts.

5.2 EMWD

A. EMWD shall release LHMWD, MWD, the Soboba Tribe, and the United States from:

(1) All past and present claims arising from or in any way related to the claims released by the Soboba Tribe and the United States solely in its capacity as trustee for the Soboba Tribe in Section 5.1, A and B, and all of their respective subparts; and

(2) All past and present claims arising from, or in any way related to, interference with EMWD's Surface and Groundwater rights under Federal or State law from time immemorial through the Effective Date, including, but not limited to, all rights originally belonging to EMWD's predecessors and/or otherwise acquired by EMWD prior to the Effective Date .

B. Notwithstanding the dispute between EMWD and MWD over the scope of EMWD's defense and indemnity obligations reflected in Section 8 of Resolution 3940 (the Terms of Annexation) or the language of Section 8, EMWD shall defend and indemnify MWD against all demands, claims, suits, or other administrative or legal proceedings arising from, or in anyway connected to, the infiltration of water into the Tunnel. This obligation shall apply irrespective of when the claim arose or the alleged infringement, harm, or injury occurred.

C. EMWD expressly preserves all rights and remedies relating to:

(1) As against all Parties, the enforcement of this Settlement Agreement;

(2) As against all Parties, the infringement of any water rights arising under State law acquired in the future by EMWD; and

(3) As against MWD, the Terms of Annexation, except as expressly agreed to in Section 5.2.B.

5.3 LHMWD

A. LHMWD shall release EMWD, MWD, the Soboba Tribe, and the United States from:

(1) All past and present claims arising from or in any way related to the claims released by the Soboba Tribe and the United States solely in its capacity as trustee for the Soboba Tribe in Section 5.1.A and B, and all of their respective subparts; and

(2) All past and present claims arising from, or in any way related to, interference

with LHMWD's Surface and Groundwater rights under Federal or State law from time immemorial through Effective Date.

B. LHMWD expressly preserves all rights and remedies relating to:

(1) As against all Parties, the enforcement of th is Settlement Agreement; and

(2) As against all Parties, the infringement of any water rights arising under State law acquired in the future by LHMWD.

5.4 MWD

A. MWD shall release EMWD, LHMWD, the Soboba Tribe, and the United States from:

(1) All past and present claims arising from or in any way related to the claims released by the Soboba Tribe and the United States solely in its capacity as trustee for the Soboba Tribe in Section 5.1.A and B, and all of their respective subparts; and

(2) All past and present claims arising from, or in any way related to, interference with MWD's Surface and Groundwater rights under Federal or State law from time immemorial through the Effective Date .

B. MWD expressly preserves all rights and remedies relating to:

(1) As against all Parties, the enforcement of this Settlement Agreement;

(2) As against all Parties, the infringement of any water rights arising under State law acquired in the future by MWD; and

(3) As against EMWD, the Terms of Annexation, except as expressly agreed to in Section 5.2.B.

5.5 All Parties Release of Unknown Claims.

A. Each Party acknowledges and agrees that certain of the releases reflected in Sections 5.1 through 5.5 apply to all claims whether known or unknown to the releasing Party.

B. Each Party certifies that it has read the following provisions of California Civil Code Section 1542:

"A general release does not extend to claims which the creditor does not know or suspect

to exist in his favor at the time of executing the release, which if known by him must have materially affected his settlement with the debtor."

C. Each Party waives the application of California Civil Code Section 1542. In doing so, each Party acknowledges that it is consciously releasing claims that may exist as of the date of this release but which it does not know exist, and which, if known, would materially affect its decision to execute this Settlement Agreement, regardless of whether the Parties' lack of knowledge is the result of ignorance, oversight, error, negligence, or any other cause.

5.6 Waiver of Sovereign Immunity. If any Party to this Settlement Agreement brings an action or other proceeding in any court of the United States relating only and directly to the interpretation or enforcement of the Act or the Settlement Agreement and names the United States or the Soboba Tribe as a party, the United States, the Tribe, or both, may be joined in any such action, and any claim by the United States or the Tribe to sovereign immunity from the action is waived, other than with respect to claims for monetary awards, for the limited and sole purpose of such interpretation or enforcement.

ARTICLE 6- ADMINISTRATION AND OTHER CONSIDERATIONS

6.1 Disclaimer. Nothing in this Settlement Agreement shall be construed as establishing any standard to be used for the quantification of Federal reserved rights, aboriginal claims, or any other Indian claims to water or lands in any judicial or administrative forum or proceeding. Nothing in this Settlement Agreement shall be construed to quantify or otherwise affect the water rights, claims or entitlements to water of any California tribe, band or community other than the Soboba Tribe.

6.2 Evidentiary Effect of Negotiations. This Settlement Agreement has been arrived at in the process of good faith negotiation for the purpose of resolving legal disputes, including pending litigation, and all Parties agree that no conduct, statements, offers, or compromises made in the course thereof shall be construed as admissions against interest or be used in any legal forum or proceeding other than one for approval, confirmation, interpretation, or enforcement of this Settlement Agreement.

6.3 Authorship. The Parties agree that this Settlement Agreement reflects the joint drafting efforts of all Parties. In the event that any dispute, disagreement, or controversy arises regarding this Settlement Agreement, the Parties shall be considered joint authors and no provision shall be interpreted against any Party because of authorship.

6.4 Authorization to Execute. Each Party represents and warrants that she or he is authorized to execute this Settlement Agreement on behalf of the respective Parties to this Settlement Agreement and does so freely and voluntarily.

6.5 Effect of Execution by the Districts. Execution of this Settlement Agreement by the Districts signifies that provisions of this Settlement Agreement affecting the Districts have been approved by their respective Boards of Directors, and these agencies assume the obligations of and are entitled to the benefits of this Settlement Agreement.

6.6 No Inducements. Each Party acknowledges and represents that in executing this Settlement Agreement it has not relied upon any inducements, promises, or representations made by the other Parties which are not reflected in this Settlement Agreement.

6.7 Advice of Counsel. Each Party warrants and represents that, in executing this Settlement Agreement, it has relied upon legal advice from counsel of its choice; that the terms of this Settlement Agreement have been read and its consequences have been completely explained to it by counsel; and that it fully understands the terms of this Settlement Agreement.

6.8 Contingent on Appropriation of Funds. The expenditure or advance of any money or the performance of any obligation by the United States under this Settlement Agreement is contingent upon appropriation of funds therefor. If funds are not appropriated, the United States shall accrue no liability.

6.9 Officials Not to Benefit. No member of or delegate to Congress or Resident Commissioner shall be admitted to any share or part of this Settlement Agreement or to any benefit that may arise from this Settlement Agreement. This restriction shall not be construed to extend to this Settlement Agreement if made with a corporation or company for its general benefit.

6.10 Counterparts. This Settlement Agreement may be signed in counterparts by one or more of the Parties, and those counterparts, when taken together, shall have the same force and effect as if a single, original document had been signed by all the Parties.

6.11 Jurisdiction. The Decree Court retains jurisdiction over the Judgment and Decree and the Settlement Agreement.

6.12 Governing Law. This Settlement Agreement shall be construed in accordance with Federal laws and where appropriate the laws of the State of California.

6.13 Successors and Assigns. This Settlement Agreement and the attached waivers and agreements shall, unless otherwise indicated, be binding on and inure to the benefit of the Parties, and their respective successors and assigns.

6.14 Integration. This Settlement Agreement incorporates all the exhibits and sets forth the entire agreement of the Parties with respect to the subject matter hereof, with the exception that EMWD and MWD have resolved certain rights and obligations by way of a Partial Settlement Agreement dated November 14, 2001 which shall remain binding on those two Parties only. This Settlement Agreement may be amended only by written agreement executed by the Parties.

ARTICLE 7- NOTICE AND SIGNATURES

7.1 Notices. Any notice or other communication given under this Settlement Agreement must be in writing and delivered by overnight courier service or certified mail, return receipt requested, postage prepaid and properly addressed to the Parties at the addresses listed below (or to any other or further addresses the Parties may subsequently designate by notice in this manner). All these notices and communication shall be effective when delivery to the required recipient is completed in accordance with this paragraph:

To the Soboba Tribe:

Chairperson
Soboba Band of Luiseño Indians
P.O. Box 487
San Jacinto, CA 92581

To the United States of America:

Asst. Secretary for Indian Affairs
U.S. Department of the Interior
1849 C St. NW 4104 MIB
Washington, DC 20240-0001
Chief, U.S. Dept. of Justice
Indian Resources Section
P.O. Box 44378
L'Enfant Plaza Station Washington, DC 20026-4378

cc: Regional Director
Bureau of Indian Affairs
Pacific Region
2800 Cottage Way
Sacramento, CA 95825

To EMWD:

General Manager
Eastern Municipal Water District
P.O. Box 8300
Perris, CA 92572-8300

To LHMWD:

General Manager
Lake Hemet Municipal Water District
2480 East Florida Avenue
P.O. Box 5039
Hemet, CA 92544

To MWD:

Chief Executive Officer
Metropolitan Water District of Southern California
P.O. Box 54153
Los Angeles, California 90054-0153

General Counsel
Metropolitan Water District of Southern California
P.O. Box 54153
Los Angeles, California 90054-0153

IN WITNESS WHEREOF, the Parties have executed this Settlement Agreement on the day and year written below.

SOBOBA BAND OF LUISEÑO INDIANS

Date: _____

By:_____
Robert J. Salgado Sr., Chairman

THE UNITED STATES OF AMERICA

Date: _____ By:_____

THE EASTERN MUNICIPAL WATER DISTRICT

Date: _____ By:_____
Randy A. Record, President

THE LAKE HEMET MUNICIPAL WATER DISTRICT

Date: _____ By:_____
Joseph D. Van Sickle, President

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Date _____ By:_____
Jeffrey Kightlinger, General Manager

EXHIBITS TO SETTLEMENT AGREEMENT

A. Soboba Settlement Act

B. Map of the Basin and San Jacinto River

C. Description of the Basin

D. Map of the Soboba Reservation

E Principles for Water Management

F. Map of the Water Management Plan Area

G. Description of the Water Management Plan Area

H. Judgment and Decree

I. Soboba Tribe's Water Development Schedule

J. Description of EMWD Property

K. Description of MWD Property

L. Description of LHMWD Property

M. Map of Potential Soboba Reservation Lands for Habitat Preservation and/or Environmental Mitigation

SEC. 1. SHORT TITLE.

This Act may be cited as the 'Soboba Band of Luiseño Indians Settlement Act'.

SEC. 2. FINDINGS AND PURPOSES.

(a) FINDINGS.– The Congress finds the following–

(1) The Soboba Band of Luiseño Indians is a federally-recognized Indian tribe whose Reservation of approximately 6,000 acres, extending east and north from the banks of San Jacinto River in Riverside County, California, was created by an Executive Order of June 19, 1883, and enlarged and modified by subsequent Executive Orders, purchases, and an Act of Congress.

(2) The Tribe's water rights have not been quantified, and the Tribe has longstanding unresolved claims for interferences with the water resources of its Reservation, which the Tribe maintains have rendered much of the Tribe's Reservation useless for habitation, livestock, or agriculture. On April 20, 2000, the Tribe filed a lawsuit against The Metropolitan Water District of Southern California for interference with the Tribe's water resources and damages to its Reservation allegedly caused by Metropolitan's construction and operation of the San Jacinto Tunnel, which is part of the Colorado River Aqueduct. The lawsuit, styled *Soboba Band of Luiseño Indians v. Metropolitan Water District of Southern California*, No. 00-04208 GAF (MANx), is pending in the United States District Court for the Central District of California.

(3) The Tribe also has made claims against Eastern Municipal Water District and Lake Hemet Municipal Water District, located adjacent to the Reservation, seeking to secure its water rights and damages arising from alleged past interference with the Tribe's water resources.

(4) Recognizing that the final resolution of its water rights and claims through litigation will take many years and entail great expense to all parties, continue to limit the Tribe's access to water with economic, social, and cultural consequences to the Tribe, prolong uncertainty as to the availability of water supplies, and seriously impair the long-term economic planning and development of all parties, the Tribe and non-Indian entities have sought to settle their water-related disputes and reduce the burdens of litigation.

(5) After negotiations, which included participation by representatives of the Tribe, the United States, The Metropolitan Water District of Southern California, Eastern Municipal Water District, and Lake Hemet Municipal Water District, the parties have entered into a Settlement Agreement to determine the Tribe's water rights, resolve all of its claims for interference with the water resources of, and damages to, its Reservation, and provide for the construction of water projects to facilitate the exercise of the Tribe's rights.

(6) Pursuant to the Settlement Agreement, Eastern Municipal Water District and Lake Hemet Municipal Water District acknowledge and assure the Tribe's prior and paramount right, superior to all others, to pump 9,000 acre-feet of water annually from the San Jacinto River basin. To provide water to the Tribe and to

reduce the overdraft of the basin, the two water districts and The Metropolitan Water District of Southern California will contract to import and recharge supplemental water supplies into the basin. The water districts also will make substantial additional contributions to the settlement, including the conveyance of certain replacement lands and economic development funds to the Tribe, to carry out the Settlement Agreement's provisions.

(7) It is appropriate that the United States participate in the implementation of the Settlement Agreement, and contribute funds to enable the Tribe to use its water entitlement in developing its Reservation, and to assist the neighboring non-Indian entities in the construction, operation, and maintenance of the facilities required to recharge the imported water.

(b) PURPOSES.– The purposes of this Act are–

(1) to approve, ratify, and confirm the Settlement Agreement entered into by the Tribe and non-Indians entities;

(2) to authorize and direct the Secretary of the Interior to execute and perform the Settlement Agreement and related waivers;

(3) to authorize the actions, agreements, and appropriations as provided in the Settlement Agreement and this Act.

SEC. 3. DEFINITIONS.

In this Act–

(1) RESTORATION FUND.– The term 'Restoration Fund' means the San Jacinto Basin Restoration Fund established by section 6 of this Act.

(2) DEVELOPMENT FUND.– The term 'Development Fund' means the Soboba Band of Luiseño Indians Water Development Fund established by section 7 of this Act.

(3) RESERVATION.– The term 'Reservation' means the Soboba Indian Reservation created by an Executive Order dated June 19, 1883, and enlarged and modified by subsequent Executive Orders, purchases, and an Act of Congress, excluding the 950 acres northwest of and contiguous to the Reservation known as the "Jones Ranch," purchased by the Soboba Tribe in fee on July 21, 2001, and placed into trust on January 13, 2003, the 129.19 acres southeast of and contiguous to the Reservation known as the "Horseshoe Properties," purchased by the Soboba Tribe in fee in four separate transactions in June and December 2001, and the 478 acres north of and contiguous to the Reservation known as "Kwiili," purchased by the Soboba Tribe in fee on April 4, 2004.

(4) SECRETARY.– The term 'Secretary' means the Secretary of the Interior or her designee.

(5) SETTLEMENT AGREEMENT.– The term 'Settlement Agreement' means that agreement dated _____, 2004, together with all exhibits thereto. The parties to the Settlement Agreement are the Soboba Band of Luiseño Indians and its members, the United States on behalf of the Tribe and its members, The

Metropolitan Water District of Southern California, Eastern Municipal Water District, and Lake Hemet Municipal Water District.

(6) TRIBE, SOBOBA TRIBE, or SOBOBA BAND OF LUISEÑO INDIANS.– The terms 'Tribe', 'Soboba Tribe', or 'Soboba Band of Luiseño Indians' means the body politic and federally recognized Indian tribe, and its members.

(7) WATER MANAGEMENT PLAN.– The term 'Water Management Plan' means the plan, approved by the Soboba Tribe and the Secretary, developed pursuant to Section 4.8, paragraph A of the Settlement Agreement to resolve the overdraft of the San Jacinto basin.

SEC. 4. RATIFICATION OF SETTLEMENT AGREEMENT; AUTHORIZATION.

(a) IN GENERAL.– The United States hereby approves, ratifies, and confirms the Settlement Agreement, except to the extent it conflicts with the provisions of this Act, and consents to be made a party to the pending action described in section 2, paragraph (a)(2) of this Act for the purpose of entering the judgment and decree attached to the Settlement Agreement as Exhibit H.

(b) AUTHORIZATION.– The Secretary is authorized and directed to execute, and take such other actions as are necessary to implement, the Settlement Agreement and any amendments approved by the parties necessary to make the Settlement Agreement consistent with this Act.

SEC. 5. AUTHORIZATION OF APPROPRIATIONS.

(a) RESTORATION FUND.– There is authorized to be appropriated to the San Jacinto Basin Restoration Fund established in section 6 of this Act the amount of $10,000,000 to pay or reimburse costs associated with constructing, operating, and maintaining the portion of the basin recharge project, described in Section 4.5 of the Settlement Agreement, necessary to accommodate deliveries of the supplemental imported water under Section 4.4 of the Settlement Agreement.

(b) DEVELOPMENT FUND.– There is authorized to be appropriated to the Soboba Band of Luiseño Indians Water Development Fund established in section 7 of this Act the amount of $11,000,000 to pay or reimburse costs associated with constructing, operating, and maintaining water and sewage infrastructure, and other water-related development projects.

SEC. 6. RESTORATION FUND.

(a) ESTABLISHMENT.– There shall be established within the Treasury of the United States a non-interest bearing account to be known as the 'San Jacinto Basin Restoration Fund', consisting of the amounts authorized to be appropriated in section 5, paragraph (a) of this Act.

(b) ADMINISTRATION.– The Restoration Fund shall be administered by the Secretary for the purposes set forth in paragraph (d) of this section.

(c) AVAILABILITY.– The funds authorized to be appropriated pursuant to section 5, paragraph (a) of this Act shall be available for expenditure or withdrawal only after the requirements set forth in section 9(e) of this Act and paragraph (d) of this section have been met.

(d) EXPENDITURES AND WITHDRAWALS.–

(1) EXPENDITURE PLAN.–

(A) IN GENERAL.– Eastern Municipal Water District, on behalf of the Water Management Plan, shall submit to the Secretary for approval an expenditure plan for use of the Restoration Fund.

(B) REQUIREMENTS.– The expenditure plan shall require that any funds be expended or reimbursed in accordance with the purposes described in section 5, paragraph (a) of this Act.

(C) APPROVAL.– The Secretary shall approve the expenditure plan if it is reasonable and not inconsistent with this Act.

(2) WITHDRAWALS.– On approval by the Secretary of the expenditure plan described in this section, Eastern Municipal Water District, on behalf of the Water Management Plan, may withdraw monies from the Restoration Fund as provided in the plan.

(3) ENFORCEMENT.– The Secretary may take judicial or administrative action to enforce the provisions of any expenditure plan to ensure that monies withdrawn from the Restoration Fund under the plan are used in accordance with this Act.

(4) LIABILITY.– If Eastern Municipal Water District, on behalf of the Water Management Plan, exercises the right to withdraw monies from the Restoration Fund, neither the Secretary nor the Secretary of the Treasury shall retain any liability for the expenditure or investment of the monies withdrawn.

(5) ANNUAL REPORT.– Eastern Municipal Water District shall submit to the Tribe and the Secretary an annual report that describes all expenditures from the Restoration Fund during the year covered by the report.

SEC. 7. DEVELOPMENT FUND.

(a) ESTABLISHMENT.– There shall be established within the Treasury of the United States an interest bearing account to be known as the 'Soboba Band of Luiseño Indians Water Development Fund', to be managed and invested by the Secretary, consisting of the amounts authorized to be appropriated in section 5, paragraph (b) of this Act.

(b) MANAGEMENT.– The Secretary shall manage the Development Fund, make investments, and make monies available for distribution consistent with the American Indian Trust Fund Management Reform Act of 1994 (25 U.S.C. 4001 et seq.) (referred to in this section as the 'Trust Fund Reform Act'), this Act, and the Settlement Agreement.

(c) INVESTMENT.– The Secretary shall invest amounts in the Development Fund in accordance with–

(1) the Act of April 1, 1880 (21 Stat. 70, ch. 41, 25 U.S.C. 161);

(2) the first section of the Act of June 24, 1938 (52 Stat. 1037, ch. 648, 25 U.S.C. 162a); and

(3) paragraph (b) of this section.

(d) AVAILABILITY.– The funds authorized to be appropriated pursuant to section 5, paragraph (b) of this Act shall be available for expenditure or withdrawal only after the requirements set forth in section 9(e) of this Act and paragraph (e) below have been met.

(e) EXPENDITURES AND WITHDRAWALS.–

(1) TRIBAL MANAGEMENT PLAN.–

(A) IN GENERAL.– The Tribe may withdraw all or part of the Development Fund on approval by the Secretary of a tribal management plan as described in the Trust Fund Reform Act.

(B) REQUIREMENTS.– In addition to the requirements under the Trust Fund Reform Act, the tribal management plan shall require that any funds be expended or reimbursed in accordance with the purposes described in section 5, paragraph (b) of this Act.

(2) ENFORCEMENT.– The Secretary may take judicial or administrative action to enforce the provisions of any tribal management plan to ensure that monies withdrawn from the Development Fund under the plan are used in accordance with this Act.

(3) LIABILITY.– If the Tribe exercises the right to withdraw monies from the Development Fund, neither the Secretary nor the Secretary of the Treasury shall retain any liability for the expenditure or investment of the monies withdrawn.

(4) ANNUAL REPORT.– The Tribe shall submit to the Secretary an annual report that describes all expenditures from the Development Fund during the year covered by the report.

(5) NO PER CAPITA DISTRIBUTIONS.– No part of the Development Fund shall be distributed on a per capita basis to members of the Tribe.

SEC. 8. WAIVERS AND RELEASES.

(a) TRIBE AND UNITED STATES AUTHORIZATION.– The Tribe, on behalf of itself and its members, and the Secretary, on behalf of the United States in its capacity as trustee for the Tribe and its members, are authorized, as part of the performance of their obligations under the Settlement Agreement, to execute a waiver and release for claims under Federal, State, or other law against The Metropolitan Water District of Southern California, Eastern Municipal Water District and Lake Hemet Municipal Water District, for any and all–

(1) past, present, and future claims to surface and groundwater rights for the Reservation from time immemorial through the effective date described in section 10 of this Act and anytime thereafter;

(2) past, present, and future claims for injury of any kind, whether to person, property, or other right or interest, arising from, or in any way related to,

interference with surface and groundwater rights and resources of the Reservation, including, but not limited to, all claims for injury to the Tribe's use and enjoyment of the Reservation, economic development, religion, language, social structure and culture, and injury to the natural resources of the Reservation, from time immemorial through the effective date described in section 10 of this Act;

(3) past, present, and future claims for injury of any kind, whether to person, property, or other right or interest, arising from, or in any way related to, continuing interference with surface and groundwater rights and resources of the Reservation, including the full scope of claims defined in Section 5.1, paragraph A(2) of the Settlement Agreement, to the extent that such continuing interference began prior to the effective date described in section 10 of this Act, from time immemorial through the effective date described in section 10 of this Act and anytime thereafter; and

(4) past, present, and future claims for injury of any kind, whether to person, property, or other right or interest, arising from, or in any way related to, seepage of water into the San Jacinto Tunnel, including the full scope of claims defined in Section 5.1, paragraph A(2) of the Settlement Agreement, from time immemorial through the effective date described in section 10 of this Act and anytime thereafter.

(b) TRIBAL WAIVERS AGAINST THE UNITED STATES.– The Tribe is authorized, as part of the performance of its obligations under the Settlement Agreement, to execute a waiver and release for claims against the United States (acting in its capacity as trustee for the Tribe or its members, or otherwise acting on behalf of the Tribe or its members), including any agencies, officials, or employees thereof, for any and all–

(1) claims described in paragraph (a) of this section;

(2) past, present, and future claims for failure to acquire or develop water rights and resources of the Reservation from time immemorial through the effective date described in section 10 of this Act and anytime thereafter;

(3) past, present, and future claims for failure to protect water rights and resources of the Reservation from time immemorial through the effective date described in section 10 of this Act, and any past, present, and future claims for any continuing failure to protect water rights and resources of the Reservation, from time immemorial through the effective date described in section 10 of this Act and, to the extent that such continuing failure to protect began before the effective date described in section 10 of this Act, anytime thereafter;

(4) past, present, and future claims arising from the failure of any non-federal Party to fulfill the terms of the Settlement Agreement at anytime; and

(5) past, present, and future claims arising out of the negotiation of the Settlement Agreement or the negotiation and enactment of this Act, or any specific terms or provisions thereof, including, but not limited to, the Tribe's consent to limit the number of participant parties to the Settlement Agreement.

SEC. 9. MISCELLANEOUS PROVISIONS.

(a) WAIVER OF SOVEREIGN IMMUNITY.– If any party to the Settlement Agreement brings an action or other proceeding in any court of the United States relating only and directly to the interpretation or enforcement of this Act or the Settlement Agreement and names the United States or the Soboba Tribe as a party–

(1) the United States, the Tribe, or both, may be joined in any such action; and

(2) any claim by the United States or the Tribe to sovereign immunity from the action is waived, other than with respect to claims for monetary awards, for the limited and sole purpose of such interpretation or enforcement.

(b) TRIBAL USE OF WATER.–

(1) IN GENERAL.– With respect to water rights made available under the Settlement Agreement–

(A) the Tribe may use water made available to it under the Settlement Agreement for any use it deems advisable on the Reservation and on any other lands it owns or may acquire, in fee or in trust, contiguous to the Reservation or within the area of the groundwater basin described in Section 2.4 of the Settlement Agreement;

(B) such water rights shall be held in trust by the United States in perpetuity, and shall not be subject to forfeiture or abandonment; and

(C) State law shall not apply to the Tribe's use of water made available to it under the Settlement Agreement.

(2) LIMITATION.–

(A) IN GENERAL.– Except as provided in paragraph (B) below, the Tribe shall not sell or lease water made available to it under the Settlement Agreement.

(B) EXCEPTION.– The Tribe may enter into contracts and options to lease, contracts and options to exchange, or contracts and options to forbear the use of water made available to it under the Settlement Agreement or postpone undertaking new or expanded water uses, provided that any such contract or option for a term greater than five years shall require the approval of the Secretary. Any such water thereby made available to others shall only be used by participants in, or other users within the area of, the Water Management Plan described in Section 2.32 of the Settlement Agreement. No contract shall be for a term exceeding one hundred years, nor shall any contract provide for permanent alienation of any portion of the water rights made available under the Settlement Agreement.

(c) ACCEPTANCE OF LAND INTO TRUST.– The Secretary shall accept into trust for the benefit of the Tribe the lands conveyed to the Tribe pursuant to Section 4.6 of the Settlement Agreement, which conveyed lands shall be considered for all purposes as if

they were so acquired into trust status in 1937, except as to valid rights existing at the time of acquisition pursuant to this Act.

(d) HABITAT CONSERVATION.– The United States, in its capacity as trustee for the Tribe, and the Tribe in its own right shall make available, including, if necessary, by conveyance of a permanent easement to the United States Fish and Wildlife Service or other agency of the United States, up to 98 acres of Reservation land for habitat conservation related to the portion of the basin recharge project necessary to accommodate deliveries of the supplemental imported water described in Section 4.4 of the Settlement Agreement.

(e) AVAILABILITY OF APPROPRIATIONS.– The funds authorized to be appropriated under section 5 of this Act shall not be available for expenditure or withdrawal until the requirements of section 10(a) of this Act have been met and the waivers and releases set out in section 8 of this Act become effective.

(f) RETENTION OF RIGHTS.–

(1) In the event the waivers and releases set out in section 8 of this Act do not become effective pursuant to section 10(a) of this Act, the Soboba Tribe and the United States shall retain the right to assert all rights and claims enumerated in section 8, and any claims or defenses of the parties to the Settlement Agreement shall also be retained.

(2) The parties expressly reserve all rights not specifically granted, recognized, waived, or released by the Settlement Agreement or this Act.

(g) PRECEDENT.– Nothing in this Act shall be construed or interpreted as a precedent for the quantification or litigation of federal reserved water rights or the interpretation or administration of future water settlement Acts.

(h) OTHER INDIAN TRIBES.– Nothing in the Settlement Agreement or this Act shall be construed in any way to quantify or otherwise adversely affect the water rights, claims, or entitlements to water of any Indian tribe, band, or community, other than the Soboba Tribe.

(i) ENVIRONMENTAL COMPLIANCE.–

(1) Signing by the Secretary of the Settlement Agreement does not constitute major Federal action under the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

(2) The Secretary shall comply with all aspects of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.), and other applicable environmental laws, in implementing the terms of the Settlement Agreement and this Act.

SEC. 10. EFFECTIVE DATE.

(a) IN GENERAL.– The waiver and release authorizations contained in subsections (b) and (c) of section 8 of this Act shall become effective as of the date the Secretary causes to be published in the Federal Register a statement of findings that–

(1) this Act has been enacted;

(2) to the extent that the Settlement Agreement conflicts with this Act, the Settlement Agreement has been revised to conform with the Act;

(3) the Settlement Agreement, revised as necessary, and the waivers and releases described in Article 5 of the Settlement Agreement and section 8 of this Act have been executed by the parties and the Secretary;

(4) warranty deeds for the property to be conveyed to the Tribe described in section 4.6 of the Settlement Agreement have been placed in escrow;

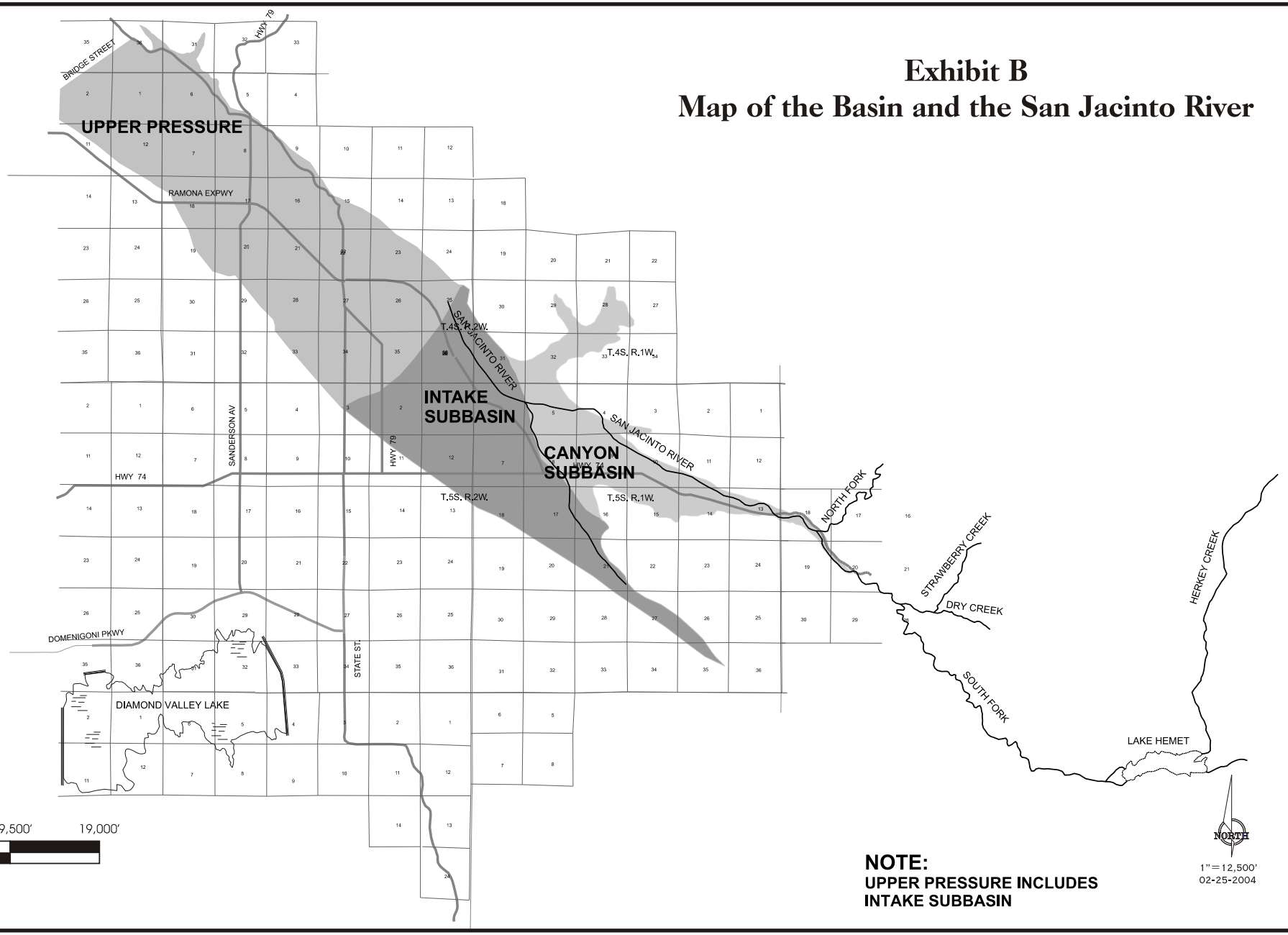
(5) the Tribe and the Secretary have approved the Water Management Plan;

(6) the judgment and decree attached to the Settlement Agreement as Exhibit H has been approved by the United States District Court, Eastern Division of the Central District of California, and that judgment and decree have become final and nonappealable; and

(7) the payment of the funds authorized by section 5 of this Act have been appropriated and deposited into the Restoration Fund and the Development Fund.

(b) DEADLINE FOR EFFECTIVE DATE.– If the conditions precedent required under paragraph (a) of this section have not been fulfilled by December 31, 2007, the Settlement Agreement and this Act shall not thereafter be effective and shall be null and void. Any funds and the interest accrued thereon appropriated pursuant to section 5 shall revert to the general fund of the United States Treasury on October 1, 2008.

Exhibit B
Map of the Basin and the San Jacinto River



NOTE:
UPPER PRESSURE INCLUDES INTAKE SUBBASIN

Legal Description for Canyon Sub-basin

Beginning at a point lying North 03-03-37 East, a distance of 8693.42 feet from the north one quarter corner of Section 7, Township 5 South, Range 1 East, S.B.B. & M.:

Thence South 33-29-10 East, a distance of 1188.9727
Thence South 20-26-50 East, a distance of 500.9370
Thence South 27-28-23 East, a distance of 428.6517
Thence South 31-35-33 East, a distance of 630.8741
Thence South 21-07-46 East, a distance of 910.5965
Thence South 18-48-47 East, a distance of 1015.1730
Thence South 24-22-09 East, a distance of 638.3066
Thence South 14-50-24 East, a distance of 1778.9616
Thence South 09-47-36 East, a distance of 1132.4407
Thence South 10-53-51 East, a distance of 909.1444
Thence South 21-23-19 East, a distance of 960.3948
Thence South 16-05-57 East, a distance of 627.4825
Thence South 17-13-52 East, a distance of 1029.1928
Thence South 26-09-14 East, a distance of 249.2721
Thence South 46-45-44 East, a distance of 1246.0249
Thence South 45-42-20 East, a distance of 804.0414
Thence South 53-45-51 East, a distance of 494.8303
Thence South 41-51-15 East, a distance of 662.8068
Thence South 37-57-12 East, a distance of 682.2970
Thence South 44-35-54 East, a distance of 598.8896
Thence South 31-20-45 East, a distance of 1101.0137
Thence South 37-47-48 East, a distance of 1333.2990
Thence South 55-04-55 East, a distance of 865.4271
Thence South 61-29-59 East, a distance of 379.0620
Thence South 66-22-49 East, a distance of 339.4363
Thence South 42-07-01 East, a distance of 362.8961
Thence South 59-20-26 East, a distance of 310.8241
Thence North 44-35-20 West, a distance of 271.0057
Thence North 27-14-21 West, a distance of 679.4763
Thence North 09-26-25 West, a distance of 669.1250
Thence North 15-50-43 West, a distance of 716.4738
Thence North 22-47-41 West, a distance of 436.5304
Thence North 20-37-42 West, a distance of 399.1550
Thence North 05-56-49 West, a distance of 259.3960
Thence North 12-05-28 West, a distance of 264.3646
Thence North 14-27-19 East, a distance of 118.1782
Thence North 50-21-25 East, a distance of 158.1102
Thence North 65-13-15 East, a distance of 328.2188
Thence North 82-49-41 East, a distance of 264.3181
Thence South 84-49-29 East, a distance of 420.5895
Thence South 77-19-12 East, a distance of 411.1524
Thence South 62-03-23 East, a distance of 453.0744
Thence South 53-30-14 East, a distance of 237.5929
Thence South 57-59-51 East, a distance of 266.6488
Thence South 66-45-48 East, a distance of 360.0835
Thence South 74-02-50 East, a distance of 326.3171
Thence South 70-08-39 East, a distance of 314.8424
Thence South 63-01-30 East, a distance of 234.3736
Thence South 35-38-22 East, a distance of 237.4798

Thence South 42-04-07 East, a distance of 284.3200
Thence South 48-59-46 East, a distance of 322.1632
Thence South 55-05-28 East, a distance of 338.9985
Thence South 76-41-52 East, a distance of 627.2030
Thence South 80-50-12 East, a distance of 689.1699
Thence South 68-34-43 East, a distance of 243.1736
Thence South 51-17-14 East, a distance of 422.9187
Thence South 23-13-07 East, a distance of 305.0162
Thence South 17-07-37 East, a distance of 348.0598
Thence South 20-36-34 East, a distance of 243.2560
Thence South 77-20-44 East, a distance of 411.1112
Thence North 88-22-32 East, a distance of 489.4467
Thence South 89-35-23 East, a distance of 209.5054
Thence South 77-48-51 East, a distance of 428.1470
Thence South 46-33-41 East, a distance of 358.4156
Thence South 54-02-09 East, a distance of 300.5375
Thence North 76-21-42 East, a distance of 288.1242
Thence North 17-30-54 East, a distance of 237.5765
Thence North 16-48-48 East, a distance of 309.4149
Thence North 34-06-01 East, a distance of 125.9718
Thence North 84-56-56 East, a distance of 368.4308
Thence South 89-35-24 East, a distance of 227.1308
Thence South 79-15-43 East, a distance of 390.4622
Thence South 89-35-24 East, a distance of 751.1442
Thence North 68-02-21 East, a distance of 321.0451
Thence North 76-24-34 East, a distance of 144.1615
Thence North 82-57-46 East, a distance of 405.0514
Thence North 77-54-02 East, a distance of 322.0287
Thence South 66-25-23 East, a distance of 265.9506
Thence South 68-58-41 East, a distance of 149.3127
Thence North 54-52-10 East, a distance of 300.6385
Thence North 29-27-12 East, a distance of 179.7287
Thence North 56-43-55 East, a distance of 251.9098
Thence South 81-28-20 East, a distance of 370.4709
Thence South 78-57-07 East, a distance of 284.3959
Thence South 67-47-29 East, a distance of 470.2621
Thence South 83-24-48 East, a distance of 650.0405
Thence South 87-51-03 East, a distance of 576.6556
Thence North 81-40-49 East, a distance of 229.7933
Thence South 89-34-59 East, a distance of 524.0139
Thence South 80-08-29 East, a distance of 424.8993
Thence South 68-58-59 East, a distance of 149.1738
Thence South 85-18-12 East, a distance of 700.7279
Thence North 69-21-28 East, a distance of 243.2410
Thence North 83-18-13 East, a distance of 140.9616
Thence North 87-02-55 East, a distance of 297.3945
Thence South 84-24-08 East, a distance of 385.7145
Thence South 73-38-13 East, a distance of 381.5806
Thence South 60-46-31 East, a distance of 398.7573
Thence South 44-33-51 East, a distance of 197.5537
Thence South 44-36-26 East, a distance of 148.2746
Thence South 80-51-20 East, a distance of 229.6689
Thence South 77-41-23 East, a distance of 339.1733
Thence South 80-08-20 East, a distance of 106.1940
Thence South 74-17-21 East, a distance of 199.1918
Thence South 63-03-57 East, a distance of 156.1926

Thence South 89-35-24 East, a distance of 139.7536
Thence North 69-52-16 East, a distance of 149.1074
Thence South 74-22-05 East, a distance of 199.2446
Thence South 54-02-09 East, a distance of 150.2688
Thence South 57-32-02 East, a distance of 164.7486
Thence South 80-08-39 East, a distance of 212.5112
Thence South 81-28-20 East, a distance of 246.9807
Thence South 57-34-32 East, a distance of 164.8208
Thence South 59-51-45 East, a distance of 281.7053
Thence South 49-18-45 East, a distance of 297.3849
Thence South 53-35-18 East, a distance of 237.6448
Thence South 41-33-00 East, a distance of 235.0086
Thence South 49-00-08 East, a distance of 483.1160
Thence South 55-49-43 East, a distance of 125.8518
Thence South 44-35-25 East, a distance of 123.5701
Thence South 44-36-30 East, a distance of 271.6237
Thence South 44-36-10 East, a distance of 197.5973
Thence South 31-11-39 East, a distance of 266.6825
Thence South 29-50-24 East, a distance of 242.6743
Thence South 26-09-18 East, a distance of 273.3663
Thence South 28-55-20 East, a distance of 320.7559
Thence South 44-37-15 East, a distance of 247.0063
Thence South 39-21-54 East, a distance of 136.3797
Thence South 39-30-43 East, a distance of 1115.9357
Thence South 56-57-13 East, a distance of 518.5041
Thence South 32-18-58 East, a distance of 290.6424
Thence South 54-36-52 East, a distance of 213.2716
Thence South 47-36-34 East, a distance of 234.9146
Thence South 44-35-24 East, a distance of 172.8920
Thence South 35-05-29 East, a distance of 150.2478
Thence South 59-20-24 East, a distance of 242.6739
Thence South 59-19-30 East, a distance of 242.5664
Thence South 89-35-24 East, a distance of 139.7536
Thence South 89-35-24 East, a distance of 139.7536
Thence South 89-35-23 East, a distance of 52.3763
Thence North 67-16-06 East, a distance of 132.9522
Thence North 00-24-32 East, a distance of 52.5643
Thence North 33-16-47 West, a distance of 62.8730
Thence North 58-37-01 West, a distance of 203.6710
Thence North 47-58-30 West, a distance of 210.3380
Thence North 50-17-39 West, a distance of 248.1038
Thence North 41-34-22 West, a distance of 235.0915
Thence North 35-34-47 West, a distance of 237.6102
Thence North 52-44-11 West, a distance of 261.9812
Thence North 49-21-11 West, a distance of 297.5341
Thence North 49-21-20 West, a distance of 297.3572
Thence North 44-34-50 West, a distance of 271.7576
Thence North 38-15-35 West, a distance of 335.4983
Thence North 27-27-57 West, a distance of 336.0671
Thence North 50-30-00 West, a distance of 360.1165
Thence North 21-23-39 West, a distance of 470.1461
Thence North 10-11-56 West, a distance of 284.4954
Thence North 07-44-11 West, a distance of 246.9982
Thence North 19-33-17 West, a distance of 204.2826
Thence North 41-52-09 West, a distance of 259.7636
Thence North 63-00-09 West, a distance of 429.5609

Thence North 43-07-25 West, a distance of 481.8419
Thence North 42-44-17 West, a distance of 382.9316
Thence North 28-24-46 West, a distance of 398.7864
Thence North 28-23-07 West, a distance of 398.6130
Thence North 38-46-12 West, a distance of 608.4346
Thence North 72-21-04 West, a distance of 530.2057
Thence North 77-53-41 West, a distance of 517.3797
Thence North 84-31-51 West, a distance of 596.0885
Thence North 68-33-48 West, a distance of 486.5318
Thence North 67-12-28 West, a distance of 642.2768
Thence North 76-42-02 West, a distance of 627.0671
Thence North 60-32-28 West, a distance of 899.1237
Thence North 75-54-13 West, a distance of 665.1543
Thence North 66-23-19 West, a distance of 665.0515
Thence North 80-51-29 West, a distance of 459.4613
Thence North 74-27-13 West, a distance of 669.4943
Thence North 63-02-06 West, a distance of 312.4704
Thence North 73-53-13 West, a distance of 580.5569
Thence North 76-51-43 West, a distance of 555.1563
Thence North 72-03-23 West, a distance of 347.9228
Thence North 71-08-13 West, a distance of 497.2030
Thence North 69-01-58 West, a distance of 746.1565
Thence North 46-26-06 West, a distance of 382.9739
Thence North 55-28-34 West, a distance of 654.0611
Thence North 65-37-13 West, a distance of 516.0126
Thence North 73-38-41 West, a distance of 508.7107
Thence North 70-36-46 West, a distance of 591.0123
Thence North 69-01-55 West, a distance of 447.6429
Thence North 64-48-32 West, a distance of 1750.7575
Thence North 68-24-13 West, a distance of 917.8053
Thence North 68-02-33 West, a distance of 1427.2827
Thence North 64-07-22 West, a distance of 1625.0677
Thence North 43-46-42 West, a distance of 876.7911
Thence North 47-49-40 West, a distance of 655.7561
Thence North 61-41-57 West, a distance of 335.8997
Thence North 51-42-49 West, a distance of 199.2231
Thence North 48-40-34 West, a distance of 346.7099
Thence North 47-34-33 West, a distance of 235.0408
Thence North 36-26-36 West, a distance of 174.6548
Thence North 09-53-20 East, a distance of 106.2668
Thence South 78-41-19 East, a distance of 462.3561
Thence South 74-50-24 East, a distance of 343.1933
Thence South 79-53-51 East, a distance of 726.5141
Thence South 82-28-31 East, a distance of 422.3874
Thence North 74-29-44 East, a distance of 254.3821
Thence North 67-11-37 East, a distance of 399.0744
Thence North 60-41-37 East, a distance of 281.6756
Thence North 79-05-27 East, a distance of 445.1700
Thence North 00-26-51 East, a distance of 192.0059
Thence North 31-36-58 West, a distance of 164.7668
Thence North 80-07-13 West, a distance of 637.4534
Thence North 79-17-00 West, a distance of 585.8427
Thence North 83-52-06 West, a distance of 702.1421
Thence North 81-40-22 West, a distance of 634.8176
Thence North 71-46-52 West, a distance of 513.7552
Thence North 78-48-11 West, a distance of 746.7136

Thence North 70-26-56 West, a distance of 905.9868
Thence North 65-52-49 West, a distance of 2823.3710
Thence North 52-03-27 West, a distance of 1519.7285
Thence North 36-15-37 West, a distance of 1023.5333
Thence North 28-50-12 West, a distance of 1501.3573
Thence North 03-16-40 East, a distance of 699.5825
Thence North 40-00-38 East, a distance of 657.5376
Thence North 55-55-24 East, a distance of 339.1029
Thence North 56-42-53 East, a distance of 377.8643
Thence North 26-59-25 East, a distance of 312.6105
Thence North 71-58-47 East, a distance of 497.0045
Thence North 80-06-42 East, a distance of 585.9547
Thence South 87-23-25 East, a distance of 454.3462
Thence North 42-41-35 East, a distance of 519.3043
Thence North 65-30-29 East, a distance of 539.2736
Thence North 85-13-27 East, a distance of 192.9198
Thence South 77-48-22 East, a distance of 428.1601
Thence South 79-18-05 East, a distance of 195.2692
Thence North 69-51-14 East, a distance of 298.5136
Thence North 28-19-28 East, a distance of 335.9044
Thence North 31-22-11 East, a distance of 305.6825
Thence North 56-01-15 East, a distance of 402.0238
Thence North 82-39-26 East, a distance of 387.8052
Thence North 78-08-24 East, a distance of 411.1519
Thence North 60-22-03 East, a distance of 383.3919
Thence North 59-26-14 East, a distance of 203.6705
Thence North 05-12-58 East, a distance of 210.3711
Thence North 54-35-53 West, a distance of 426.4772
Thence North 11-40-50 West, a distance of 250.0533
Thence North 49-48-05 East, a distance of 161.0345
Thence North 48-23-44 East, a distance of 235.0392
Thence North 00-24-37 East, a distance of 174.5675
Thence North 23-13-24 West, a distance of 304.9592
Thence North 70-45-15 East, a distance of 259.7676
Thence South 78-49-18 East, a distance of 373.3326
Thence South 72-19-46 East, a distance of 530.4007
Thence North 68-01-44 East, a distance of 321.0687
Thence North 61-21-05 East, a distance of 179.8988
Thence North 15-39-15 East, a distance of 199.2007
Thence North 00-24-37 East, a distance of 174.5675
Thence North 09-52-20 West, a distance of 195.3932
Thence North 38-41-05 West, a distance of 359.9806
Thence North 38-15-35 West, a distance of 335.4983
Thence North 24-47-03 West, a distance of 328.3020
Thence North 18-01-30 West, a distance of 220.9698
Thence North 00-27-21 East, a distance of 157.1300
Thence North 24-36-33 West, a distance of 289.0680
Thence North 26-08-49 West, a distance of 195.4380
Thence North 37-10-21 West, a distance of 286.5286
Thence North 71-10-31 West, a distance of 276.0141
Thence North 89-35-24 West, a distance of 366.7594
Thence North 47-18-37 West, a distance of 259.8516
Thence North 02-26-15 West, a distance of 349.7545
Thence North 02-27-48 West, a distance of 125.0526
Thence North 02-27-50 West, a distance of 78.5106
Thence North 02-27-01 West, a distance of 146.1957

Thence North 05-17-26 West, a distance of 351.1208
Thence North 29-50-24 West, a distance of 242.6743
Thence North 87-54-29 West, a distance of 594.1460
Thence South 25-25-45 West, a distance of 289.0690
Thence South 07-33-35 West, a distance of 54.1577
Thence South 07-31-36 West, a distance of 368.3617
Thence South 15-40-43 West, a distance of 398.2550
Thence South 21-34-12 West, a distance of 580.7325
Thence South 17-07-05 West, a distance of 546.9813
Thence South 18-03-11 West, a distance of 403.3575
Thence South 25-37-23 West, a distance of 328.0751
Thence South 34-42-09 West, a distance of 465.0331
Thence South 25-01-48 West, a distance of 461.1868
Thence South 54-23-57 West, a distance of 475.1916
Thence South 69-37-52 West, a distance of 541.7496
Thence North 73-56-54 West, a distance of 453.4280
Thence North 48-34-43 West, a distance of 532.4290
Thence North 28-23-07 West, a distance of 398.6121
Thence North 54-35-53 West, a distance of 426.4777
Thence North 16-41-42 West, a distance of 237.5764
Thence North 12-06-59 West, a distance of 322.1772
Thence North 33-16-47 West, a distance of 251.7194
Thence North 60-46-31 West, a distance of 398.7569
Thence North 40-31-06 West, a distance of 346.7031
Thence North 29-18-46 West, a distance of 281.6207
Thence North 31-34-49 West, a distance of 329.6291
Thence North 65-37-55 West, a distance of 344.1602
Thence North 33-16-48 West, a distance of 314.8173
Thence North 40-10-53 West, a distance of 160.9938
Thence South 48-09-08 West, a distance of 259.5913
Thence South 05-10-56 West, a distance of 210.3598
Thence South 01-52-06 East, a distance of 437.1073
Thence South 17-14-28 East, a distance of 403.1796
Thence South 16-17-52 East, a distance of 546.9801
Thence South 17-24-29 East, a distance of 513.9131
Thence South 44-35-54 East, a distance of 296.2405
Thence South 40-10-11 East, a distance of 322.2593
Thence South 35-07-29 East, a distance of 300.4644
Thence South 31-25-13 East, a distance of 596.0948
Thence South 27-28-50 East, a distance of 335.9003
Thence South 04-21-44 East, a distance of 210.3594
Thence South 42-01-35 West, a distance of 210.4263
Thence South 45-23-50 West, a distance of 197.5089
Thence South 52-08-16 West, a distance of 422.9006
Thence South 45-24-36 West, a distance of 469.3541
Thence South 70-25-56 West, a distance of 408.8638
Thence South 66-59-15 West, a distance of 571.0711
Thence South 33-18-10 West, a distance of 353.7851
Thence South 37-17-32 West, a distance of 349.2845
Thence South 49-29-46 West, a distance of 346.7099
Thence South 65-13-51 West, a distance of 328.1924
Thence South 55-43-12 West, a distance of 276.0820
Thence South 59-26-46 West, a distance of 407.4482
Thence South 55-41-57 West, a distance of 385.3996
Thence South 74-49-34 West, a distance of 746.6568
Thence South 88-29-17 West, a distance of 502.1748

Thence North 70-28-56 West, a distance of 460.1936
Thence North 69-36-20 West, a distance of 783.2207
Thence North 43-33-28 West, a distance of 939.4676
Thence South 90-00-00 East, a distance of 0.0000
to the point of beginning.

Perimeter: 140686.1563

Area: 191218952.8402 4389.7831 acres

Legal Description for Intake Sub-basin

Beginning at a point lying North 03-03-37 East, a distance of 8693.42 feet from the north one quarter corner of Section 7, Township 5 South, Range 1 East, S.B.B. & M.:

Thence North 43-33-19 West, a distance of 1036.0201
Thence North 40-54-46 West, a distance of 2583.7541
Thence North 31-11-35 West, a distance of 1531.8376
Thence North 29-04-17 West, a distance of 883.9252
Thence North 09-00-43 East, a distance of 1454.7700
Thence North 54-11-24 West, a distance of 779.7834
Thence North 87-31-53 West, a distance of 469.5258
Thence South 14-02-10 West, a distance of 1192.3299
Thence South 19-44-49 West, a distance of 1658.1895
Thence South 20-33-22 West, a distance of 1709.5454
Thence South 30-34-45 West, a distance of 1022.5993
Thence South 37-11-05 West, a distance of 1456.6566
Thence South 37-20-58 West, a distance of 1912.8988
Thence South 36-19-37 West, a distance of 1688.8119
Thence South 47-17-26 West, a distance of 1415.9609
Thence South 51-20-25 West, a distance of 1024.9459
Thence South 62-35-33 West, a distance of 1217.0825
Thence South 67-50-01 West, a distance of 1166.6981
Thence South 53-21-57 West, a distance of 2545.3471
Thence South 51-32-23 East, a distance of 1521.6193
Thence South 52-06-41 East, a distance of 3640.2127
Thence South 54-16-42 East, a distance of 2832.0686
Thence South 54-45-45 East, a distance of 8093.9477
Thence South 66-45-32 East, a distance of 1985.2225
Thence South 63-00-45 East, a distance of 1076.6119
Thence South 57-44-44 East, a distance of 10768.6202
Thence South 52-42-56 East, a distance of 2888.8756
Thence South 55-53-51 East, a distance of 6249.5878
Thence South 52-42-56 East, a distance of 2888.8756
Thence South 53-45-11 East, a distance of 2138.0014
Thence South 64-43-22 East, a distance of 2206.1030
Thence North 46-42-44 West, a distance of 156.7825
Thence North 44-35-15 West, a distance of 405.2711
Thence North 46-18-48 West, a distance of 669.1426
Thence North 37-52-35 West, a distance of 693.8574
Thence North 34-17-42 West, a distance of 906.2395
Thence North 33-57-07 West, a distance of 659.8059
Thence North 44-35-16 West, a distance of 608.0830
Thence North 46-47-40 West, a distance of 1054.3274
Thence North 48-19-10 West, a distance of 1868.4824
Thence North 56-06-31 West, a distance of 2130.4779
Thence North 66-07-44 West, a distance of 1655.6256
Thence North 58-12-53 West, a distance of 1376.2780
Thence North 41-24-29 West, a distance of 730.8163
Thence North 41-13-30 West, a distance of 345.0212
Thence North 26-08-55 West, a distance of 384.6138
Thence North 13-37-46 West, a distance of 354.3535
Thence North 41-34-35 West, a distance of 385.5755
Thence North 42-50-20 West, a distance of 669.1777

Thence North 50-29-55 West, a distance of 1181.6210
Thence North 31-24-48 West, a distance of 978.2580
Thence North 26-09-14 West, a distance of 704.9949
Thence North 08-33-23 West, a distance of 551.1343
Thence North 10-42-42 East, a distance of 640.9180
Thence North 35-06-54 East, a distance of 453.0875
Thence North 45-23-44 East, a distance of 243.3389
Thence North 52-32-18 East, a distance of 326.7674
Thence North 00-25-00 East, a distance of 171.8795
Thence North 34-34-34 West, a distance of 349.7803
Thence North 44-35-13 West, a distance of 337.0774
Thence North 59-20-26 West, a distance of 310.8241
Thence North 42-07-01 West, a distance of 362.8961
Thence North 66-22-49 West, a distance of 339.4363
Thence North 61-29-59 West, a distance of 379.0620
Thence North 55-04-55 West, a distance of 865.4271
Thence North 37-47-48 West, a distance of 1333.2990
Thence North 31-20-45 West, a distance of 1101.0137
Thence North 44-35-54 West, a distance of 598.8896
Thence North 37-57-12 West, a distance of 682.2970
Thence North 41-51-15 West, a distance of 662.8068
Thence North 53-45-51 West, a distance of 494.8303
Thence North 45-42-20 West, a distance of 804.0414
Thence North 46-45-44 West, a distance of 1246.0249
Thence North 26-09-14 West, a distance of 249.2721
Thence North 17-13-52 West, a distance of 1029.1928
Thence North 16-05-57 West, a distance of 627.4825
Thence North 21-23-19 West, a distance of 960.3948
Thence North 10-53-51 West, a distance of 909.1444
Thence North 09-47-36 West, a distance of 1132.4407
Thence North 14-50-24 West, a distance of 1778.9616
Thence North 24-22-09 West, a distance of 638.3066
Thence North 18-48-47 West, a distance of 1015.1730
Thence North 21-07-46 West, a distance of 910.5965
Thence North 31-35-33 West, a distance of 630.8741
Thence North 27-28-23 West, a distance of 428.6517
Thence North 20-26-50 West, a distance of 500.9370
Thence North 33-29-10 West, a distance of 1188.9727
Thence South 90-00-00 East, a distance of 0.0000
to the point of beginning.

Perimeter: 115214.4657

Area: 308717524.7511 7087.1792 acres

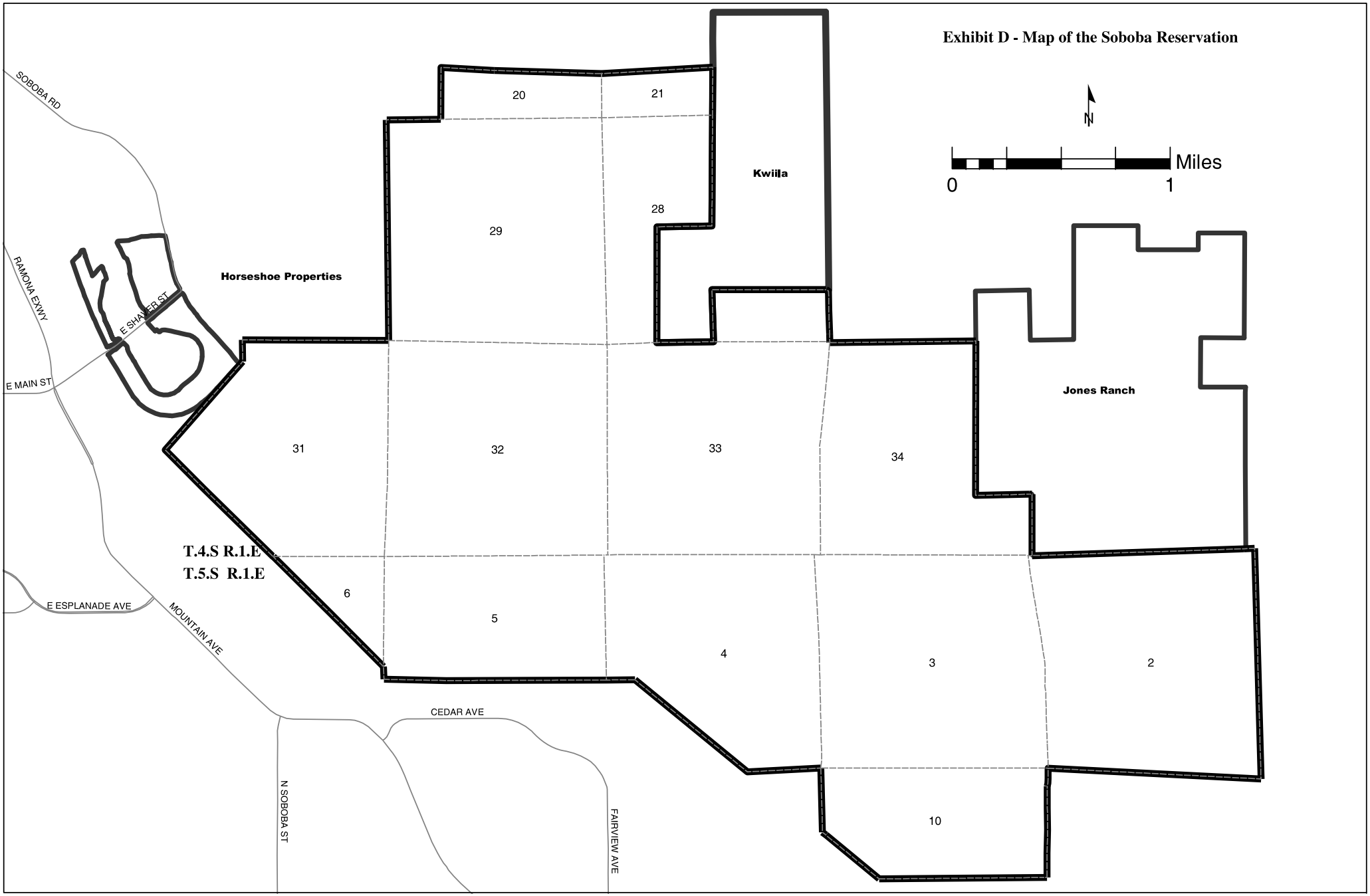


Exhibit D - Map of the Soboba Reservation
N
Miles
0
1
SOBOBA RD
RAMONA EXWY
E MAIN ST
E ESPLANADE AVE
MOUNTAIN AVE
CEDAR AVE
N SOBOBA ST
FAIRVIEW AVE
Horseshoe Properties
Kwiila
Jones Ranch
20
21
28
29
31
32
33
34
6
5
4
3
2
10
T.4.S R.1.E
T.5.S R.1.E

PRINCIPLES FOR WATER MANAGEMENT

1. Water Management Plan. These Principles, approved by the appropriate authority of each party, are intended to form the basis from which the parties will develop a Water Management Plan ("Management Plan") for the area described in Section 2. The Management Plan is being developed to ensure an adequate and reliable source of future water supply. The Management Plan is also intended to facilitate and accommodate a settlement of the claims of the Soboba Band of Luiseno Indians ("Soboba Tribe").

2. Management Area. The area included in the Management Plan consists of the Canyon Sub-basin and the San Jacinto Upper Pressure Sub-basin, downstream to Bridge Street, and the Hemet Basins ("Management Area"). The Management Area is shown upon the attached map.

3. Pumpers within the Management Area. The primary pumpers within the Management Area are: Eastern Municipal Water District ("Eastern"), Lake Hemet Municipal Water District ("Lake Hemet"), City of San Jacinto ("San Jacinto"), and City of Hemet ("Hemet") (individually

"Public Agency," collectively "Public Agencies"); the Soboba Tribe (not a Management Plan participant); and approximately 62 individual agricultural and other private pumpers who pump more than 25 acre-feet per year ("Private Pumpers").

4. Goals. The parties agree that the Management Plan shall incorporate and serve to implement the following goals:

A. Allowing for Future Urban Growth. The parties acknowledge that the Management Area will continue to experience residential, commercial, and industrial growth and development, and that existing water production and service systems will need to be expanded to meet this growth. It is estimated that at least 15,000 afy incremental water supply capacity over the existing base production rights of the Public Agencies must be dedicated to adequately serve this growth. The Management Plan should serve and provide a clear planning process so that each affected Public Agency will be able to meet these projected growth needs.

B. Water Quality Protection. Implementation of the Management Plan should protect and/or enhance Management Area water quality. However, implementation of certain elements of the Management Plan may cause limited localized water quality degradation. If such degradation impedes the then current beneficial use of any Public Agency in the Management Area, the Watermaster described in Section 22 ("Watermaster") shall implement appropriate mitigation measures to ensure water supply to the affected Public Agency and bear the associated costs. The standards for local water quality degradation shall be defined in the Management Plan.

C. Cost-Effective Management. The Management Plan should serve to support the pursuit of cost-effective water supply and water treatment by the Public Agencies, both individually and collectively.

D. Overdraft. The groundwater levels within the Management Area have generally been declining for a number of years, and the Management Area is presently in a condition of overdraft. It is recognized that the Management Plan will, within a reasonable period, eliminate groundwater overdraft and enhance operational yield by

implementing a combination of available water resources management elements. These elements include: reduction in native groundwater production; enhanced recharge with native, imported and/or recycled water; development of supplemental supplies such as imported and recycled water; and water conservation programs.

E. Monitoring. The Watermaster shall implement a monitoring program to ensure the Management Plan activities follow best management and engineering principles to protect Management Area water resources.

5. Public Agencies Base Production Rights.

A. The base production rights of Eastern, Lake Hemet and Hemet in the first year of the Management Plan shall be based upon their average production for calendar years 1995-1999. This period was chosen to reflect these Public Agencies' recent pumping, and shall determine their base production rights.

B. The base production right of San Jacinto in the first year of the Management Plan, shall be based upon its average production for calendar years 1995-1999, plus 500 afy. The 500 afy is added because San Jacinto's recent production does not reflect its historic production because of water purchases and other factors.

C. Pursuant to Section 21 below, for the life of the Management Plan, Hemet and San Jacinto shall each add an additional 900 afy to their base production rights. The additional 900 afy shall not be subject to reduction by the Watermaster as provided in Section 5.D and shall not be subject to any Administrative or Replenishment Assessments as provided in Section 6, or other fee or charge imposed under the Management Plan.

D. It is the goal of the Management Plan to adjust base production rights over time to a level consistent with the Watermaster's calculation of the Public Agencies' share of safe yield for the Management Area. Based on current information, it appears that the total reduction in base production rights will need to be approximately 35%. The ultimate reduction will be based on periodic demand, hydrology, recharge and

availability of imported water. In order to implement this reduction in a phased manner, each Public Agency's base production rights shall be subject to adjustment as follows:

(1) A 10% reduction from the base production rights in the first year of the Management Plan; and

(2) Until base production rights are consistent with the Public Agencies' share of safe yield, Watermaster shall determine the reductions in base production rights in each subsequent year of the Management Plan, to achieve this goal within 6 years of approval of the Management Plan. Each reduction shall not be more than 10% of the base production right of the prior year.

(3) Pursuant to Section 7(A)(2)(b), upon conversion of a Class B Participant's land from agricultural to a use that requires water service from a Public Agency, the Public Agency shall receive an increase in its base production rights equal to the adjusted base production right of the Class B Participant.

6. Public Agency Production Assessments. The Public Agency production will be subject to the following assessments:

A. An Administrative Assessment on each acre-foot pumped by a Public Agency up to its adjusted base production right. The parties contemplate that the Administrative Assessment will be $50.00 per acre-foot of water pumped in the first year of the Management Plan, and that such amount will thereafter be set by the Watermaster.

B. A Replenishment Assessment on each acre-foot pumped by a Public Agency in excess of its adjusted base production right equal to the cost of providing a like quantity of supplemental water to recharge the Management Area, including recharge losses. Pumping by a Public Agency in excess of its adjusted base production right in order to meet increasing demands is expected and permissible, provided that such excess extractions shall be subject to the Replenishment Assessment. The costs of providing a like quantity of supplemental water shall include the costs of water, O&M costs of the replenishment system, capital recovery and other administrative costs. Currently, the total of these cost items is estimated to be in the range

of $300 to $400 per acre-feet; the actual amount will reflect the costs at the time incurred.

7. Private Pumpers Water Rights. The Public Agencies recognize the overlying water rights of the Private Pumpers, and do not intend to take or adversely impact these rights without an agreement with the owner of such rights. The Management Plan will lay out alternatives for the retention, protection, or transfer of such rights, leaving selection of the alternative to the individual overlying water rights owner. A Private Pumper can elect not to participate in the Management Plan and not to formally acknowledge its existence. Such Pumpers shall be referred to herein as "Non-Participants"; such Pumpers shall continue to exercise whatever water rights they may hold under California law unaffected by the Management Plan. There is no intent to affect water use that is consistent with the historical use of the Private Pumpers. However, other pumpers under the Management Plan do not waive their rights to challenge new or expanded water rights. Non-Participants will not have the option of joining the program at a later date. The alternatives available to participants are as follows:

A. (1) Class A Participation. A Private Pumper can elect to sign a written agreement acknowledging the existence of the Management Plan. Such Pumper shall be a Class A Participant and shall be entitled to vote for and/or be elected to serve as the Private Pumper representative on the Management Plan's governing board or body described in Paragraph 22 below, but shall not otherwise be required to participate in the Management Plan implementation. A Class A Participant may, without any financial assessment by the Watermaster, pump from his/her/its property within the Management Area the amount of water that can be put to reasonable and beneficial use on the Pumper's land as may be authorized under California law. Class A Participants shall have the right to convert to Class B Participation during a grace period that shall end three (3) years after the effective date of the Management Plan, as approved by a judgment of the Superior Court for Riverside County, upon payment of the total assessments the Pumper would have paid had the Pumper elected to be a member of Class B from the outset, plus interest.

(2) Class B Participation. A Private Pumper can become a Class B Participant by electing to limit annual pumping to the Pumper's average annual production during the calendar years 1995 through

1999 and to pay replenishment assessments on amounts in excess of that average annual production. A Class B Participant shall enjoy the following benefits of Plan Participation:

a. Vote for and/or be elected to serve as the Private Pumper's representative on the Management Plan's Governing Board;

b. Upon conversion of Pumper's land from agricultural use to a use that requires water service from a participating Public Agency, Public Agency shall credit to the extent legally permissible, Pumper or Pumper's successor-in-interest's adjusted production right, using the formula in Section 5 towards satisfaction of any requirement then in effect for water supply assessment requirements. Furthermore, Pumper or Pumper's successor-in-interest shall be given a credit for Pumper's adjusted production right using the formula in Section 5 towards any fees associated with water supply that the Public Agency may then have in effect. The Public Agency serving the converted land shall receive a credit to its production right as set forth in Section 5.

c. To the extent the Pumper's land is not covered under Section 7(A)(2)(b), Pumper will be eligible to enter into a contract with the Management Plan, or a participating Public Agency, to sell for a defined period of time some portion of Pumper's adjusted production right, under terms and conditions mutually agreed upon by the Pumper and the Management Plan. Criteria used in consideration of such contract shall include:

(i) Management Plan's need to acquire additional water supplies to address Basin overdraft and recovery;

(ii) Submission of a water conservation plan, including use of in lieu water, by Pumper that will reasonably guarantee conservation of water that would otherwise be produced from the Basin;

(iii) Public policy considerations of local government jurisdictions, including economic and land use impacts of proposed water conservation plan.

B. In-Lieu Water Use. In the event a Private Pumper (or successor) receives recycled and/or imported water from a Public Agency to serve an overlying use in place of groundwater, or otherwise engages in an in-lieu program, the overlying water right of the Private Pumper (or successor) shall not be diminished by the receipt and use of such recycled and/or imported water or by engaging in an in-lieu program.

C. Well Monitoring. To become a Class A or B Participant, a Private Pumper shall authorize the metering of the Pumper's well(s) and the collection of groundwater level and quality data, and the reading thereof by Management Plan personnel. The metering and reading shall be at no cost to the Pumper, and the Pumper shall receive copies of the reports and information obtained upon request.

D. Future Production Participation. Any new Pumper after the effective date of the Management Plan, as approved by a judgment of the Superior Court for Riverside County, can only participate as a Class A Participant as described in Section 7A(1).

E. Replacement Wells. The redrilling of existing wells and the drilling of new wells to replace existing wells will not be considered new private production.

8. Capital Facilities. Each Public Agency shall continue to own its existing capital facilities for water management. However, capital facilities may be jointly constructed and owned by the Management Plan. Joint financing of such facilities may be funded by regional capital fees, loans and grants, contributions for storage by The Metropolitan Water District of Southern California ("Metropolitan") or other third-parties, and municipal bonds. Responsibility for the costs of any existing and future capital facility of the Management Plan should be apportioned among the Public Agencies based on relative benefit to be derived by each Public Agency. Any of the participating Public Agencies may propose projects to be included in the Management Plan to increase Management Area water supply. Such proposals, after evaluation by the Watermaster, shall be included or rejected. If the Watermaster chooses to reject the proposal, the proposing Public Agency may implement the rejected project as long as it does not significantly impact the implementation of the Management Plan and/or interfere with the ongoing production by the Public Agencies.

9. Soboba Tribe's Water Rights. The Soboba Tribe's water rights shall be determined as part of a settlement among the Soboba Tribe, the United States, Eastern, Lake Hemet and Metropolitan. Major points of the proposed settlement are:

A. The Soboba Tribe shall have a senior, prior right in the Canyon and San Jacinto Upper Pressure Sub-basins of 9000 afy, but its use shall be limited to a maximum of 4100 afy during the first 50 years after the effective date of the settlement.

B. The Soboba Tribe shall have the right to purchase replenishment water for use pursuant to the Principles of Settlement at the Management Plan replenishment rate.

C. The Soboba settlement provides that, among other things, Metropolitan will use its best efforts to deliver sufficient water to yield a 15-year average of 7,500 afy to the Management Plan until 2035 at its long-term interruptible rate (currently $233/af).

D. Subject to full funding of the settlement by the United States, the Management Plan shall pay the Soboba Tribe $10 million.

E. The Management Plan will also pay the Soboba Tribe $7 million. A Public Agency's payment of its share of this amount is optional, but in order to obtain the benefits of the low-cost Metropolitan water delivered pursuant to the settlement, a Public Agency shall pay its share of this amount.

F. The Management Plan will receive $10 million for capital improvements from the United States, and all unused Soboba Tribe water based on the Public Agency's participation in the payment in Section 9(E) above.

10. Implementation of These Principles. These Interim Principles for Water Management shall be used by the parties as a basis for the preparation of the Management Plan, and a stipulated judgment in a water rights adjudication. As explained below, the Management Plan shall be administered by the Watermaster. The Watermaster will be under the continuing jurisdiction of the Court.

11. Assessment Program. The assessment program contemplated by the Management Plan shall be administered by the Watermaster subject to the governance provisions herein. All payments shall be made to the Watermaster and shall be maintained in a separate restricted fund. All assessments shall be used exclusively to acquire imported, recycled or Metropolitan water for the recharge of the Management Area, and for the facilities and operational and administrative expenses associated with the assessment and recharge programs. Subject to Management Plan approval, assessments may also be used by affected parties to acquire and deliver water for direct use by the parties, in lieu of pumping.

12. Replenishment Program. The replenishment program contemplated by the Management Plan shall also be administered by the Watermaster. The program shall include: the acquisition of supplemental water supplies (including imported, recycled and Soboba Tribe water); the expenditure of assessments; the recharge of the Management Area; and the construction and operation of all necessary facilities, including but not limited to, development of surface and sub-surface percolation and injection facilities. Priority for replenishment will be based on an equitable

apportionment of available replenishment water among the sub-basins after full consideration of: the Public Agency's participation in the payment in Section 9(E) above; the Management Area conditions; water demands; the availability of storage capacity to accommodate the recharge of natural flows; the availability of appropriate conveyance facilities; and the availability of replenishment or imported water. The Watermaster is encouraged to take advantage of surplus imported water that occasionally may be available at low cost, and to use available assessment funds to bank such recharge against future pumping in excess of adjusted production rights.

13. Rights to Groundwater. Groundwater in the Management Area may occur from: natural recharge; spreading operations of natural flows; replenishment with imported, recycled or Metropolitan water acquired with assessment funds; or in-lieu recharge programs financed with assessment funds. All such groundwater shall be available to support the pumping of the parties as allowed herein, and shall not be the property of any individual party, subject to the provisions of Section 14.

14. Storage Rights. The parties recognize that unused storage capacity exists in the Management Area, and the Management Plan contemplates that this capacity will be managed conjunctively with available imported and recycled water supplies. Subject to availability of the Management Plan fund for assessments and unused storage capacity as determined by Watermaster, the Management Area will be recharged and water stored therein when such supplies are available, and drawn upon by the Public Agencies in dry years when such supplemental water supplies may not be available. In addition, unused storage capacity as determined by Watermaster may be used for "put and take" operations of recycled or imported water that is paid for by any party to the Management Plan provided that:

A. Such operations do not interfere with the rights of any other pumper, or with the use of the storage capacity for recharge and storage under the Management Plan;

B. Water available for recharge is purchased first, as needed, for the Management Plan;

C. Later recovery of stored water shall exclude losses; and

D. Such recovered water may be used anywhere within the service area of the party.

Any conjunctive use programs for the benefit of territory outside of the Management Area shall be subject to the governance provisions herein. Any storage, conjunctive use programs by third parties or in-lieu recharge programs financed with assessment funds shall be subject to the governance provisions herein.

15. Spreading Operations. The Public Agencies shall independently or jointly operate their respective facilities to maximize the existing spreading and recharge operations of natural flow in the Management Area.

16. Recharge Water Quality. Consistent with Section 4(E) above all water used to replenish any sub-basin in the Management Area shall meet the Regional Water Quality Control Board requirements, and may be used in any sub-basin where such requirements are met.

17. Recharge Losses. The accounting for storage recharge of the Management Area shall not include any water that escapes therefrom and migrates downstream beyond the Management Area. Losses will be calculated based upon best engineering principles.

18. Recycled Water. The use of recycled water can be of substantial benefit in providing additional water in the Management Area. Each Public Agency may implement a recycled water program, including the ownership, operation and construction of all necessary facilities, and the application for and administration of any loan or grant applications. The Management Plan will support loan or grant applications, and the Public Agencies will work to integrate recycled water into the Management Plan to the extent economically feasible while meeting regulatory standards. Subject to existing recycled water contracts, the Management Plan will have a first right of refusal to purchase excess recycled water for recharge. Priority shall be given to Management Area recharge for the use of recycled water which originates therefrom.

19. Export. The Public Agencies may export water outside the Management Area, on a temporary basis, upon approval by the Watermaster.

However, any water exported shall be replenished with an appropriate amount of similar or better quality water as determined by Watermaster. Also, water exports by the Public Agencies shall not interfere with the Management Plan or any other Public Agency's operations. The Management Plan will set forth the specific criteria for the export of water, including, but not limited to, conjunctive use programs.

20. Credits. Recharge credits documented before the Management Plan shall be calculated pursuant to the Management Plan. Future recharge credits shall be established by replenishment of water or by not exercising the full, adjusted base production right, and shall be calculated pursuant to the Management Plan.

21. Tunnel Seepage, Stream Diversions, Fruitvale To resolve Eastern's use of Tunnel seepage, Lake Hemet's stream diversions and Eastern's use of Fruitvale water, 900 afy shall be added to Hemet's adjusted base production and 900 afy shall be added to San Jacinto's adjusted base production right as discussed in Section 5 above. This is intended to provide Hemet and San Jacinto a fair share of water from these disputed issues.

22. Governance. The Management Plan will be administered by a Watermaster as follows:

A. The governing board of the Watermaster shall consist of one elected official from each of the Public Agencies and one Private Pumper representative selected by the Private Pumpers who participate in the Management Plan. Each member shall have one vote.

B. The Watermaster's duties shall include: determining safe yield; determining replenishment needs; determining annual adjusted base production rights; purchasing and selling imported and recycled water; constructing future capital facilities; establishing assessment rates; initiating necessary conservation and drought management measures; and implementing other responsibilities identified in the Management Plan documents.

Dated: _____, 2004.

EASTERN MUNICIPAL WATER DISTRICT

By: _____

Dated: _____, 2004. LAKE HEMET MUNICIPAL WATER DISTRICT

By: _____

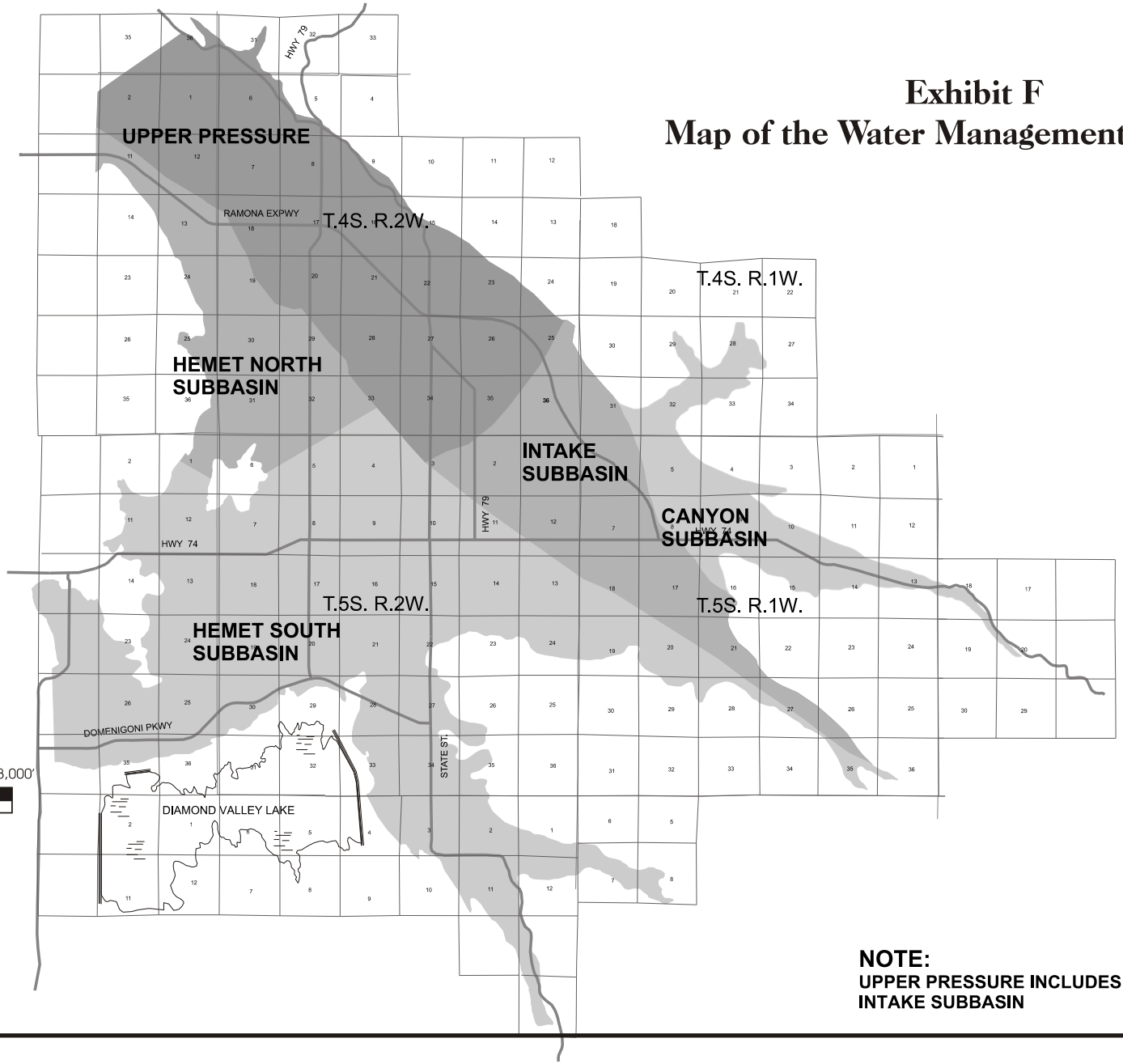
Dated: _____, 2004. CITY OF HEMET

By: _____

Dated: _____, 2004. CITY OF SAN JACINTO

By: _____

Exhibit F
Map of the Water Management Plan Area



NOTE:
UPPER PRESSURE INCLUDES INTAKE SUBBASIN

NORTH

1" = 9,000'
06-02-2004

Exhibit G – Description of the Water Management Plan Area

Water Management Plan Area

Beginning at the North quarter Corner of Section 2, Township 4 South, Range 2 West, S.B.B.& M.:

Thence South 55-09-46 West, a distance of 3086.02 to the True Point of Beginning;

Thence South 01-57-57 West, a distance of 3159.1491
Thence South 00-29-02 West, a distance of 429.3273
Thence South 00-14-26 West, a distance of 1908.6588
Thence South 01-46-37 West, a distance of 1567.6119
Thence North 55-21-31 East, a distance of 446.8379
Thence North 26-23-15 East, a distance of 631.4127
Thence South 87-18-21 East, a distance of 191.4616
Thence South 87-17-52 East, a distance of 446.7468
Thence South 70-03-12 East, a distance of 419.5431
Thence South 48-59-17 East, a distance of 352.6834
Thence South 49-46-27 East, a distance of 298.9505
Thence South 38-14-56 East, a distance of 408.2682
Thence South 43-41-06 East, a distance of 568.0886
Thence South 33-24-04 East, a distance of 907.5881
Thence South 39-40-04 East, a distance of 681.4619
Thence South 44-35-36 East, a distance of 523.0954
Thence South 40-05-37 East, a distance of 805.0741
Thence South 37-55-01 East, a distance of 359.8351
Thence South 35-20-31 East, a distance of 531.5890
Thence South 22-00-05 East, a distance of 405.3986
Thence South 17-22-41 East, a distance of 504.7266
Thence South 25-17-32 East, a distance of 595.1082
Thence South 32-14-23 East, a distance of 575.2528
Thence South 38-11-56 East, a distance of 414.9866
Thence South 21-26-59 East, a distance of 691.8554
Thence South 22-44-15 East, a distance of 524.2415
Thence South 20-38-45 East, a distance of 573.2541
Thence South 32-15-39 East, a distance of 191.7948
Thence South 88-14-08 East, a distance of 156.3241
Thence South 46-34-05 East, a distance of 439.2778
Thence South 12-36-58 East, a distance of 409.7686
Thence South 18-19-44 East, a distance of 426.9082
Thence South 16-24-51 East, a distance of 572.8471
Thence South 22-07-10 East, a distance of 731.9991
Thence South 22-31-31 East, a distance of 720.1255
Thence South 22-41-43 East, a distance of 1039.9629
Thence South 38-30-56 East, a distance of 426.1504
Thence South 37-08-43 East, a distance of 350.8795
Thence South 35-21-27 East, a distance of 265.6921
Thence South 00-21-06 West, a distance of 692.3260
Thence South 09-53-35 East, a distance of 427.7983
Thence South 14-00-56 East, a distance of 460.9092
Thence South 00-49-47 East, a distance of 353.9741
Thence South 39-14-44 West, a distance of 334.1122
Thence North 88-16-13 West, a distance of 312.6425
Thence North 88-15-40 West, a distance of 327.5258

Exhibit G – Description of the Water Management Plan Area

Thence South 65-20-48 West, a distance of 211.1187
Thence South 51-19-16 West, a distance of 262.9182
Thence North 81-25-48 West, a distance of 270.5204
Thence North 00-23-36 East, a distance of 254.9440
Thence North 14-20-10 West, a distance of 196.8810
Thence North 69-38-37 West, a distance of 331.8501
Thence North 88-16-15 West, a distance of 312.7674
Thence South 45-39-54 West, a distance of 220.8974
Thence South 00-40-33 West, a distance of 158.9491
Thence South 08-40-14 West, a distance of 373.9607
Thence South 18-56-44 West, a distance of 166.3231
Thence South 13-04-14 East, a distance of 219.4350
Thence South 88-17-54 East, a distance of 208.3419
Thence South 52-36-50 East, a distance of 454.9685
Thence South 57-10-41 East, a distance of 307.7555
Thence South 10-23-15 East, a distance of 271.0676
Thence South 47-38-04 East, a distance of 488.4199
Thence South 38-59-11 East, a distance of 489.7587
Thence South 43-18-04 East, a distance of 225.0918
Thence South 36-19-43 East, a distance of 1211.7791
Thence South 00-40-32 West, a distance of 159.0111
Thence South 15-40-02 East, a distance of 555.4493
Thence South 32-13-48 East, a distance of 383.6829
Thence South 34-03-33 East, a distance of 457.3251
Thence South 06-55-29 West, a distance of 478.9941
Thence South 11-48-53 West, a distance of 538.4695
Thence South 04-00-47 East, a distance of 639.4428
Thence South 57-16-59 West, a distance of 374.5463
Thence South 59-59-38 West, a distance of 302.6944
Thence South 45-44-02 West, a distance of 220.8122
Thence South 40-23-23 West, a distance of 407.4181
Thence South 27-02-10 West, a distance of 234.5719
Thence South 18-54-48 West, a distance of 499.3999
Thence South 18-54-28 West, a distance of 332.9008
Thence South 08-40-29 West, a distance of 373.7759
Thence South 11-49-45 West, a distance of 538.4344
Thence South 00-40-31 West, a distance of 318.1471
Thence South 00-39-43 West, a distance of 530.0974
Thence South 30-14-06 West, a distance of 422.2534
Thence South 31-26-41 West, a distance of 305.2671
Thence South 77-24-27 West, a distance of 214.1513
Thence North 25-17-38 West, a distance of 238.1444
Thence South 35-31-17 West, a distance of 637.9021
Thence South 39-15-19 West, a distance of 169.0961
Thence South 39-13-20 West, a distance of 165.0641
Thence South 39-14-20 West, a distance of 668.3212
Thence South 30-15-45 West, a distance of 422.1539
Thence South 06-16-29 West, a distance of 531.8110
Thence South 18-55-03 West, a distance of 166.5596
Thence South 21-01-01 West, a distance of 449.2623
Thence South 27-03-08 West, a distance of 351.8017
Thence South 31-28-15 West, a distance of 305.2794
Thence South 45-41-33 West, a distance of 515.4747
Thence South 77-23-51 West, a distance of 642.2232
Thence South 85-54-45 West, a distance of 522.5793
Thence North 82-59-20 West, a distance of 576.5611

Thence North 64-53-25 West, a distance of 400.6090
Thence North 66-16-35 West, a distance of 566.0858
Thence North 38-59-11 West, a distance of 489.7595
Thence North 32-14-03 West, a distance of 383.4039
Thence North 20-39-20 West, a distance of 286.6781
Thence North 43-18-43 West, a distance of 225.0460
Thence South 18-53-52 West, a distance of 166.3412
Thence North 88-17-24 West, a distance of 416.8106
Thence South 04-55-55 East, a distance of 533.6007
Thence South 51-18-38 East, a distance of 264.5584
Thence South 16-03-15 East, a distance of 723.6602
Thence South 34-10-30 West, a distance of 188.4831
Thence South 37-27-05 West, a distance of 261.0635
Thence South 06-18-55 East, a distance of 428.4127
Thence South 00-40-32 West, a distance of 371.0878
Thence South 66-17-12 East, a distance of 283.1573
Thence South 54-26-34 East, a distance of 380.8999
Thence South 18-53-51 West, a distance of 499.4190
Thence South 32-15-38 East, a distance of 191.7957
Thence South 14-32-01 West, a distance of 434.8520
Thence South 17-11-06 West, a distance of 549.9921
Thence South 31-27-03 West, a distance of 305.2142
Thence South 60-02-12 West, a distance of 302.7087
Thence South 60-45-52 West, a distance of 721.1047
Thence South 83-27-27 West, a distance of 367.5184
Thence South 57-14-27 West, a distance of 374.5758
Thence South 20-39-20 East, a distance of 286.6781
Thence South 88-16-51 East, a distance of 312.5156
Thence South 25-17-24 East, a distance of 476.0654
Thence South 57-08-56 East, a distance of 307.8569
Thence North 50-10-17 East, a distance of 479.5142
Thence North 29-05-00 East, a distance of 656.5286
Thence South 34-02-30 East, a distance of 457.5323
Thence South 17-22-42 East, a distance of 168.2415
Thence South 00-40-33 West, a distance of 158.9491
Thence South 60-02-12 West, a distance of 302.7087
Thence South 00-40-31 West, a distance of 371.2758
Thence South 67-32-00 East, a distance of 448.9489
Thence South 64-52-57 East, a distance of 400.4958
Thence North 71-51-49 East, a distance of 481.6809
Thence South 89-35-03 East, a distance of 344.3841
Thence South 46-25-17 East, a distance of 279.7030
Thence South 03-10-14 East, a distance of 409.0632
Thence South 23-51-22 West, a distance of 416.9340
Thence South 03-24-06 East, a distance of 383.4255
Thence South 66-09-28 East, a distance of 498.9547
Thence North 61-17-01 East, a distance of 418.4674
Thence North 62-31-22 East, a distance of 424.9349
Thence South 60-02-46 East, a distance of 439.7373
Thence South 24-58-10 East, a distance of 414.5596
Thence South 33-07-02 East, a distance of 260.1327
Thence South 34-34-28 East, a distance of 318.9559
Thence South 18-21-02 East, a distance of 308.8960
Thence South 13-34-41 West, a distance of 413.1727
Thence South 42-19-37 West, a distance of 343.9836
Thence South 63-55-07 West, a distance of 198.5981

Exhibit G – Description of the Water Management Plan Area

Thence North 85-31-13 West, a distance of 366.4946
Thence North 76-58-32 West, a distance of 406.8413
Thence North 72-11-08 West, a distance of 279.2651
Thence South 48-26-06 West, a distance of 204.3228
Thence South 34-26-55 West, a distance of 484.3828
Thence South 07-01-37 West, a distance of 389.2991
Thence South 05-32-54 East, a distance of 480.9402
Thence South 47-03-44 East, a distance of 682.8003
Thence South 21-46-09 East, a distance of 371.7621
Thence South 02-53-33 East, a distance of 483.0534
Thence South 14-20-24 West, a distance of 531.9487
Thence South 35-28-25 West, a distance of 663.8471
Thence South 52-23-59 West, a distance of 364.7668
Thence South 08-13-01 East, a distance of 698.7991
Thence South 67-31-20 East, a distance of 449.3910
Thence South 25-24-05 East, a distance of 238.0781
Thence South 22-14-37 West, a distance of 282.6599
Thence South 22-16-19 West, a distance of 282.6499
Thence South 26-41-31 East, a distance of 328.3674
Thence South 08-00-01 East, a distance of 374.5201
Thence South 00-14-32 West, a distance of 295.8146
Thence South 22-50-30 East, a distance of 524.2347
Thence South 32-19-47 East, a distance of 135.8012
Thence South 74-41-41 East, a distance of 495.5765
Thence North 87-48-16 East, a distance of 230.0439
Thence South 62-02-24 East, a distance of 271.0081
Thence South 27-01-09 East, a distance of 158.7654
Thence South 00-25-08 West, a distance of 188.1300
Thence South 47-28-36 West, a distance of 306.8174
Thence South 67-08-04 West, a distance of 1017.9951
Thence South 88-16-15 West, a distance of 559.2547
Thence North 38-00-54 West, a distance of 199.5152
Thence North 01-24-06 West, a distance of 209.4997
Thence North 29-50-03 West, a distance of 268.0941
Thence North 58-00-46 West, a distance of 880.2816
Thence North 18-49-54 East, a distance of 131.2772
Thence North 41-46-48 East, a distance of 881.2088
Thence North 53-22-34 East, a distance of 244.5273
Thence North 12-17-03 East, a distance of 196.8192
Thence North 32-10-09 West, a distance of 185.4739
Thence North 63-33-01 West, a distance of 250.0488
Thence North 87-33-20 West, a distance of 561.2607
Thence North 66-33-29 West, a distance of 616.6454
Thence North 08-43-43 East, a distance of 216.6340
Thence North 67-39-56 East, a distance of 702.4460
Thence North 35-11-58 East, a distance of 228.9973
Thence North 05-39-39 West, a distance of 221.7695
Thence North 52-37-23 West, a distance of 454.7550
Thence North 70-59-03 West, a distance of 713.5651
Thence North 88-13-32 West, a distance of 260.3749
Thence North 81-50-24 West, a distance of 472.9131
Thence North 46-37-10 West, a distance of 638.0651
Thence North 43-16-43 West, a distance of 300.1255
Thence North 38-12-54 West, a distance of 414.8389
Thence North 17-22-30 West, a distance of 336.5442
Thence North 15-44-09 East, a distance of 601.0252

Exhibit G – Description of the Water Management Plan Area

Thence North 17-21-42 West, a distance of 673.1694
Thence North 20-38-46 West, a distance of 573.2531
Thence North 18-52-30 West, a distance of 622.8685
Thence South 60-02-48 West, a distance of 302.6778
Thence North 69-38-36 West, a distance of 331.8504
Thence South 60-02-48 West, a distance of 302.6778
Thence North 43-18-30 West, a distance of 675.1831
Thence North 32-14-42 West, a distance of 383.5238
Thence North 57-09-25 West, a distance of 615.5074
Thence South 80-11-19 West, a distance of 529.6212
Thence South 86-26-44 West, a distance of 574.6054
Thence North 35-20-05 West, a distance of 531.4653
Thence North 00-38-55 East, a distance of 265.0170
Thence North 67-31-12 West, a distance of 448.8571
Thence South 88-18-10 West, a distance of 886.2638
Thence South 60-46-39 West, a distance of 721.0129
Thence South 45-41-01 West, a distance of 589.1057
Thence South 14-55-27 East, a distance of 387.3153
Thence South 00-40-32 West, a distance of 371.0888
Thence South 13-04-27 East, a distance of 438.7482
Thence South 21-26-38 East, a distance of 692.0304
Thence South 46-37-24 East, a distance of 638.0219
Thence South 47-03-19 East, a distance of 563.1754
Thence South 14-56-23 East, a distance of 387.4074
Thence South 23-12-42 East, a distance of 643.1882
Thence South 28-23-55 East, a distance of 428.9302
Thence South 14-56-32 East, a distance of 387.3475
Thence South 08-36-11 East, a distance of 323.3886
Thence South 04-55-55 East, a distance of 533.6007
Thence South 13-03-12 East, a distance of 205.8819
Thence South 09-36-40 East, a distance of 902.1630
Thence South 33-16-14 East, a distance of 321.9605
Thence South 36-27-41 West, a distance of 173.5290
Thence South 58-28-58 West, a distance of 639.1622
Thence South 01-42-32 East, a distance of 8216.1537
Thence North 78-59-47 East, a distance of 87.1013
Thence South 88-12-52 East, a distance of 469.3529
Thence South 74-02-23 East, a distance of 432.5486
Thence South 69-39-25 East, a distance of 664.8422
Thence South 88-10-48 East, a distance of 208.6052
Thence South 69-38-45 East, a distance of 498.6348
Thence South 82-26-13 East, a distance of 525.1939
Thence North 80-15-12 East, a distance of 265.0761
Thence South 69-37-59 East, a distance of 332.4062
Thence North 80-15-12 East, a distance of 265.0761
Thence North 61-21-31 East, a distance of 418.1679
Thence North 78-16-23 East, a distance of 907.4410
Thence South 79-58-51 East, a distance of 370.0179
Thence North 82-08-20 East, a distance of 316.2216
Thence North 55-40-58 East, a distance of 239.1251
Thence North 32-41-32 East, a distance of 260.8180
Thence North 87-54-28 East, a distance of 267.0530
Thence South 74-39-09 East, a distance of 360.3507
Thence South 81-59-59 East, a distance of 351.1678
Thence South 85-51-12 East, a distance of 535.0256
Thence North 74-27-22 East, a distance of 253.5225

Exhibit G – Description of the Water Management Plan Area

Thence North 68-04-45 East, a distance of 405.9771
Thence North 72-57-30 East, a distance of 164.2103
Thence North 68-40-29 East, a distance of 674.5618
Thence South 88-12-52 East, a distance of 469.3529
Thence North 84-02-19 East, a distance of 787.1317
Thence North 57-20-59 East, a distance of 187.2075
Thence North 72-57-06 East, a distance of 328.3010
Thence North 89-27-22 East, a distance of 1303.8087
Thence North 69-30-36 East, a distance of 279.4284
Thence North 55-24-17 East, a distance of 446.5897
Thence North 77-27-37 East, a distance of 428.3428
Thence North 57-20-59 East, a distance of 187.2075
Thence North 68-40-15 East, a distance of 674.4450
Thence North 54-02-04 East, a distance of 259.7702
Thence North 61-32-05 West, a distance of 236.0350
Thence North 11-48-13 East, a distance of 268.8725
Thence North 74-44-23 East, a distance of 542.1152
Thence North 79-01-23 East, a distance of 478.8868
Thence North 72-58-07 East, a distance of 328.4024
Thence North 39-15-47 East, a distance of 333.7907
Thence North 18-52-51 East, a distance of 332.5833
Thence North 77-29-05 East, a distance of 428.3020
Thence South 64-07-57 East, a distance of 518.8621
Thence South 88-12-19 East, a distance of 365.1791
Thence North 57-18-33 East, a distance of 748.5774
Thence North 30-13-53 East, a distance of 421.8035
Thence North 50-13-44 East, a distance of 479.1141
Thence North 27-01-48 East, a distance of 351.2419
Thence North 69-48-55 East, a distance of 347.5974
Thence North 73-52-54 East, a distance of 276.2335
Thence North 64-10-01 East, a distance of 564.5414
Thence North 48-25-39 East, a distance of 770.2680
Thence North 02-42-04 West, a distance of 363.4037
Thence North 07-15-13 East, a distance of 494.0156
Thence South 82-00-37 East, a distance of 544.5357
Thence North 23-34-36 East, a distance of 248.7655
Thence North 08-21-28 West, a distance of 257.9899
Thence North 12-57-56 West, a distance of 211.7095
Thence North 39-05-14 East, a distance of 188.3414
Thence South 59-36-44 East, a distance of 294.3064
Thence South 29-40-15 East, a distance of 384.3301
Thence North 77-27-50 East, a distance of 214.2324
Thence South 37-11-16 East, a distance of 340.4048
Thence South 29-37-50 East, a distance of 310.4751
Thence North 63-11-55 East, a distance of 298.2940
Thence North 54-27-48 East, a distance of 484.6434
Thence North 53-19-04 East, a distance of 504.0777
Thence North 70-16-43 East, a distance of 313.3817
Thence North 68-19-13 East, a distance of 338.7091
Thence South 79-55-46 East, a distance of 321.3256
Thence South 88-11-10 East, a distance of 260.6306
Thence South 88-14-05 East, a distance of 365.1733
Thence South 61-32-01 East, a distance of 235.8955
Thence South 69-37-59 East, a distance of 332.4058
Thence South 71-22-52 East, a distance of 548.3222
Thence South 13-09-09 East, a distance of 219.1868

Exhibit G – Description of the Water Management Plan Area

Thence South 22-05-36 East, a distance of 405.4599
Thence South 35-25-24 East, a distance of 265.9093
Thence South 61-31-13 East, a distance of 235.9251
Thence North 09-57-27 East, a distance of 320.9599
Thence North 12-08-01 West, a distance of 709.4744
Thence North 05-00-10 West, a distance of 533.2184
Thence North 31-28-03 East, a distance of 304.8291
Thence North 62-04-26 East, a distance of 534.2079
Thence North 76-04-08 East, a distance of 380.0540
Thence North 50-36-14 East, a distance of 898.3854
Thence South 60-30-43 East, a distance of 295.9651
Thence South 09-03-18 East, a distance of 874.4608
Thence South 42-03-39 West, a distance of 1049.7552
Thence South 33-04-47 East, a distance of 305.9692
Thence South 00-25-20 West, a distance of 424.0115
Thence South 08-41-25 West, a distance of 175.3885
Thence South 18-57-27 West, a distance of 88.8830
Thence South 00-37-56 West, a distance of 158.5727
Thence South 02-24-11 West, a distance of 420.3696
Thence South 10-51-56 West, a distance of 218.1612
Thence South 23-17-39 West, a distance of 1081.6711
Thence South 22-14-55 West, a distance of 282.6016
Thence South 09-56-34 West, a distance of 642.1445
Thence South 00-36-30 West, a distance of 423.7739
Thence South 05-36-43 East, a distance of 480.6166
Thence South 34-07-27 East, a distance of 457.6755
Thence South 43-22-35 East, a distance of 525.6352
Thence South 43-21-59 East, a distance of 468.2066
Thence South 86-51-47 East, a distance of 194.1659
Thence North 13-02-05 West, a distance of 207.2779
Thence North 31-29-15 East, a distance of 304.8943
Thence South 28-28-33 East, a distance of 429.1724
Thence South 00-37-56 West, a distance of 101.9432
Thence South 00-34-18 West, a distance of 162.8831
Thence South 79-04-14 West, a distance of 215.9165
Thence South 16-16-25 East, a distance of 365.7800
Thence South 29-40-24 East, a distance of 310.3196
Thence South 00-36-30 West, a distance of 211.8869
Thence South 11-46-39 West, a distance of 268.8469
Thence South 34-06-24 East, a distance of 457.6575
Thence South 32-18-47 East, a distance of 383.7376
Thence South 05-00-57 East, a distance of 533.2921
Thence South 18-52-51 West, a distance of 332.5833
Thence South 34-14-57 West, a distance of 564.8157
Thence South 62-30-45 West, a distance of 350.7168
Thence South 27-53-02 East, a distance of 1292.0070
Thence South 26-38-27 East, a distance of 844.3959
Thence South 35-16-45 East, a distance of 1398.9888
Thence South 43-11-11 East, a distance of 1392.1514
Thence South 42-14-40 East, a distance of 491.7866
Thence North 45-24-07 East, a distance of 151.1478
Thence South 77-29-31 East, a distance of 410.3647
Thence South 18-02-51 East, a distance of 181.1631
Thence South 39-21-33 East, a distance of 223.9113
Thence South 33-18-20 East, a distance of 206.6998
Thence South 00-25-39 West, a distance of 167.5677

Exhibit G – Description of the Water Management Plan Area

Thence South 54-42-30 East, a distance of 111.6424
Thence South 50-39-25 East, a distance of 838.8686
Thence North 11-47-14 West, a distance of 130.9483
Thence North 07-43-40 West, a distance of 202.6535
Thence North 00-24-22 East, a distance of 229.3178
Thence North 00-25-00 East, a distance of 171.8795
Thence North 37-17-40 East, a distance of 143.3793
Thence South 83-52-17 East, a distance of 288.0212
Thence South 35-07-26 East, a distance of 246.5899
Thence South 57-35-35 East, a distance of 270.2065
Thence South 66-24-50 East, a distance of 218.3676
Thence South 84-22-46 East, a distance of 316.5217
Thence South 67-45-17 East, a distance of 154.3641
Thence South 60-13-50 East, a distance of 526.0466
Thence South 30-34-27 East, a distance of 334.2156
Thence South 20-07-23 East, a distance of 244.8868
Thence South 21-23-16 East, a distance of 463.0777
Thence South 26-09-54 East, a distance of 192.1947
Thence South 37-28-06 East, a distance of 326.7182
Thence South 31-11-18 East, a distance of 437.6249
Thence South 36-28-24 East, a distance of 429.8103
Thence South 32-03-48 East, a distance of 373.6888
Thence South 38-14-10 East, a distance of 366.9793
Thence South 26-09-29 East, a distance of 448.5666
Thence South 26-08-48 East, a distance of 256.4284
Thence South 28-11-19 East, a distance of 359.0890
Thence South 27-53-11 East, a distance of 423.0643
Thence South 28-12-22 East, a distance of 359.1480
Thence South 32-03-30 East, a distance of 373.7422
Thence South 44-37-29 East, a distance of 80.9655
Thence North 18-52-20 East, a distance of 181.2433
Thence North 00-24-01 East, a distance of 143.1905
Thence North 14-50-58 West, a distance of 326.7890
Thence North 05-18-17 West, a distance of 287.9834
Thence North 00-24-59 East, a distance of 258.0698
Thence North 53-33-00 East, a distance of 143.2788
Thence North 84-41-51 East, a distance of 288.1079
Thence South 51-43-06 East, a distance of 326.7620
Thence South 44-34-21 East, a distance of 527.0298
Thence South 31-11-28 East, a distance of 437.3463
Thence South 33-58-56 East, a distance of 659.7382
Thence South 38-14-14 East, a distance of 550.5564
Thence South 63-00-06 East, a distance of 384.5311
Thence South 38-59-18 East, a distance of 1038.4843
Thence South 15-17-56 East, a distance of 952.6996
Thence South 55-56-23 East, a distance of 206.5605
Thence South 55-53-00 East, a distance of 516.8216
Thence South 38-53-16 East, a distance of 407.1779
Thence South 16-56-09 East, a distance of 1441.3852
Thence South 07-11-08 East, a distance of 433.7182
Thence South 21-02-16 East, a distance of 862.1560
Thence South 27-40-23 East, a distance of 487.1621
Thence South 26-09-29 East, a distance of 448.5666
Thence South 45-22-28 West, a distance of 81.1422
Thence South 06-42-29 East, a distance of 231.1453
Thence South 20-08-17 East, a distance of 244.7103

Exhibit G – Description of the Water Management Plan Area

Thence South 09-04-03 East, a distance of 174.4926
Thence South 09-02-24 East, a distance of 174.2271
Thence South 07-43-40 East, a distance of 202.6525
Thence South 00-24-00 West, a distance of 286.5700
Thence South 14-49-32 East, a distance of 326.8170
Thence South 00-24-00 West, a distance of 286.5070
Thence South 21-21-44 East, a distance of 154.4223
Thence South 13-37-15 East, a distance of 236.2051
Thence South 13-38-35 East, a distance of 236.3570
Thence South 15-31-50 East, a distance of 208.6814
Thence South 22-46-58 East, a distance of 218.2129
Thence South 22-46-35 East, a distance of 218.2700
Thence South 55-52-57 East, a distance of 206.7006
Thence South 78-16-53 East, a distance of 146.1716
Thence North 79-05-28 East, a distance of 292.2816
Thence North 74-28-54 East, a distance of 208.6048
Thence North 82-16-12 East, a distance of 202.5910
Thence South 89-35-39 East, a distance of 229.3808
Thence South 80-06-19 East, a distance of 174.2164
Thence North 22-12-54 East, a distance of 154.3976
Thence North 26-07-54 West, a distance of 192.1396
Thence North 36-27-45 West, a distance of 286.6826
Thence North 41-34-35 West, a distance of 385.5748
Thence North 26-08-54 West, a distance of 384.3343
Thence North 13-37-11 West, a distance of 354.5964
Thence North 24-22-44 West, a distance of 410.3376
Thence North 18-00-48 West, a distance of 362.5852
Thence North 12-07-44 West, a distance of 264.1464
Thence North 05-55-46 West, a distance of 519.0893
Thence North 00-24-59 East, a distance of 429.9494
Thence North 02-18-24 West, a distance of 602.4882
Thence North 02-04-24 West, a distance of 659.9320
Thence North 02-05-06 West, a distance of 659.6867
Thence North 25-08-41 West, a distance of 730.7479
Thence North 42-06-19 West, a distance of 466.4456
Thence North 19-15-13 West, a distance of 426.0813
Thence North 02-57-04 West, a distance of 488.0222
Thence North 00-24-41 East, a distance of 487.3876
Thence North 00-25-30 East, a distance of 286.5709
Thence North 19-34-09 West, a distance of 335.5043
Thence North 34-05-50 West, a distance of 556.3259
Thence North 22-12-56 West, a distance of 745.1916
Thence North 23-12-25 West, a distance of 500.5652
Thence North 06-43-37 West, a distance of 462.0560
Thence North 10-53-48 West, a distance of 292.2697
Thence North 00-25-22 East, a distance of 372.6971
Thence North 00-24-28 East, a distance of 544.3888
Thence North 00-24-21 East, a distance of 458.6995
Thence North 13-37-02 West, a distance of 472.5327
Thence North 16-18-14 West, a distance of 299.2196
Thence North 06-09-17 East, a distance of 287.9729
Thence North 63-49-21 East, a distance of 256.2870
Thence North 63-49-04 East, a distance of 192.3620
Thence South 89-35-15 East, a distance of 286.5074
Thence South 72-52-12 East, a distance of 299.4071
Thence South 36-27-54 East, a distance of 286.4572

Thence South 63-00-19 East, a distance of 320.4094
Thence South 87-05-43 East, a distance of 659.8478
Thence South 87-18-26 East, a distance of 717.0418
Thence North 78-19-20 East, a distance of 410.3691
Thence North 86-20-49 East, a distance of 402.1922
Thence North 75-28-47 East, a distance of 444.9628
Thence North 68-35-42 East, a distance of 463.0656
Thence South 89-35-15 East, a distance of 573.1398
Thence North 74-30-26 East, a distance of 208.7087
Thence North 67-12-39 East, a distance of 218.1548
Thence North 40-38-39 East, a distance of 488.2085
Thence North 56-43-24 East, a distance of 309.9471
Thence North 82-49-48 East, a distance of 433.6411
Thence South 64-49-28 East, a distance of 410.3555
Thence South 79-35-09 East, a distance of 494.7756
Thence South 51-42-35 East, a distance of 326.8004
Thence South 67-19-51 East, a distance of 681.2553
Thence South 53-53-05 East, a distance of 1129.4102
Thence South 36-27-09 East, a distance of 573.2902
Thence South 69-38-11 East, a distance of 335.3323
Thence North 82-19-37 East, a distance of 202.6898
Thence North 75-09-58 East, a distance of 326.6362
Thence South 86-44-29 East, a distance of 573.9280
Thence South 44-35-15 East, a distance of 405.2711
Thence South 54-53-15 East, a distance of 453.2260
Thence South 26-08-48 East, a distance of 256.4275
Thence South 70-17-49 East, a distance of 607.3060
Thence South 72-29-09 East, a distance of 389.8210
Thence South 57-07-23 East, a distance of 373.7322
Thence South 78-17-20 East, a distance of 292.2079
Thence North 60-38-50 East, a distance of 231.0356
Thence North 63-52-05 East, a distance of 192.2792
Thence North 63-50-06 East, a distance of 256.2596
Thence North 33-14-52 West, a distance of 103.2813
Thence North 73-39-56 West, a distance of 208.6728
Thence North 83-14-16 West, a distance of 259.5556
Thence North 83-52-07 West, a distance of 287.8969
Thence North 38-15-29 West, a distance of 183.7039
Thence North 31-36-33 West, a distance of 270.2132
Thence North 06-40-38 West, a distance of 231.1308
Thence North 31-21-38 East, a distance of 167.1723
Thence North 36-29-06 West, a distance of 286.5315
Thence North 52-43-48 West, a distance of 143.2535
Thence North 12-07-13 West, a distance of 264.3292
Thence North 00-26-14 East, a distance of 229.3817
Thence North 49-48-32 East, a distance of 264.1064
Thence North 63-50-04 East, a distance of 64.2044
Thence North 81-00-14 East, a distance of 174.2687
Thence North 37-17-40 East, a distance of 143.3793
Thence North 11-41-40 East, a distance of 146.1588
Thence North 00-22-29 East, a distance of 114.6895
Thence North 44-33-45 West, a distance of 162.1090
Thence North 54-04-38 West, a distance of 246.5087
Thence North 74-39-06 West, a distance of 444.8663
Thence North 55-53-48 West, a distance of 206.6659
Thence North 81-26-16 West, a distance of 202.7599

Exhibit G – Description of the Water Management Plan Area

Thence North 89-35-15 West, a distance of 286.5074
Thence South 60-39-45 West, a distance of 231.1446
Thence South 75-28-47 West, a distance of 444.9625
Thence South 84-04-11 West, a distance of 259.5139
Thence North 74-39-14 West, a distance of 889.8532
Thence North 37-28-30 West, a distance of 326.6682
Thence North 60-56-43 West, a distance of 359.0601
Thence North 51-42-35 West, a distance of 326.8004
Thence North 74-40-45 West, a distance of 444.9374
Thence North 78-16-36 West, a distance of 584.4413
Thence North 59-50-38 West, a distance of 462.3204
Thence North 41-12-16 West, a distance of 345.1619
Thence North 36-28-24 West, a distance of 429.8103
Thence North 44-33-45 West, a distance of 324.2179
Thence North 78-17-37 West, a distance of 292.3305
Thence North 82-27-35 West, a distance of 230.9974
Thence North 85-45-59 West, a distance of 430.9259
Thence North 74-51-11 West, a distance of 563.0613
Thence South 86-51-26 West, a distance of 459.4410
Thence South 66-26-36 West, a distance of 282.2731
Thence North 87-12-58 West, a distance of 688.4375
Thence North 66-44-39 West, a distance of 590.7479
Thence North 71-08-45 West, a distance of 815.7709
Thence North 61-17-05 West, a distance of 423.1666
Thence North 75-34-27 West, a distance of 472.6522
Thence North 86-00-24 West, a distance of 459.4906
Thence North 54-52-19 West, a distance of 453.1594
Thence North 77-03-58 West, a distance of 792.7378
Thence North 64-34-10 West, a distance of 474.3353
Thence North 69-21-42 West, a distance of 580.3709
Thence North 65-57-27 West, a distance of 500.4138
Thence North 48-24-23 West, a distance of 914.0925
Thence North 48-58-47 West, a distance of 528.5110
Thence North 26-09-15 West, a distance of 576.8086
Thence North 28-38-22 West, a distance of 294.9630
Thence North 05-55-05 West, a distance of 259.4447
Thence North 39-03-22 East, a distance of 183.5086
Thence North 08-32-50 East, a distance of 202.6892
Thence North 18-02-29 West, a distance of 181.2221
Thence North 44-34-49 West, a distance of 283.6904
Thence North 16-56-18 West, a distance of 480.5332
Thence North 26-57-57 East, a distance of 63.9531
Thence North 26-59-06 East, a distance of 320.3812
Thence North 00-24-56 East, a distance of 86.1903
Thence North 13-36-07 West, a distance of 117.9965
Thence North 55-53-15 West, a distance of 103.4197
Thence North 80-07-57 West, a distance of 348.6579
Thence South 83-19-15 West, a distance of 231.0682
Thence South 71-56-46 West, a distance of 181.3012
Thence North 89-35-15 West, a distance of 286.5074
Thence North 65-37-31 West, a distance of 282.2862
Thence North 21-24-19 West, a distance of 154.4679
Thence North 00-25-00 East, a distance of 257.8188
Thence North 50-35-45 East, a distance of 223.8940
Thence North 72-00-09 East, a distance of 362.4866
Thence North 77-51-49 East, a distance of 264.2818

Exhibit G – Description of the Water Management Plan Area

Thence North 51-44-27 East, a distance of 367.0951
Thence North 54-54-11 East, a distance of 246.4308
Thence North 56-41-40 East, a distance of 310.0497
Thence North 62-07-05 East, a distance of 423.2595
Thence North 06-43-28 East, a distance of 259.4095
Thence North 21-22-37 West, a distance of 617.2803
Thence North 23-33-48 West, a distance of 282.3551
Thence North 89-33-45 West, a distance of 114.6283
Thence North 89-35-22 West, a distance of 401.2603
Thence South 69-51-30 West, a distance of 244.8490
Thence South 60-09-01 West, a distance of 398.0591
Thence South 54-23-11 West, a distance of 389.9315
Thence South 54-22-33 West, a distance of 389.8293
Thence South 61-48-41 West, a distance of 359.0890
Thence South 84-03-32 West, a distance of 259.6446
Thence North 89-35-15 West, a distance of 286.5074
Thence North 57-07-23 West, a distance of 373.7322
Thence North 00-24-59 East, a distance of 258.0698
Thence North 30-40-48 East, a distance of 398.0960
Thence North 00-23-59 East, a distance of 143.3785
Thence North 18-00-35 West, a distance of 90.5622
Thence North 40-11-02 West, a distance of 264.2419
Thence North 65-07-41 West, a distance of 346.2386
Thence North 83-15-30 West, a distance of 519.0892
Thence North 44-35-39 West, a distance of 324.3934
Thence North 60-59-24 West, a distance of 359.0481
Thence North 30-30-56 West, a distance of 167.1519
Thence North 18-02-29 West, a distance of 362.4451
Thence North 00-25-00 East, a distance of 171.9425
Thence North 53-32-05 East, a distance of 286.7694
Thence North 79-07-22 East, a distance of 292.1233
Thence South 89-35-23 East, a distance of 200.6301
Thence South 84-48-57 East, a distance of 345.1619
Thence South 50-18-17 East, a distance of 407.2701
Thence South 44-36-07 East, a distance of 324.3485
Thence South 47-35-44 East, a distance of 385.4597
Thence South 47-57-26 East, a distance of 345.2181
Thence South 50-18-41 East, a distance of 407.2305
Thence South 65-07-08 East, a distance of 346.2647
Thence South 85-11-02 East, a distance of 373.6944
Thence South 89-35-12 East, a distance of 372.6347
Thence North 70-25-25 East, a distance of 335.3866
Thence North 67-14-11 East, a distance of 218.3853
Thence North 32-23-49 East, a distance of 270.3989
Thence North 00-24-59 East, a distance of 344.0091
Thence North 06-44-46 West, a distance of 230.9107
Thence North 37-17-40 East, a distance of 286.7579
Thence North 00-23-34 East, a distance of 200.5677
Thence North 00-23-58 East, a distance of 143.4405
Thence North 54-03-04 West, a distance of 493.0265
Thence North 79-16-58 West, a distance of 640.9295
Thence North 85-45-54 West, a distance of 430.8012
Thence North 74-20-13 West, a distance of 653.5178
Thence North 71-09-25 West, a distance of 543.7674
Thence North 53-33-23 West, a distance of 779.7344
Thence North 26-08-55 West, a distance of 768.9482

Exhibit G – Description of the Water Management Plan Area

Thence North 21-24-02 West, a distance of 617.3128
Thence North 04-14-31 East, a distance of 430.9305
Thence North 42-24-18 East, a distance of 385.5473
Thence North 41-00-36 East, a distance of 264.2145
Thence North 30-08-41 East, a distance of 230.9893
Thence North 07-43-31 West, a distance of 202.7149
Thence North 40-45-25 West, a distance of 304.6257
Thence North 70-17-49 West, a distance of 607.3060
Thence North 55-54-46 West, a distance of 310.0155
Thence North 26-09-10 West, a distance of 256.3718
Thence North 00-27-01 East, a distance of 143.1924
Thence North 14-27-19 East, a distance of 118.1782
Thence North 00-23-59 East, a distance of 143.3785
Thence North 54-03-37 West, a distance of 246.4075
Thence North 81-58-34 West, a distance of 433.8727
Thence North 77-04-54 West, a distance of 264.1866
Thence North 37-26-54 West, a distance of 326.8667
Thence North 00-25-42 East, a distance of 200.6306
Thence North 00-24-14 East, a distance of 372.5092
Thence North 15-40-06 East, a distance of 326.7674
Thence North 16-21-03 East, a distance of 208.6903
Thence North 35-24-20 East, a distance of 349.7396
Thence North 63-50-04 East, a distance of 64.2044
Thence North 63-50-50 East, a distance of 256.3718
Thence North 56-43-24 East, a distance of 309.9471
Thence North 53-33-00 East, a distance of 286.5577
Thence North 76-22-18 East, a distance of 945.3672
Thence North 52-15-15 East, a distance of 510.2846
Thence North 66-11-52 East, a distance of 628.5904
Thence North 74-26-54 East, a distance of 625.9155
Thence North 58-25-38 East, a distance of 270.2542
Thence South 85-01-19 East, a distance of 718.8363
Thence South 63-01-36 East, a distance of 384.4457
Thence South 66-20-26 East, a distance of 218.3532
Thence South 69-03-13 East, a distance of 244.9364
Thence North 83-16-16 East, a distance of 230.9660
Thence North 53-34-47 East, a distance of 143.3794
Thence South 84-23-40 East, a distance of 949.5407
Thence South 56-51-35 East, a distance of 476.9601
Thence South 58-35-04 East, a distance of 167.2702
Thence North 84-03-22 East, a distance of 519.0406
Thence North 56-46-52 East, a distance of 103.2473
Thence North 58-23-45 East, a distance of 270.4916
Thence North 71-54-54 East, a distance of 90.6009
Thence South 89-35-01 East, a distance of 172.0045
Thence South 74-03-10 East, a distance of 535.4830
Thence South 44-34-13 East, a distance of 324.1737
Thence South 33-18-20 East, a distance of 310.0497
Thence South 20-36-19 East, a distance of 399.2270
Thence South 47-58-49 East, a distance of 345.0929
Thence South 53-33-09 East, a distance of 389.8856
Thence South 76-35-51 East, a distance of 764.7010
Thence South 81-44-01 East, a distance of 838.9669
Thence South 77-41-35 East, a distance of 556.5393
Thence South 84-08-48 East, a distance of 1209.1792
Thence South 87-06-12 East, a distance of 1319.5612

Exhibit G – Description of the Water Management Plan Area

Thence North 82-17-20 East, a distance of 607.8717
Thence South 89-35-38 East, a distance of 458.6365
Thence North 68-02-09 East, a distance of 526.8664
Thence North 76-22-18 East, a distance of 472.6836
Thence North 76-23-14 East, a distance of 590.8480
Thence South 89-35-37 East, a distance of 114.5029
Thence North 56-42-13 East, a distance of 103.4884
Thence North 63-53-06 East, a distance of 128.0747
Thence North 45-25-36 East, a distance of 243.2076
Thence North 29-27-11 East, a distance of 295.1445
Thence North 41-00-36 East, a distance of 264.2145
Thence South 89-35-37 East, a distance of 114.6279
Thence North 82-16-29 East, a distance of 202.7149
Thence South 89-35-00 East, a distance of 257.8818
Thence South 83-52-26 East, a distance of 288.1455
Thence South 52-40-48 East, a distance of 143.1916
Thence South 30-33-09 East, a distance of 167.2154
Thence South 09-52-16 West, a distance of 174.2679
Thence South 30-08-41 West, a distance of 230.9893
Thence South 22-12-22 West, a distance of 154.4560
Thence South 00-26-15 West, a distance of 229.1317
Thence South 00-23-59 West, a distance of 143.3785
Thence South 26-09-10 East, a distance of 384.5573
Thence South 30-33-01 East, a distance of 334.2063
Thence South 47-04-25 East, a distance of 466.5541
Thence South 59-51-47 East, a distance of 462.0867
Thence South 66-04-10 East, a distance of 718.7888
Thence South 60-34-06 East, a distance of 295.0830
Thence South 36-26-24 East, a distance of 429.9371
Thence South 38-16-32 East, a distance of 183.4302
Thence South 50-55-44 East, a distance of 367.0959
Thence South 80-07-32 East, a distance of 522.9976
Thence South 83-14-16 East, a distance of 259.5556
Thence South 89-35-00 East, a distance of 343.8841
Thence North 59-26-40 East, a distance of 167.0758
Thence North 60-38-50 East, a distance of 231.0356
Thence North 66-27-54 East, a distance of 282.3629
Thence North 63-51-05 East, a distance of 192.3069
Thence South 89-35-22 East, a distance of 200.5051
Thence South 44-36-00 East, a distance of 202.5910
Thence South 18-01-23 East, a distance of 181.4008
Thence South 13-38-22 East, a distance of 236.4173
Thence South 03-58-18 East, a distance of 373.5851
Thence South 10-53-48 East, a distance of 292.2697
Thence South 22-46-58 East, a distance of 218.2120
Thence South 31-34-53 East, a distance of 270.4261
Thence South 39-24-51 East, a distance of 223.8461
Thence North 76-20-46 East, a distance of 118.0872
Thence North 68-37-46 East, a distance of 154.3636
Thence North 18-52-43 East, a distance of 181.1847
Thence North 26-57-53 East, a distance of 256.3714
Thence North 18-50-39 East, a distance of 362.6232
Thence North 36-25-57 East, a distance of 389.8114
Thence North 45-25-49 East, a distance of 364.7890
Thence North 58-48-12 East, a distance of 437.5179
Thence North 73-54-12 East, a distance of 807.0133

Thence South 89-35-13 East, a distance of 372.6347
Thence South 70-07-37 East, a distance of 516.6417
Thence South 57-26-00 East, a distance of 1184.7900
Thence South 42-06-12 East, a distance of 933.1152
Thence South 68-33-43 East, a distance of 399.1137
Thence South 44-35-55 East, a distance of 283.7774
Thence South 68-32-12 East, a distance of 399.1825
Thence South 71-10-13 East, a distance of 453.1256
Thence South 86-24-01 East, a distance of 516.6443
Thence South 63-00-36 East, a distance of 256.2886
Thence South 47-57-26 East, a distance of 345.2181
Thence South 61-08-28 East, a distance of 782.1325
Thence South 53-20-23 East, a distance of 533.2286
Thence South 58-37-21 East, a distance of 835.5739
Thence South 44-35-29 East, a distance of 526.8518
Thence South 68-43-27 East, a distance of 644.0187
Thence South 60-46-50 East, a distance of 654.2487
Thence South 56-28-54 East, a distance of 786.8458
Thence South 34-42-45 East, a distance of 946.2958
Thence South 31-35-39 East, a distance of 1081.5570
Thence South 24-47-42 East, a distance of 1076.9010
Thence South 09-02-24 East, a distance of 174.2261
Thence South 10-53-23 East, a distance of 292.4543
Thence South 29-50-59 East, a distance of 398.0591
Thence South 54-01-30 East, a distance of 246.5173
Thence South 55-54-06 East, a distance of 206.8047
Thence South 39-23-59 East, a distance of 223.7180
Thence South 35-07-27 East, a distance of 246.5891
Thence South 49-48-18 East, a distance of 223.7016
Thence South 71-06-40 East, a distance of 272.0239
Thence South 82-30-21 East, a distance of 230.9730
Thence South 89-35-39 East, a distance of 114.6279
Thence South 78-15-28 East, a distance of 146.1842
Thence South 63-02-06 East, a distance of 192.2788
Thence South 62-57-36 East, a distance of 128.1311
Thence North 00-22-28 East, a distance of 57.3762
Thence North 30-32-53 West, a distance of 166.9909
Thence North 36-27-13 West, a distance of 430.0114
Thence North 55-53-59 West, a distance of 309.9120
Thence North 29-50-11 West, a distance of 398.2213
Thence North 16-42-00 West, a distance of 389.7520
Thence North 03-40-13 West, a distance of 402.2620
Thence North 34-06-00 East, a distance of 310.1378
Thence South 89-35-37 East, a distance of 114.6279
Thence South 89-35-00 East, a distance of 257.8818
Thence South 33-18-20 East, a distance of 103.3499
Thence South 50-17-04 East, a distance of 407.3895
Thence South 83-51-32 East, a distance of 288.0279
Thence South 63-02-07 East, a distance of 192.2783
Thence South 58-09-42 East, a distance of 604.5925
Thence South 59-00-31 East, a distance of 732.2881
Thence North 85-12-37 East, a distance of 316.6057
Thence South 89-35-00 East, a distance of 343.8841
Thence South 79-34-59 East, a distance of 494.6526
Thence North 51-42-18 West, a distance of 326.6633
Thence North 53-35-56 West, a distance of 82.4656

Exhibit G – Description of the Water Management Plan Area

Thence North 53-34-06 West, a distance of 307.3090
Thence North 55-53-22 West, a distance of 413.3665
Thence North 72-53-50 West, a distance of 598.4647
Thence North 60-58-05 West, a distance of 718.2480
Thence North 46-42-41 West, a distance of 390.6740
Thence North 46-42-44 West, a distance of 156.7825
Thence North 44-35-15 West, a distance of 405.2711
Thence North 46-18-48 West, a distance of 669.1426
Thence North 37-52-35 West, a distance of 693.8574
Thence North 34-17-42 West, a distance of 906.2395
Thence North 33-57-07 West, a distance of 659.8059
Thence North 44-35-16 West, a distance of 608.0830
Thence North 46-47-40 West, a distance of 1054.3274
Thence North 48-19-10 West, a distance of 1868.4824
Thence North 56-06-31 West, a distance of 2130.4779
Thence North 66-07-44 West, a distance of 1655.6256
Thence North 58-12-53 West, a distance of 1376.2780
Thence North 41-24-29 West, a distance of 730.8163
Thence North 41-13-30 West, a distance of 345.0212
Thence North 26-08-55 West, a distance of 384.6138
Thence North 13-37-46 West, a distance of 354.3535
Thence North 41-34-35 West, a distance of 385.5755
Thence North 42-50-20 West, a distance of 669.1777
Thence North 50-29-55 West, a distance of 1181.6210
Thence North 31-24-48 West, a distance of 978.2580
Thence North 26-09-14 West, a distance of 704.9949
Thence North 08-33-23 West, a distance of 551.1343
Thence North 10-42-42 East, a distance of 640.9180
Thence North 35-06-54 East, a distance of 453.0875
Thence North 45-23-44 East, a distance of 243.3389
Thence North 52-32-18 East, a distance of 326.7674
Thence North 00-25-00 East, a distance of 171.8795
Thence North 34-34-34 West, a distance of 349.7803
Thence North 44-35-13 West, a distance of 337.0774
Thence North 44-35-20 West, a distance of 271.0057
Thence North 27-14-21 West, a distance of 679.4763
Thence North 09-26-25 West, a distance of 669.1250
Thence North 15-50-43 West, a distance of 716.4738
Thence North 22-47-41 West, a distance of 436.5304
Thence North 20-37-42 West, a distance of 399.1550
Thence North 05-56-49 West, a distance of 259.3960
Thence North 12-05-28 West, a distance of 264.3646
Thence North 14-27-19 East, a distance of 118.1782
Thence North 50-21-25 East, a distance of 158.1102
Thence North 65-13-15 East, a distance of 328.2188
Thence North 82-49-41 East, a distance of 264.3181
Thence South 84-49-29 East, a distance of 420.5895
Thence South 77-19-12 East, a distance of 411.1524
Thence South 62-03-23 East, a distance of 453.0744
Thence South 53-30-14 East, a distance of 237.5929
Thence South 57-59-51 East, a distance of 266.6488
Thence South 66-45-48 East, a distance of 360.0835
Thence South 74-02-50 East, a distance of 326.3171
Thence South 70-08-39 East, a distance of 314.8424
Thence South 63-01-30 East, a distance of 234.3736
Thence South 35-38-22 East, a distance of 237.4798

Thence South 42-04-07 East, a distance of 284.3200
Thence South 48-59-46 East, a distance of 322.1632
Thence South 55-05-28 East, a distance of 338.9985
Thence South 76-41-52 East, a distance of 627.2030
Thence South 80-50-12 East, a distance of 689.1699
Thence South 68-34-43 East, a distance of 243.1736
Thence South 51-17-14 East, a distance of 422.9187
Thence South 23-13-07 East, a distance of 305.0162
Thence South 17-07-37 East, a distance of 348.0598
Thence South 20-36-34 East, a distance of 243.2560
Thence South 77-20-44 East, a distance of 411.1112
Thence North 88-22-32 East, a distance of 489.4467
Thence South 89-35-23 East, a distance of 209.5054
Thence South 77-48-51 East, a distance of 428.1470
Thence South 46-33-41 East, a distance of 358.4156
Thence South 54-02-09 East, a distance of 300.5375
Thence North 76-21-42 East, a distance of 288.1242
Thence North 17-30-54 East, a distance of 237.5765
Thence North 16-48-48 East, a distance of 309.4149
Thence North 34-06-01 East, a distance of 125.9718
Thence North 84-56-56 East, a distance of 368.4308
Thence South 89-35-24 East, a distance of 227.1308
Thence South 79-15-43 East, a distance of 390.4622
Thence South 89-35-24 East, a distance of 751.1442
Thence North 68-02-21 East, a distance of 321.0451
Thence North 76-24-34 East, a distance of 144.1615
Thence North 82-57-46 East, a distance of 405.0514
Thence North 77-54-02 East, a distance of 322.0287
Thence South 66-25-23 East, a distance of 265.9506
Thence South 68-58-41 East, a distance of 149.3127
Thence North 54-52-10 East, a distance of 300.6385
Thence North 29-27-12 East, a distance of 179.7287
Thence North 56-43-55 East, a distance of 251.9098
Thence South 81-28-20 East, a distance of 370.4709
Thence South 78-57-07 East, a distance of 284.3959
Thence South 67-47-29 East, a distance of 470.2621
Thence South 83-24-48 East, a distance of 650.0405
Thence South 87-51-03 East, a distance of 576.6556
Thence North 81-40-49 East, a distance of 229.7933
Thence South 89-34-59 East, a distance of 524.0139
Thence South 80-08-29 East, a distance of 424.8993
Thence South 68-58-59 East, a distance of 149.1738
Thence South 85-18-12 East, a distance of 700.7279
Thence North 69-21-28 East, a distance of 243.2410
Thence North 83-18-13 East, a distance of 140.9616
Thence North 87-02-55 East, a distance of 297.3945
Thence South 84-24-08 East, a distance of 385.7145
Thence South 73-38-13 East, a distance of 381.5806
Thence South 60-46-31 East, a distance of 398.7573
Thence South 44-33-51 East, a distance of 197.5537
Thence South 44-36-26 East, a distance of 148.2746
Thence South 80-51-20 East, a distance of 229.6689
Thence South 77-41-23 East, a distance of 339.1733
Thence South 80-08-20 East, a distance of 106.1940
Thence South 74-17-21 East, a distance of 199.1918
Thence South 63-03-57 East, a distance of 156.1926

Exhibit G – Description of the Water Management Plan Area

Thence South 89-35-24 East, a distance of 139.7536
Thence North 69-52-16 East, a distance of 149.1074
Thence South 74-22-05 East, a distance of 199.2446
Thence South 54-02-09 East, a distance of 150.2688
Thence South 57-32-02 East, a distance of 164.7486
Thence South 80-08-39 East, a distance of 212.5112
Thence South 81-28-20 East, a distance of 246.9807
Thence South 57-34-32 East, a distance of 164.8208
Thence South 59-51-45 East, a distance of 281.7053
Thence South 49-18-45 East, a distance of 297.3849
Thence South 53-35-18 East, a distance of 237.6448
Thence South 41-33-00 East, a distance of 235.0086
Thence South 49-00-08 East, a distance of 483.1160
Thence South 55-49-43 East, a distance of 125.8518
Thence South 44-35-25 East, a distance of 123.5701
Thence South 44-36-30 East, a distance of 271.6237
Thence South 44-36-10 East, a distance of 197.5973
Thence South 31-11-39 East, a distance of 266.6825
Thence South 29-50-24 East, a distance of 242.6743
Thence South 26-09-18 East, a distance of 273.3663
Thence South 28-55-20 East, a distance of 320.7559
Thence South 44-37-15 East, a distance of 247.0063
Thence South 39-21-54 East, a distance of 136.3797
Thence South 39-30-43 East, a distance of 1115.9357
Thence South 56-57-13 East, a distance of 518.5041
Thence South 32-18-58 East, a distance of 290.6424
Thence South 54-36-52 East, a distance of 213.2716
Thence South 47-36-34 East, a distance of 234.9146
Thence South 44-35-24 East, a distance of 172.8920
Thence South 35-05-29 East, a distance of 150.2478
Thence South 59-20-24 East, a distance of 242.6739
Thence South 59-19-30 East, a distance of 242.5664
Thence South 89-35-24 East, a distance of 139.7536
Thence South 89-35-24 East, a distance of 139.7536
Thence South 89-35-23 East, a distance of 52.3763
Thence North 67-16-06 East, a distance of 132.9522
Thence North 00-24-32 East, a distance of 52.5643
Thence North 33-16-47 West, a distance of 62.8730
Thence North 58-37-01 West, a distance of 203.6710
Thence North 47-58-30 West, a distance of 210.3380
Thence North 50-17-39 West, a distance of 248.1038
Thence North 41-34-22 West, a distance of 235.0915
Thence North 35-34-47 West, a distance of 237.6102
Thence North 52-44-11 West, a distance of 261.9812
Thence North 49-21-11 West, a distance of 297.5341
Thence North 49-21-20 West, a distance of 297.3572
Thence North 44-34-50 West, a distance of 271.7576
Thence North 38-15-35 West, a distance of 335.4983
Thence North 27-27-57 West, a distance of 336.0671
Thence North 50-30-00 West, a distance of 360.1165
Thence North 21-23-39 West, a distance of 470.1461
Thence North 10-11-56 West, a distance of 284.4954
Thence North 07-44-11 West, a distance of 246.9982
Thence North 19-33-17 West, a distance of 204.2826
Thence North 41-52-09 West, a distance of 259.7636
Thence North 63-00-09 West, a distance of 429.5609

Exhibit G – Description of the Water Management Plan Area

Thence North 43-07-25 West, a distance of 481.8419
Thence North 42-44-17 West, a distance of 382.9316
Thence North 28-24-46 West, a distance of 398.7864
Thence North 28-23-07 West, a distance of 398.6130
Thence North 38-46-12 West, a distance of 608.4346
Thence North 72-21-04 West, a distance of 530.2057
Thence North 77-53-41 West, a distance of 517.3797
Thence North 84-31-51 West, a distance of 596.0885
Thence North 68-33-48 West, a distance of 486.5318
Thence North 67-12-28 West, a distance of 642.2768
Thence North 76-42-02 West, a distance of 627.0671
Thence North 60-32-28 West, a distance of 899.1237
Thence North 75-54-13 West, a distance of 665.1543
Thence North 66-23-19 West, a distance of 665.0515
Thence North 80-51-29 West, a distance of 459.4613
Thence North 74-27-13 West, a distance of 669.4943
Thence North 63-02-06 West, a distance of 312.4704
Thence North 73-53-13 West, a distance of 580.5569
Thence North 76-51-43 West, a distance of 555.1563
Thence North 72-03-23 West, a distance of 347.9228
Thence North 71-08-13 West, a distance of 497.2030
Thence North 69-01-58 West, a distance of 746.1565
Thence North 46-26-06 West, a distance of 382.9739
Thence North 55-28-34 West, a distance of 654.0611
Thence North 65-37-13 West, a distance of 516.0126
Thence North 73-38-41 West, a distance of 508.7107
Thence North 70-36-46 West, a distance of 591.0123
Thence North 69-01-55 West, a distance of 447.6429
Thence North 64-48-32 West, a distance of 1750.7575
Thence North 68-24-13 West, a distance of 917.8053
Thence North 68-02-33 West, a distance of 1427.2827
Thence North 64-07-22 West, a distance of 1625.0677
Thence North 43-46-42 West, a distance of 876.7911
Thence North 47-49-40 West, a distance of 655.7561
Thence North 61-41-57 West, a distance of 335.8997
Thence North 51-42-49 West, a distance of 199.2231
Thence North 48-40-34 West, a distance of 346.7099
Thence North 47-34-33 West, a distance of 235.0408
Thence North 36-26-36 West, a distance of 174.6548
Thence North 09-53-20 East, a distance of 106.2668
Thence South 78-41-19 East, a distance of 462.3561
Thence South 74-50-24 East, a distance of 343.1933
Thence South 79-53-51 East, a distance of 726.5141
Thence South 82-28-31 East, a distance of 422.3874
Thence North 74-29-44 East, a distance of 254.3821
Thence North 67-11-37 East, a distance of 399.0744
Thence North 60-41-37 East, a distance of 281.6756
Thence North 79-05-27 East, a distance of 445.1700
Thence North 00-26-51 East, a distance of 192.0059
Thence North 31-36-58 West, a distance of 164.7668
Thence North 80-07-13 West, a distance of 637.4534
Thence North 79-17-00 West, a distance of 585.8427
Thence North 83-52-06 West, a distance of 702.1421
Thence North 81-40-22 West, a distance of 634.8176
Thence North 71-46-52 West, a distance of 513.7552
Thence North 78-48-11 West, a distance of 746.7136

Exhibit G – Description of the Water Management Plan Area

Thence North 70-26-56 West, a distance of 905.9868
Thence North 65-52-49 West, a distance of 2823.3710
Thence North 52-03-27 West, a distance of 1519.7285
Thence North 36-15-37 West, a distance of 1023.5333
Thence North 28-50-12 West, a distance of 1501.3573
Thence North 03-16-40 East, a distance of 699.5825
Thence North 40-00-38 East, a distance of 657.5376
Thence North 55-55-24 East, a distance of 339.1029
Thence North 56-42-53 East, a distance of 377.8643
Thence North 26-59-25 East, a distance of 312.6105
Thence North 71-58-47 East, a distance of 497.0045
Thence North 80-06-42 East, a distance of 585.9547
Thence South 87-23-25 East, a distance of 454.3462
Thence North 42-41-35 East, a distance of 519.3043
Thence North 65-30-29 East, a distance of 539.2736
Thence North 85-13-27 East, a distance of 192.9198
Thence South 77-48-22 East, a distance of 428.1601
Thence South 79-18-05 East, a distance of 195.2692
Thence North 69-51-14 East, a distance of 298.5136
Thence North 28-19-28 East, a distance of 335.9044
Thence North 31-22-11 East, a distance of 305.6825
Thence North 56-01-15 East, a distance of 402.0238
Thence North 82-39-26 East, a distance of 387.8052
Thence North 78-08-24 East, a distance of 411.1519
Thence North 60-22-03 East, a distance of 383.3919
Thence North 59-26-14 East, a distance of 203.6705
Thence North 05-12-58 East, a distance of 210.3711
Thence North 54-35-53 West, a distance of 426.4772
Thence North 11-40-50 West, a distance of 250.0533
Thence North 49-48-05 East, a distance of 161.0345
Thence North 48-23-44 East, a distance of 235.0392
Thence North 00-24-37 East, a distance of 174.5675
Thence North 23-13-24 West, a distance of 304.9592
Thence North 70-45-15 East, a distance of 259.7676
Thence South 78-49-18 East, a distance of 373.3326
Thence South 72-19-46 East, a distance of 530.4007
Thence North 68-01-44 East, a distance of 321.0687
Thence North 61-21-05 East, a distance of 179.8988
Thence North 15-39-15 East, a distance of 199.2007
Thence North 00-24-37 East, a distance of 174.5675
Thence North 09-52-20 West, a distance of 195.3932
Thence North 38-41-05 West, a distance of 359.9806
Thence North 38-15-35 West, a distance of 335.4983
Thence North 24-47-03 West, a distance of 328.3020
Thence North 18-01-30 West, a distance of 220.9698
Thence North 00-27-21 East, a distance of 157.1300
Thence North 24-36-33 West, a distance of 289.0680
Thence North 26-08-49 West, a distance of 195.4380
Thence North 37-10-21 West, a distance of 286.5286
Thence North 71-10-31 West, a distance of 276.0141
Thence North 89-35-24 West, a distance of 366.7594
Thence North 47-18-37 West, a distance of 259.8516
Thence North 02-26-15 West, a distance of 349.7545
Thence North 02-27-48 West, a distance of 125.0526
Thence North 02-27-50 West, a distance of 78.5106
Thence North 02-27-01 West, a distance of 146.1957

Exhibit G – Description of the Water Management Plan Area

Thence North 05-17-26 West, a distance of 351.1208
Thence North 29-50-24 West, a distance of 242.6743
Thence North 87-54-29 West, a distance of 594.1460
Thence South 25-25-45 West, a distance of 289.0690
Thence South 07-33-35 West, a distance of 54.1577
Thence South 07-31-36 West, a distance of 368.3617
Thence South 15-40-43 West, a distance of 398.2550
Thence South 21-34-12 West, a distance of 580.7325
Thence South 17-07-05 West, a distance of 546.9813
Thence South 18-03-11 West, a distance of 403.3575
Thence South 25-37-23 West, a distance of 328.0751
Thence South 34-42-09 West, a distance of 465.0331
Thence South 25-01-48 West, a distance of 461.1868
Thence South 54-23-57 West, a distance of 475.1916
Thence South 69-37-52 West, a distance of 541.7496
Thence North 73-56-54 West, a distance of 453.4280
Thence North 48-34-43 West, a distance of 532.4290
Thence North 28-23-07 West, a distance of 398.6121
Thence North 54-35-53 West, a distance of 426.4777
Thence North 16-41-42 West, a distance of 237.5764
Thence North 12-06-59 West, a distance of 322.1772
Thence North 33-16-47 West, a distance of 251.7194
Thence North 60-46-31 West, a distance of 398.7569
Thence North 40-31-06 West, a distance of 346.7031
Thence North 29-18-46 West, a distance of 281.6207
Thence North 31-34-49 West, a distance of 329.6291
Thence North 65-37-55 West, a distance of 344.1602
Thence North 33-16-48 West, a distance of 314.8173
Thence North 40-10-53 West, a distance of 160.9938
Thence South 48-09-08 West, a distance of 259.5913
Thence South 05-10-56 West, a distance of 210.3598
Thence South 01-52-06 East, a distance of 437.1073
Thence South 17-14-28 East, a distance of 403.1796
Thence South 16-17-52 East, a distance of 546.9801
Thence South 17-24-29 East, a distance of 513.9131
Thence South 44-35-54 East, a distance of 296.2405
Thence South 40-10-11 East, a distance of 322.2593
Thence South 35-07-29 East, a distance of 300.4644
Thence South 31-25-13 East, a distance of 596.0948
Thence South 27-28-50 East, a distance of 335.9003
Thence South 04-21-44 East, a distance of 210.3594
Thence South 42-01-35 West, a distance of 210.4263
Thence South 45-23-50 West, a distance of 197.5089
Thence South 52-08-16 West, a distance of 422.9006
Thence South 45-24-36 West, a distance of 469.3541
Thence South 70-25-56 West, a distance of 408.8638
Thence South 66-59-15 West, a distance of 571.0711
Thence South 33-18-10 West, a distance of 353.7851
Thence South 37-17-32 West, a distance of 349.2845
Thence South 49-29-46 West, a distance of 346.7099
Thence South 65-13-51 West, a distance of 328.1924
Thence South 55-43-12 West, a distance of 276.0820
Thence South 59-26-46 West, a distance of 407.4482
Thence South 55-41-57 West, a distance of 385.3996
Thence South 74-49-34 West, a distance of 746.6568
Thence South 88-29-17 West, a distance of 502.1748

Exhibit G – Description of the Water Management Plan Area

Thence North 70-28-56 West, a distance of 460.1936
Thence North 69-36-20 West, a distance of 783.2207
Thence North 43-33-28 West, a distance of 939.4676
Thence North 43-33-19 West, a distance of 1036.0201
Thence North 40-54-46 West, a distance of 2583.7541
Thence North 31-11-35 West, a distance of 1531.8376
Thence North 29-04-17 West, a distance of 883.9252
Thence North 09-00-43 East, a distance of 1454.7700
Thence North 54-11-24 West, a distance of 779.7834
Thence North 87-31-53 West, a distance of 468.6850
Thence North 57-43-25 West, a distance of 728.5775
Thence North 45-11-13 West, a distance of 1123.8200
Thence North 42-28-03 West, a distance of 639.0971
Thence North 44-35-23 West, a distance of 993.5551
Thence North 53-37-20 West, a distance of 1053.8761
Thence North 45-08-03 West, a distance of 1265.5924
Thence North 59-09-53 West, a distance of 2532.3330
Thence North 47-35-59 West, a distance of 2350.0134
Thence North 58-27-25 West, a distance of 2060.8752
Thence North 66-50-08 West, a distance of 1174.2981
Thence North 63-57-03 West, a distance of 968.6480
Thence North 63-00-31 West, a distance of 390.6801
Thence North 70-40-49 West, a distance of 646.2686
Thence North 40-55-19 West, a distance of 581.6539
Thence North 34-57-19 West, a distance of 664.1211
Thence North 29-30-50 West, a distance of 665.0486
Thence North 40-11-42 West, a distance of 644.1840
Thence North 32-41-45 West, a distance of 479.4718
Thence North 31-47-25 West, a distance of 557.3641
Thence North 35-29-16 West, a distance of 625.5074
Thence North 57-26-41 West, a distance of 722.0837
Thence North 56-11-52 West, a distance of 920.3187
Thence North 52-01-01 West, a distance of 859.5622
Thence North 43-09-18 West, a distance of 988.3405
Thence North 48-19-27 West, a distance of 1138.6784
Thence North 49-20-55 West, a distance of 892.3305
Thence North 61-42-59 West, a distance of 128.6036
Thence North 61-46-06 West, a distance of 582.4067
Thence North 38-45-39 West, a distance of 608.3563
Thence North 57-50-10 West, a distance of 431.4674
Thence North 54-15-44 West, a distance of 513.7375
Thence North 47-06-09 West, a distance of 284.2715
Thence North 61-17-55 West, a distance of 257.9420
Thence North 69-55-30 West, a distance of 259.6503
Thence North 82-28-31 West, a distance of 422.3874
Thence North 76-33-36 West, a distance of 233.1347
Thence North 73-00-13 West, a distance of 856.5357
Thence North 30-02-19 West, a distance of 344.5967
Thence North 32-29-37 West, a distance of 707.3623
Thence North 37-17-46 West, a distance of 485.6130
Thence North 24-21-08 West, a distance of 500.1906
Thence North 19-14-31 West, a distance of 519.2580
Thence North 09-53-20 East, a distance of 212.5327
Thence North 00-24-37 East, a distance of 296.8196
Thence North 38-14-00 West, a distance of 335.6954
Thence North 89-35-24 West, a distance of 192.1299

Exhibit G – Description of the Water Management Plan Area

Thence North 89-35-24 West, a distance of 209.6304
Thence North 55-06-11 West, a distance of 339.1010
Thence North 16-16-08 West, a distance of 182.4945
Thence North 34-35-39 West, a distance of 213.1185
Thence North 64-49-05 West, a distance of 250.1489
Thence North 70-17-53 West, a distance of 370.0374
Thence North 44-34-57 West, a distance of 345.8289
Thence North 16-18-05 West, a distance of 364.7246
Thence North 29-57-57 West, a distance of 587.1073
Thence North 16-16-28 West, a distance of 182.4350
Thence North 38-34-12 East, a distance of 310.9619
Thence North 26-58-53 East, a distance of 507.7685
Thence North 26-02-10 East, a distance of 484.4089
Thence North 28-30-44 East, a distance of 296.9540
Thence North 09-08-31 East, a distance of 229.7301
Thence North 06-25-49 East, a distance of 333.7245
Thence North 09-22-35 East, a distance of 336.0530
Thence North 04-13-57 East, a distance of 262.5279
Thence North 31-34-44 West, a distance of 164.7022
Thence South 45-26-05 West, a distance of 98.9540
Thence South 50-38-19 West, a distance of 136.2910
Thence South 31-20-58 West, a distance of 203.7449
Thence South 20-23-24 West, a distance of 204.5015
Thence South 37-18-31 West, a distance of 174.6797
Thence South 35-56-42 West, a distance of 300.4641
Thence South 30-10-36 West, a distance of 281.7456
Thence South 19-50-56 West, a distance of 314.7618
Thence South 10-42-47 West, a distance of 390.6845
Thence South 56-43-54 West, a distance of 251.9103
Thence South 62-31-10 West, a distance of 335.9003
Thence North 83-15-45 West, a distance of 316.4353
Thence South 67-46-15 West, a distance of 226.9957
Thence South 84-04-56 West, a distance of 316.4363
Thence North 80-51-20 West, a distance of 229.6689
Thence North 66-23-39 West, a distance of 398.4678
Thence North 66-22-50 West, a distance of 665.7744
Thence North 40-11-08 West, a distance of 805.0972
Thence North 55-01-37 West, a distance of 954.6359
Thence North 44-35-45 West, a distance of 419.8105
Thence North 59-05-55 West, a distance of 344.5304
Thence North 42-58-24 West, a distance of 432.4011
Thence North 50-05-14 West, a distance of 384.7675
Thence North 63-02-07 West, a distance of 312.4699
Thence North 64-14-47 West, a distance of 367.0874
Thence South 17-59-39 East, a distance of 110.4651
Thence South 35-50-56 East, a distance of 324.8520
Thence South 32-28-58 East, a distance of 353.7862
Thence South 31-35-51 East, a distance of 329.4689
Thence South 44-35-03 East, a distance of 420.0770
Thence South 41-51-46 East, a distance of 519.2197
Thence South 13-37-56 East, a distance of 287.9879
Thence South 09-35-21 East, a distance of 301.6528
Thence South 05-18-52 East, a distance of 175.4412
Thence South 27-00-57 West, a distance of 117.2299
Thence South 49-48-06 West, a distance of 161.0338
Thence North 89-35-23 West, a distance of 157.1290

Exhibit G – Description of the Water Management Plan Area

Thence North 72-13-07 West, a distance of 292.8656
Thence North 38-14-40 West, a distance of 223.5397
Thence North 49-21-21 West, a distance of 1487.2756
Thence North 50-30-26 West, a distance of 154.9607
Thence South 53-10-59 West, a distance of 150.5821
Thence South 54-44-21 West, a distance of 1005.8733
Thence South 55-06-24 West, a distance of 6992.3760
Thence South 54-09-37 West, a distance of 1051.0319
to the True Point of Beginning.

Perimeter: 551741.8300

Area: 2495992473.0343 57300.1027 acres
Mapcheck Closure - (Uses listed courses & COGO Units)
Error of Closure: 0.02737 Thence South 68-46-44 W
Precision 1: 20161685.12

Exhibit H – Judgment and Decree

UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA

SOBOBA BAND OF LUISEÑO INDIANS, a federally recognized Indian tribe,

Plaintiff,

v.

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA, a California metropolitan water district; LAKE HEMET MUNICIPAL WATER DISTRICT, a California water district; the UNITED STATES OF AMERICA for the benefit of the Soboba Band of Luiseño Indians,

Defendants,

v.

EASTERN MUNICIPAL WATER DISTRICT, a California water district,

Third-Party Defendant.

Case No. 00-04208 GAF (MANx)
Judge: Honorable Gary A. Feess

STIPULATED JUDGMENT

The Court has considered the Settlement Agreement dated _____, 2004, which permanently resolves the claims of the Soboba Band of Luiseño Indians, (hereinafter "Soboba Tribe") and the United States appearing for the benefit of the Soboba Tribe for alleged infringement of its water rights in the San Jacinto River and the Canyon Sub-basin and Intake portion of the Upper Pressure Sub-basin associated therewith (collectively "Basin") in Riverside County, California, and for damages related to historical interference with the Soboba Tribe's rights and unauthorized use of its water. A copy of the Settlement Agreement is attached as Exhibit 1 to the Stipulation and Request for Entry of Judgment and Decree.

After consideration of the pleadings and papers filed in this action, the evidence presented by the Parties, and the Stipulation and Request for Entry of Judgment and Decree, it is hereby ORDERED, ADJUDGED AND DECREED:

1. The Settlement Agreement is hereby approved in its entirety, and this Judgment and Decree incorporates the definitions set forth therein. When used in this Judgment and Decree, the term "United States" shall mean the United States of America acting on behalf of the Soboba Tribe, and in no other capacity except as specifically otherwise provided herein.

2. The Soboba Tribe shall have the right to waters beneath the Soboba Indian Reservation, which shall be held in trust by the United States for the benefit of the Soboba Tribe, as follows:

A. The prior and paramount right, superior to all others, to pump 9,000 AFA from the Basin for any use on the Reservation and lands now owned or hereafter acquired by the Soboba Tribe contiguous to the Reservation or within the Basin.

B. The Soboba Tribe's right to pump a total of 9,000 AFA from the

Basin is without regard to whether the water was naturally or artificially recharged.

C. In the event the Soboba Tribe is unable, except for mechanical failure of its wells, pumps or water facilities, to produce from its existing wells or equivalent replacements up to 3,000 AFA production from the Canyon Sub-basin and the remainder of its Tribal Water Right from the Intake Sub-basin, Eastern Municipal Water District and Lake Hemet Municipal Water District ("the Local Districts") shall deliver any shortage to the Soboba Tribe. Any shortage shall be delivered at such locations as the Soboba Tribe and the Local Districts may agree, or if there is no agreement, at the wellheads where the shortage occurred. Such water may be supplied from Local District wells in either the Canyon or Intake Sub-basins, or from other sources. For any water delivered pursuant to this paragraph, the Soboba Tribe shall pay an acre-foot charge equal to its then current cost of production, and any avoided cost of treatment, from the wells where the shortage occurred, assuming pumping lifts equal to the Soboba Tribe's averages in the respective Sub-basins over the preceding ten years.

3. Beginning on the Effective Date of the Settlement Agreement, the Soboba Tribe's right to pump groundwater in the exercise of its Tribal Water Right shall be subject to the following provisions:

A. The Soboba Tribe agrees to limit its exercise of the Tribal Water Right to 4,100 acre-feet annually, for a period of fifty (50) years commencing with the Effective Date of the Settlement Agreement, according to the schedule set forth in Exhibit F of the Settlement Agreement. Should the Soboba Tribe during that period identify a need for water in addition to the Schedule set forth in Exhibit F, the Soboba Tribe shall have the right to purchase water from the Water Management Plan at the rate then being charged to the Water Management Plan's municipal producers.

B. Any use of the Tribal Water Right by an individual member of the

Soboba Tribe shall be satisfied out of the water resources provided to the Soboba Tribe in the Settlement Agreement and this Judgment and Decree.

4. The foregoing rights are in full satisfaction of all of the Soboba Tribe's claims as provided in Article 5 of the Settlement Agreement.

5. This Court retains jurisdiction over this matter and the Parties for the limited and sole purpose of interpretation and enforcement of this Judgment and Decree and the Settlement Agreement.

6. The Action shall be transferred to the United States District Court, Central District of California, Eastern Division.

7. Except as may be included in the payments contemplated by the Settlement Agreement, no Party shall recover any attorney's fees or costs from any other Party.

8. The Parties have waived their rights to appeal, and therefore, this Judgment and Decree shall become final and nonappealable as of the date it is entered. This Judgment and Decree shall become enforceable as of the date the United States Secretary of the Interior causes to be published in the Federal Register a statement of findings that all actions necessary to make the settlement effective have been completed, as required by Section 10 of the Soboba Band of Luiseño Indians Settlement Act, Public Law _____.

Dated: _____, 200_

_____
United States District Court Judge

Exhibit I – Soboba Tribe's Water Development Schedule

SETTLEMENT YEARS (FROM EFFECTIVE DATE)	MAXIMUM TRIBAL USAGE (AFA)
1 – 5	2900
6 – 10	3215
11 – 15	3520
16 – 20	3825
21 – 25	4010
26 – 30	4020
31 – 35	4025
36 – 40	4040
41 – 45	4075
46 – 50	4100

Exhibit J – Description of EMWD Property

Parcel 1:

The North half of the Northwest quarter of Section 34 in Township 5 South, Range 2 West, San Bernardino Meridian, in the County of Riverside, State of California, according to the Official Plat thereof;

Excepting therefrom the Westerly 30 feet for road purposes as conveyed to the County of Riverside, by Deed recorded November 13, 1929 in Book 722 page 447 of Deeds, Riverside County Records;

Also excepting therefrom that portion conveyed to the County of Riverside, for road purposes, by Deed filed for record January 18, 1949 as Instrument No. 1917, Official Records.

Also except that portion conveyed to Riverside County Flood Control and Water Conservation District by Grant Deed recorded May 13, 1987 as Instrument No. 133741, Official Records.

Also except that portion conveyed to the Metropolitan Water District of Southern California, a public corporation, by Grant Deed recorded July 22, 1994 as Instrument No. 291698, Official Records.

Also except that portion conveyed to the Metropolitan Water District of Southern California by Grant Deed recorded July 22, 1994 as Instrument No. 291699, Official Records.

Also except that portion conveyed to the Metropolitan Water District of Southern California, a public corporation by Grant Deed recorded January 30, 1997 as Instrument No. 32920, Official Records.

Parcel 2:

The South half of the Northwest quarter of Section 34, Township 5 South,.Range 2 East, San Bernardino Meridian, in the County of Riverside, State of California, according to the Official Plat thereof.

Except that portion conveyed to the County of Riverside, by deed recorded April 26, 1949 in Book 1071, Page 392, Official Records.

Also except that portion conveyed to the Metropolitan Water District of Southern California, a public corporation, by Grant Deed recorded July 22, 1994 as Instrument No. 291698, Official Records.

Also except that portion conveyed to the Metropolitan Water District of Southern California, a public corporation by Grant Deed recorded January 30, 1997 as Instrument No. 32920, Official Records.

Also except that portion conveyed to the Metropolitan Water District of Southern California, a public corporation, by Grant Deed recorded May 5, 1997 as Instrument No. 154365, Official Records.

Exhibit K - Description of MWD Property

DRAFT

EXHIBIT A

Diamond Valley Lake
144-1-649C
Grant Deed
MWD to
The Soboba Band of Luiseno Indians

That parcel of land conveyed to The Metropolitan Water District of Southern California by Grant Deed recorded April 25, 1996 as Instrument No. 149322 Official Records of Riverside County, California, lying within the west half of the northeast quarter of Section 34, Township 5 South, Range 2 West San Bernardino Meridian, as shown on Record of Survey filed in Book 104, pages 62 through 76, inclusive, Records of Survey of said County.

EXCEPTING therefrom that portion lying southerly of the northerly line of that certain parcel conveyed to the County of Riverside by Grant Deed recorded November 21, 1999 as Document No. 1999-463789 Official Records of said County.

ALSO EXCEPTING therefrom that portion lying northerly of the southerly line of that certain parcel conveyed to the Riverside County Flood Control and Water Conservation District by Document No. 1999-441419, recorded October 4, 1999, Official Records of said County

Containing 21.718 acres, more or less.

All as shown on EXHIBIT "B" attached hereto and made a part hereof.

END OF DESCRIPTION

PREPARED UNDER MY SUPERVISION

DRAFT

Date _____

DRAFT

EXHIBIT B

W1/2NE1/4, SEC. 34, T5S, R2W, SBM,
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

THIS EXHIBIT IS TO BE ATTACHED TO THE LEGAL DESCRIPTION

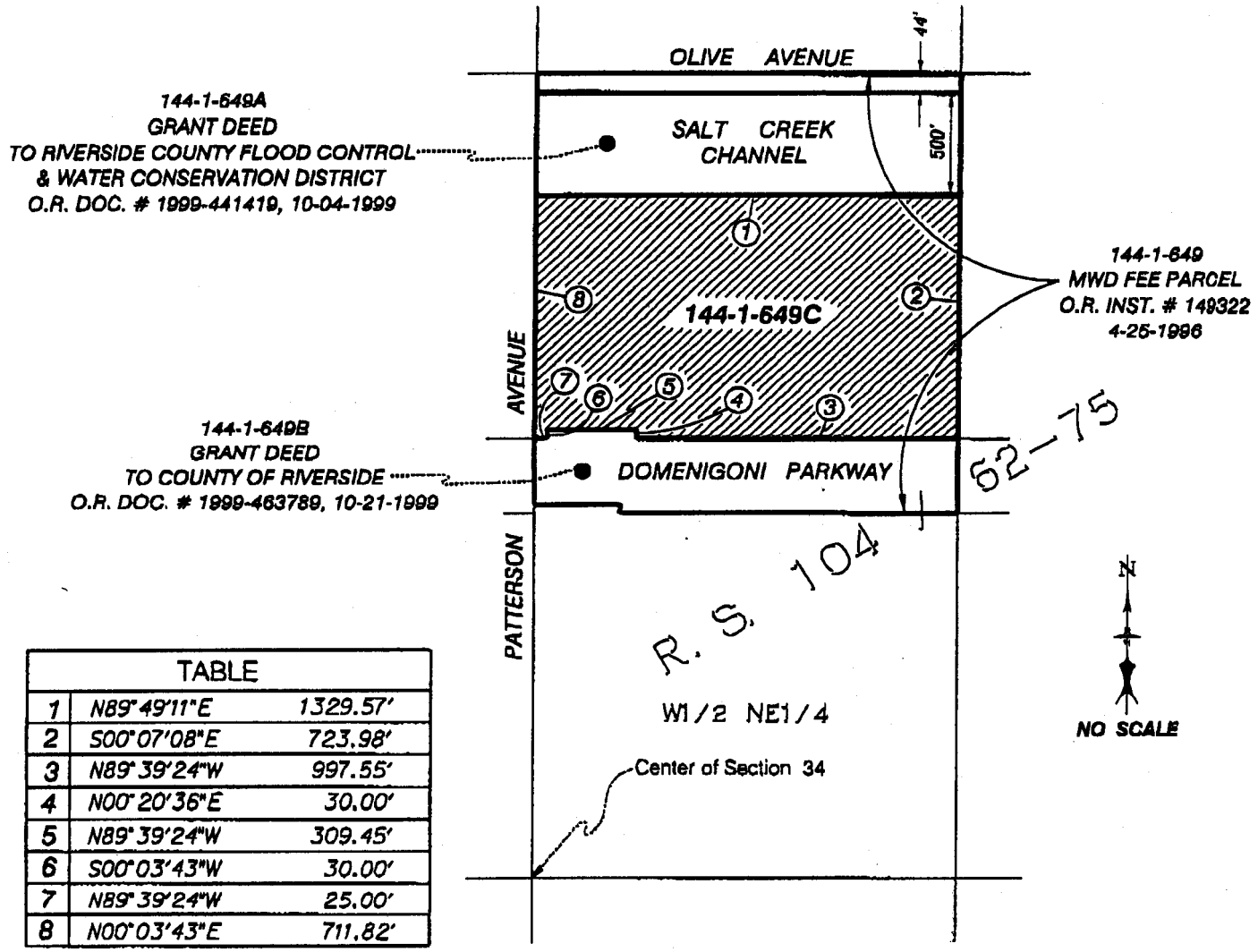
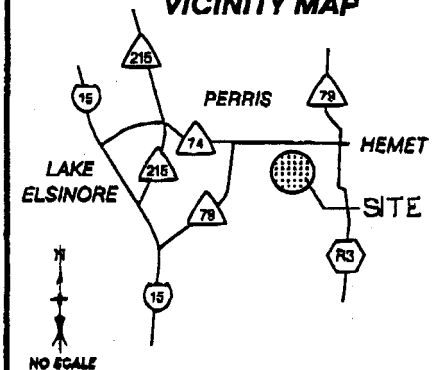


TABLE		
1	N89°49'11"E	1329.57'
2	S00°07'08"E	723.98'
3	N89°39'24"W	997.55'
4	N00°20'36"E	30.00'
5	N89°39'24"W	309.45'
6	S00°03'43"W	30.00'
7	N89°39'24"W	25.00'
8	N00°03'43"E	711.82'

LEGEND

144-1-649C = GRANT DEED 21.718 ACRES.

VICINITY MAP



PREPARED UNDER MY SUPERVISION

DRAFT

DATE

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

DIAMOND VALLEY LAKE PROJECT

GRANT DEED

MWD
TO
THE SOBOBA BAND OF LUISENO INDIANS
144-1-649C

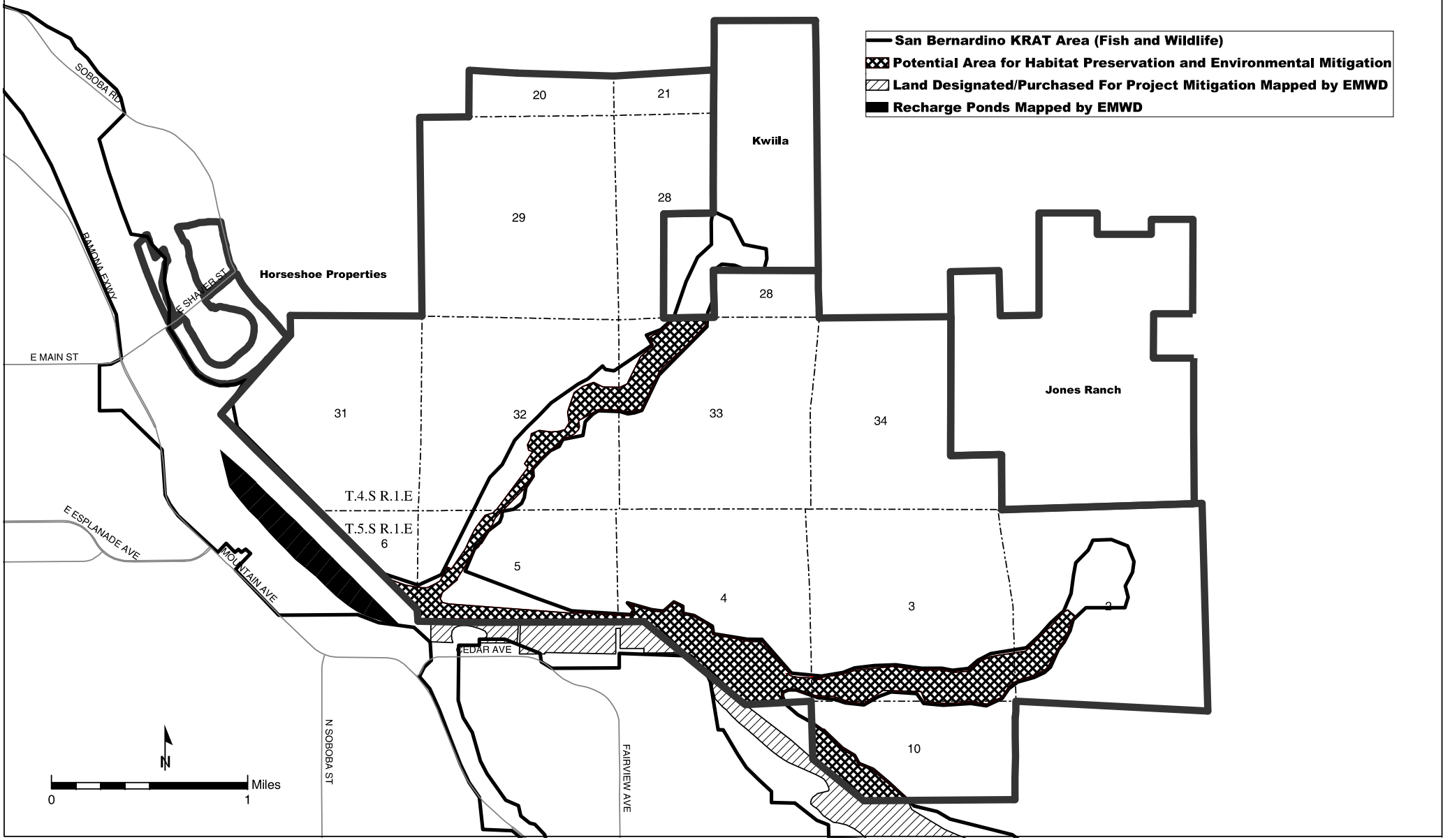
/dvr/row/exhib/1441649c.dgn

4-8-2003 HN

Exhibit L – Description of LHMWD Property

Portions of Lots 3, 4 and 5 of Fairview Tract, as shown on the plat in San Diego Map Book 006, page 307, in Riverside County, California, comprising 11.57 acres more or less.

Exhibit M - Map of Potential Soboba Reservation Lands for Habitat Preservation and /or Environmental Mitigation



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APPENDIX B STIPULATED JUDGMENT

DRAFT
May 19, 2006

DRAFT

Attorneys for _____

_____

SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF RIVERSIDE

EASTERN MUNICIPAL WATER DISTRICT, a California municipal water district,

Plaintiff,

v.

LAKE HEMET MUNICIPAL WATER DISTRICT, a California municipal water district; CITY OF HEMET, a California municipal corporation; CITY OF SAN JACINTO, a California municipal corporation; _____, an individual; _____, an individual; _____, an individual; _____, an individual,

Defendants.

Case No.
Judge:

STIPULATED JUDGMENT

Action Filed: _____, 200_
Trial Date: Stipulation

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P.O. BOX 1028
RIVERSIDE, CALIFORNIA 92502

FINDINGS

After consideration of the pleadings and the Stipulation for Entry of Judgment, the Court finds that:

1. Complaint. On _____, 200_, Plaintiff Eastern Municipal Water District ("Eastern") filed a Complaint against Defendants Lake Hemet Municipal Water District ("Lake Hemet"), City of Hemet ("Hemet"), City of San Jacinto ("San Jacinto"), _____, _____, _____. The Complaint requests a declaration of Plaintiff's and Defendants' individual and collective rights to surface water and groundwater in the Canyon Sub-basin, the San Jacinto Upper Pressure Sub-basin downstream to Bridge Street, and the Hemet Basin ("Management Area") and the imposition of a physical solution to achieve the optimum, reasonable, beneficial use of the waters of the Management Area pursuant to Section 2 of Article X of the California Constitution. A map describing the boundaries of the Management Area is attached to this Judgment as Exhibit A and to the Complaint.

2. Parties.

A. Eastern. Eastern is a California municipal water district formed pursuant to the Municipal Water District Law, California Water Code Sections 71000-73001 (West 1966), with its principal place of business in Riverside County, California. Eastern diverts surface water from the San Jacinto River, and pumps groundwater from the Management Area for use by its customers within its boundaries.

B. Lake Hemet. Lake Hemet is a California municipal water district formed pursuant to the Municipal Water District Law, California Water Code Sections 71000-73001 (West 1966), with its principal place of business in Riverside County, California. Lake Hemet diverts surface water from the Santa Jacinto River and its tributaries, and pumps groundwater from the Management Area for use by its customers within its boundaries.

C. Hemet. Hemet is a California municipal corporation providing utility services pursuant to the California Constitution, Article XI, Section 9. Hemet pumps groundwater from the Management Area for use by its customers within its boundaries.

D. San Jacinto. San Jacinto is a California municipal corporation providing utility services pursuant to the California Constitution, Article XI, Section 9. San Jacinto pumps groundwater from the Management Area for use by its customers within its boundaries.

E. _____, _____, _____, _____ and _____ are persons who own farms or other property within the Management Area, and pump groundwater from the Management Area.

3. Answers and Stipulation for Judgment. On _____, 200_, Defendants filed Answers. On _____, 200_, the Parties filed a Stipulation for Entry of Judgment.

4. Sole Producers. Other than the Soboba Band of Luiseno Indians, and certain overlying users not parties to this litigation, the parties claim essentially all of the rights to produce surface water and groundwater in the Management Area.

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5. Importance of Surface Water and Groundwater. Surface water and groundwater from the Management Area are important water supplies for agriculture, domestic and municipal use. The Parties have a mutual and collective interest in the coordinated management of such water resources to ensure that the common resource is used efficiently and reasonably, and that it is sustained and replenished.

6. Overdraft. It is estimated that the overdraft of the Management Area is at least 10,000 acre-feet per year. This estimate will be refined through further studies to be completed pursuant to the Water Management Plan, including data on the several sub-basins within the Management Area. Studies confirm that in recent years the total production from the Management Area, including pumping by those persons not parties to this litigation, has averaged approximately 63,800 acre-feet per year.

7. Importance of Judgment. The Parties have an interest in the physical solution imposed by this Judgment to promote the efficient and coordinated management of surface water and groundwater, to avoid problems from overdraft, to assist in protecting the rights of the Soboba Band of Luiseno Indians, to sustain and enhance water resources, and to resolve competing claims to surface water and groundwater.

8. Jurisdiction. This Court has jurisdiction to enter this Judgment declaring and adjudicating the rights of the Parties to the reasonable and beneficial use of surface water and groundwater in the Management Area, and to impose a physical solution pursuant to law, including California Constitution, Article X, Section 2.

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JUDGMENT

IT IS ORDERED, ADJUDGED AND DECREED:

1. DEFINITIONS.

1.1 Adjusted Production Right – the Base Production Right of each Public Agency, as adjusted pursuant to Sections 3.2 to 3.2.5.

1.2 Administrative Assessment – an acre-foot charge to be levied against each Public Agency for water pumped up to its Adjusted Production Right, including any unused amount of such Right that is pumped in a following year. Such assessments shall be used for Administrative Expenses, and for the purchase of Supplemental Water after Administrative Expenses have been paid.

1.3 Administrative Expenses – Watermaster's expenses for office rental, personnel, supplies, office equipment, general overhead, preparing and collecting assessments, monitoring well pumping, measuring water levels, sampling and analyzing water quality, compiling and interpreting collected data, conducting special studies, and litigation.

1.4 Advisor. An independent engineering firm or qualified individual as provided in Section 9.6.3.

1.5 Annual Basin Yield – the quantity of Groundwater that Watermaster determines the Parties may Produce from the Management Area in a calendar year without a replenishment obligation under the Physical Solution.

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1.6 Base Production Right – the water right of a Public Agency or Class B Participant as set forth in the attached Exhibit "C."

1.7 Carry-Over Credit – a Party's credit against the Replenishment Assessment in a Fiscal Year, based on the Party's Adjusted Production Right or share of Imported Water not produced in prior calendar years.

1.8 Class A Participant – a Private Pumper who stipulates to this Judgment and participates in the Water Management Plan as defined in Sections 4.3 to 4.3.5.

1.9 Class B Participant – a Private Pumper who stipulates to this Judgment and participates in the Water Management Plan as defined in Sections 4.4 to 4.4.6.

1.10 Fiscal Year – the period from July 1 through June 30 of the following calendar year.

1.11 Fruitvale Documents –

(a) Fruitvale Judgment – The Judgment and Decree entered in the Superior Court for the County of Riverside on June 4, 1954, in an action titled The City of San Jacinto, et al. v. Fruitvale Mutual Water Company, et al., Case No. 51-546;

(b) Fruitvale Mutual Water Company Sale of Assets to Eastern – That certain "Agreement for the Sale of Assets of the Fruitvale Mutual Water Company to Eastern Municipal Water District" dated September 10, 1971;

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(c) Fruitvale Mutual Water Company Agency Agreements – The Agreement Between the City of San Jacinto and Eastern Municipal Water District dated June 15, 1972, the Agreement Between Lake Hemet Municipal Water District and Eastern Municipal Water District dated June 9, 1972, and the Agreement Between the City of Hemet and Eastern Municipal Water District dated June 13, 1972, all providing for recognition of ownership of stock in Fruitvale Mutual Water Company by the Cities and by Lake Hemet, and making provision for the continued sale of water produced through the Fruitvale facilities by Eastern to the Cities and to Lake Hemet.

1.12 Groundwater – all water within and beneath the ground surface of the Management Area.

1.13 Imported Water – An average of 7,500 acre feet annually of water sold by The Metropolitan Water District of Southern California to Eastern pursuant to Section 4.4 of the Soboba Band of Luiseño Indians "Settlement Agreement."

1.14 Management Area –the Canyon Sub-basin, the San Jacinto Upper Pressure Sub-basin downstream to Bridge Street, and the Hemet Basin, as delineated on the map attached as Exhibit "A."

1.15 Metropolitan – The Metropolitan Water District of Southern California.

1.16 Natural Recharge – Groundwater replenishment within the Management Area occurring from precipitation on the surface, percolation from surface flows of the San Jacinto River and its tributaries, return flows from

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irrigation, artificial spreading or injection of such surface flows, and subsurface inflows.

1.17 Non-Participant – a Private Pumper who elects not to participate in the Management Plan, or to be a party to this Judgment.

1.18 Overdraft – a condition whereby pumping in the Management Area exceeds the Safe Yield thereof.

1.19 Overlying Right – the appurtenant right of an owner of land overlying the Management Area to pump water from such land for beneficial use thereon.

1.20 Party or Parties – Eastern, Lake Hemet, Hemet, San Jacinto and the other Persons listed in the attached Exhibit "B."

1.21 Person – any individual, partnership, association, corporation, trust, government agency or other organization.

1.22 Physical Solution – the Court decreed method of managing the water supply of the Management Area to maximize the reasonable and beneficial use of the waters thereof pursuant to the California Constitution, Article X, Section 2, to eliminate overdraft pursuant to the provisions of this Judgment, to protect the prior rights of the Soboba Tribe, and to provide for the substantial enjoyment of all water rights recognizing their priorities.

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1.23 Private Pumper – a Person who owns land with an Overlying Right or other right in the Management Area and pumps more than 25 acre-feet per year.

1.24 Public Agency or Agencies – Eastern, Lake Hemet, Hemet and San Jacinto.

1.25 Recharge or Replenish – to sink, spread or inject water directly or indirectly underground in the Management Area.

1.26 Recharge Right – a Party's right to the use of Recharge Water.

1.27 Recharge Water – water used for Recharge.

1.28 Recycled Water – treated wastewater which is processed and suitable for controlled use in the Management Area, including Recharge.

1.29 Replenishment Assessment – an acre-foot charge to be levied against each Public Agency for water pumped in excess of the sum of its respective Adjusted Production Right, its share of Imported Water, and applicable Carry-Over Credits; and against each Class B Participant for pumping in excess of its 1995-99 average production, i.e., its Base Production Right. Such assessments shall be determined by the Watermaster to be used for Replenishment Expenses.

1.30 Replenishment Expenses – Watermaster expenses for the acquisition of Supplemental Water supplies, for land, and for the construction, maintenance and operation of facilities necessary to replenish groundwater in the

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Management Area, or otherwise to provide water to producers within the Management Area.

1.31 Safe Yield – the long term, average quantity of water supply in the Management Area that can be pumped without causing undesirable results, including the gradual reduction of natural groundwater in storage over long-term hydrologic cycles.

1.32 Settlement Agreement – that Agreement titled "The Soboba Band of Luiseño Indians Settlement Agreement" among the Soboba Tribe, the United States, as Trustee for the Tribe, Eastern Municipal Water District, Lake Hemet Municipal Water District, and The Metropolitan Water District of Southern California.

1.33 Soboba Tribe (sometimes the "Tribe") – the Soboba Band of Luiseno Indians.

1.34 Soboba Action – the lawsuit entitled Soboba Band of Mission Indians, etc., v. Metropolitan, etc., et al, U.S. District Court, Central District of California, Case No. 00-84208 GAF (MANx).

1.35 Storage Agreement – an agreement between Watermaster and a Party to store Supplemental Water by sinking, spreading, injecting or in-lieu procedures in the Management Area, and subsequently to recover such water, without payment of Replenishment Assessments.

1.36 Storage Right – a Party's right to store and pump Supplemental Water pursuant to a Storage Agreement.

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1.37 Stored Water – Supplemental Water stored by a Party pursuant to a Storage Agreement.

1.38 Surface Water – all water tributary to the Management Area and flowing above the ground surface.

1.39 Supplemental Water – nontributary water imported into the Management Area, including Imported Water and Recycled Water, and in-lieu programs that reduce groundwater pumping.

1.40 Transfer – a temporary or permanent conveyance, assignment, sale, contract or lease of part or all of a Party's Adjusted Production Right, Carry-Over Credit, Storage Right or Recharge Right to any other Party, or a temporary assignment, contract, lease or sale of part of the Soboba Tribe's quantified water right.

1.41 Tribal Water Rights – the Soboba Tribe's rights to water set forth in Section 4.1 of the Settlement Agreement and Section 5 of this Stipulated Judgment.

1.42 Tunnel – the San Jacinto Tunnel in Riverside County, California, constructed by Metropolitan in the 1930s.

1.43 Watermaster – the Board with the powers and duties defined in Section 9.

1.44 Water Management Plan (sometimes the "Plan") – the Plan adopted by the Watermaster, as it may be modified from time to time, to

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implement the Physical Solution, to ensure an adequate and reliable source of future water supply for the Management Area, and to protect the prior rights of the Soboba Tribe.

2. EXHIBITS.

The following exhibits are attached to this Judgment and incorporated in it:

"A." Map of the Management Area and the Management Area Watershed.

"B." List of Parties to this Judgment.

"C." Description of each Public Agency's and Class B Participant's Base Production Right.

3. PUBLIC AGENCIES' WATER RIGHTS.

3.1 Base Production Right. The Public Agencies are owners of rights to pump groundwater from the Management Area as set forth in Exhibit "C." These rights are for a calendar year and were calculated as follows:

3.1.1 The Base Production Right of Eastern is based upon its respective average pumping for calendar years 1995-1999, less an adjustment of 1800 acre-feet for seepage from Metropolitan's San Jacinto tunnel, and for use of Fruitvale water. The 1995-1999 period was chosen to reflect recent production prior to the commencement of negotiations leading to this Stipulated Judgment.

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3.1.2 The Base Production Right of Lake Hemet is based on its average production for calendar years 1995-1999.

3.1.3 The Base Production Right of Hemet is based on its average production for calendar years 1995-99, plus an adjustment of 900 acre feet per year.

3.1.4 The Base Production Right of San Jacinto is based upon its average Production for calendar years 1995-1999, plus 500 acre-feet per year, and plus an adjustment of 900 acre feet per year. The 500 acre-feet per year has been added because San Jacinto's recent pumping does not reflect its historic production, due to water purchases and other factors.

3.1.5 The Base Production Rights of Hemet and San Jacinto each include 900 acre-feet per year that have been added to their respective amounts of pumping for calendar years 1995-1999. These amounts have been added to provide Hemet and San Jacinto a fair share of water from, and to resolve disputes regarding, Eastern's use of tunnel seepage, Eastern's use of Fruitvale waters, and Lake Hemet's surface stream diversions. These additional amounts of 900 acre-feet per year shall be treated as the first amounts pumped by Hemet and San Jacinto, shall not be subject to reduction by the Watermaster as provided in Sections 3.2 to 3.2.2, and shall not be subject to any Administrative or Replenishment Assessments as provided in Sections 3.3 to 3.3.2, or to any other fee or charge imposed under the Management Plan.

3.2 Adjusted Production Rights. It is the goal of the Physical Solution to adjust Base Production Rights over time on a pro-rata basis to a level consistent with the Watermaster's determination of Safe Yield. The reduction

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will be based on periodic demand, hydrology, recharge, and the community's ability to pay for Supplemental Water, and protection of the Tribal Water Rights. In order to implement this reduction in a phased manner, each Public Agency's Base Production Right shall be subject to adjustment as follows:

3.2.1 Subject to Section 3.1.5, a 10% reduction from each Base Production Right in the first full year after entry of this Judgment.

3.2.2 Until Adjusted Production Rights are consistent with the Public Agencies' share of Safe Yield, Watermaster shall determine the required reductions in Adjusted Production Rights in each subsequent year to achieve Safe Yield within a reasonable period of time as determined by the Watermaster, considering the extent of the overdraft, the economic impact on the Parties bound by this Judgment, and other relevant factors. The goal is to achieve Safe Yield over a six (6) year period assuming an annual overdraft of 10,000 acre feet. In the event the extent of the overdraft is greater or lesser than assumed, then the period of time reasonably required to reach Safe Yield may be extended or reduced accordingly. However, in no event shall any reduction be more than 10% of the Adjusted Production Rights of the prior year.

3.2.3 A party may pump in excess of its Adjusted Production Right, without any additional Replenishment Assessment, by an amount equal to its share of the 7,500 acre feet of Imported Water that is not used by the Tribe. The amount of the Tribe's unused portion of the 7,500 acre feet shall be determined annually by the Watermaster. This provision shall apply only during such period as Imported Water is provided pursuant to Section 5.2 hereof. Shares of unused Imported Water shall be allotted in proportion to Base Production Rights, and shall be acquired and paid for pursuant to contract with Eastern.

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3.2.4 A Base Production Right of a Public Agency serving the land of a Class B Participant shall be increased in an amount equal to such Participant's Base Production Right, adjusted and reduced pursuant to Sections 3.2.1 and 3.2.2, when the Participant's land is converted from agricultural use to water service from the Public Agency, pursuant to Section 4.4.3.

3.2.5 The Adjusted Production Rights of the Public Agencies may be increased by the Watermaster on a prorata basis to the extent that pumping by Class A participants, or pumping by persons not parties to this Judgment, may decrease, and the Watermaster finds that achieving the goal of maintaining the Management Area in a Safe Yield condition can still be met.

3.3 Public Agency Production Assessments. Public Agency pumping shall be subject to the following assessments:

3.3.1 An Administrative Assessment as provided in Section 1.2 . The Administrative Assessment will be $50.00 per acre-foot of water pumped in the first full year after entry of this Judgment, and such amount thereafter will be set by the Watermaster.

3.3.2 A Replenishment Assessment as provided in Section 1.29. Pumping by a Public Agency in excess of the sum of its Adjusted Production Right, its share of Imported Water, and applicable Carry-Over Credits in order to meet increasing demands is permissible, provided that such excess extractions shall be subject to Replenishment Assessments.

3.4 Surface Rights. Eastern holds License Number 016667 from the State Water Resources Control Board to divert, spread and recover surface

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flows of the San Jacinto River within the Management Area. Lake Hemet holds pre-1914 appropriative rights to divert and store surface flows in Lake Hemet, and to divert surface flows tributary to but outside of the Management Area from Strawberry Creek and from the North and South Forks of the San Jacinto River. All Parties acknowledge such Eastern and Lake Hemet rights, and the fact that they are not subject to any assessments under this Judgment; provided that any water pumped by Eastern under its License shall be included in its Adjusted Production Right.

3.5 Fruitvale Judgment, Sale of Assets, and Agreements. The Court hereby finds that Eastern purchased all of the water rights and assets of the Fruitvale Mutual Water Company ("Fruitvale") pursuant to the Agreement described in Section 1.11(b) hereof, and is now the owner thereof. Eastern, as the successor in interest to Fruitvale, is also a defendant in the action described in Section 1.11(a) hereof. The Court finds that the only other remaining party in such action is the plaintiff City of San Jacinto. The Court retained continuing jurisdiction in such action, and Eastern has made annual reports pursuant to the Fruitvale Judgment. Pursuant to stipulation between Eastern and San Jacinto, and in accord with the physical solution and terms of this Judgment, the Court hereby finds that the rights and obligations of the Fruitvale Judgment have been subsumed in, and superseded by, this Judgment and are no longer enforceable; that the limitations upon the place and amounts of water use in the Fruitvale Judgment, the sale Agreement, and the Agency Agreements described in Sections 1.11(a), (b), (c) are no longer applicable or enforceable; and that the continuing jurisdiction of the Court under the Fruitvale Judgment, and the obligation of Eastern to report thereunder, are hereby terminated; provided, however, that none of the service area agreements included in the Fruitvale documents in Section

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1.11, or any other agreements related to mutual aid, system interties, or service areas, shall be affected by this Judgment.

3.6 Fruitvale Agency Rights. The water rights of Hemet, San Jacinto and Lake Hemet under the several agreements with Eastern described in Section 1.11(c) hereof have been incorporated in their respective Base Production Rights under this Judgment.

4. PRIVATE PUMPERS' WATER RIGHTS

4.1 Recognition of Rights. The Private Pumpers are owners of Overlying or other water rights to pump from the Management Area. The Public Agencies recognize these rights, and do not intend to take or adversely impact these rights without an agreement with the owner of such rights. There is no intent to affect water use that is consistent with the historical use of the Private Pumpers.

4.2 Non-Participation. A Private Pumper can elect not to participate in the Water Management Plan and not to formally acknowledge its existence. Such Pumpers are referred to as Non-Participants. Non-Participants shall continue to exercise whatever water rights they may hold under California law unaffected by the Plan. However, the Parties do not waive their rights to challenge any new or expanded use of water or water rights. Non-Participants will not have the option of intervening as a party under the Judgment at a later date.

4.3 Class A Participation. A Private Pumper can stipulate to be a party to the Judgment as a Class A Participant under the following terms:

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4.3.1 A Class A Participant approves this Physical Solution and may vote for and/or be elected to serve as the Private Pumper representative on the Watermaster, but other than Section 4.3.4 shall not otherwise have any obligation for the implementation of the Physical Solution or the Water Management Plan.

4.3.2 A Class A Participant may, without any assessment by the Watermaster, pump from the Participant's property within the Management Area the amount of water that can be put to reasonable and beneficial use in the Participant's historic place of use or as authorized under California law.

4.3.3 A Class A Participant shall have the right to convert to Class B Participation during a grace period that shall end 3 years after the entry of this Judgment, and upon payment of the total assessments, without interest, that the Class A Participant would have paid had the Class A Participant elected to be a Class B Participant from the outset.

4.3.4 A Class A Participant hereby authorizes the installation of water meters, and the collection and reading of Groundwater production, level and water quality data from the Class A Participant's well(s) by personnel authorized by the Watermaster. The metering, meter reading, and other related monitoring efforts shall be at no cost to the Class A Participant, and the Class A Participant shall receive copies of the reports and information obtained upon request.

4.3.5 The Stipulation signed by a Class A Participant shall describe or otherwise identify the Participant's land and wells within the Management Area. The heirs, successors and assigns of such land and wells shall

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succeed to the benefits of the Participant's rights under the Judgment, and be bound by the obligations thereof, provided that such successor intervenes as a party under the Judgment. Absent such intervention, the successor will be treated as a Non-Participant.

4.4 Class B Participation. A Private Pumper can stipulate to be or intervene as a party under the Judgment as a Class B Participant on the following terms:

4.4.1 A Class B Participant's annual pumping shall be limited to average annual Production during the calendar years 1995 through 1999, less any amount of water that had been used on land that was developed for non-agricultural purposes after 1999, which is the Participant's Base Production Right. The Class B Participant shall pay Replenishment Assessments on amounts in excess of its Base Production Right. A Class B Participant shall not be subject to Administrative Assessments, and until conversion to a Public Agency, such Base Production Right shall not be subject to reduction to Safe Yield. In the absence of production history for this period, the Watermaster, using all available information including power consumption records and records of water use by similar farming operations in the area, will estimate the average annual production for the Participant.

4.4.2 The Class B Participant approves this Physical Solution and may vote for and/or be elected to serve as the Private Pumper's representative on the Watermaster;

4.4.3 Upon conversion of a Class B Participant's land from agricultural to a use that requires water service from a Public Agency, the Public Agency shall credit, to the extent legally permissible, the Class B Participant's Base

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Production Right, adjusted pursuant to the percentage reductions in Sections 3.2.1 and 3.2.2, against any requirement then in effect for any water supply assessment requirements, or against any fees associated with water supply that the Public Agency may then have in effect. The Public Agency serving the converted land shall receive a credit added to its Base Production Right as set forth in Section 3.2.4.

4.4.4 A Class B Participant is eligible to enter into a contract with the Watermaster, or a participating Public Agency, to sell for a defined period of time the unused portion of the Class B Participant's Base Production Right, under terms and conditions approved by the Watermaster. Criteria used in consideration of such contract shall include:

4.4.4.1 The Water Management Plan's need to acquire additional water supplies to address overdraft and recovery;

4.4.4.2 Submission of a water conservation plan, including use of in lieu water, by the Class B Participant that will reasonably guarantee conservation of water that would otherwise be produced from the Management Area; and the amount of conserved water transferred reflects a reduction pursuant to Sections 3.2.1 and 3.2.2.

4.4.4.3 Public policy considerations of local government jurisdictions, including economic, land use and community impacts of any proposed water conservation plan.

4.4.5 The Class B Participant hereby authorizes the installation of meters and the collection and reading of Groundwater production, water level

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and water quality data from the Class B Participant's well(s) by personnel authorized by the Watermaster. The metering, meter reading and other related monitoring efforts shall be at no cost to the Class B Participant, and the Class B Participant shall receive copies of the reports and information obtained upon request.

4.4.6 The Stipulation signed by a Class B Participant shall describe or otherwise identify the Participant's land and wells within the Management Area. The heirs, successors and assigns of such land and wells shall succeed to the benefits of the Participant's rights under the Judgment, and be bound by the obligations thereof, provided that such successor intervenes as a party under the Judgment. Absent such intervention, the successor will be treated as a Non-Participant.

4.5 In-Lieu Water Use. In the event a Private Pumper receives Supplemental Water from a Public Agency to serve an historic use in place of Groundwater, or otherwise engages in an in-lieu program, the Overlying Right of the Private Pumper shall not be diminished by the receipt and use of such Supplemental Water or by engaging in an in-lieu program.

4.6 Future Production Participation. Any new pumper after the entry of this Judgment may intervene in this action and Judgment only as a Class A Participant.

4.7 Replacement Wells. Re-drilling of existing wells and the drilling of new wells to replace existing wells will not be considered new production as provided in Section 4.6.

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5. TRIBAL WATER RIGHTS

The Tribal Water Rights will be determined as part of a settlement among the Soboba Tribe, the United States, Eastern, Lake Hemet and Metropolitan. The settlement will be reflected in a Settlement Agreement, Congressional legislation and appropriation of funds, and a Judgment in the Soboba Action. Such settlement includes the following provisions, which shall be effective only upon fulfillment of all of the conditions precedent set forth in Article 3 of the Settlement Agreement, a copy of which is attached hereto.

5.1 Senior Right. The Soboba Tribe shall have a prior and paramount right, superior to all others, to pump 9000 acre-feet per year (3000 acre feet from the Canyon Subbasin and the remainder from a portion of the San Jacinto Upper Pressure Subbasin referred to as the Intake Subbasin), for use on the Reservation, as defined in Article 2.20 of the Settlement Agreement, and on lands now owned or hereafter acquired by the Soboba Tribe contiguous to the Reservation or within the Canyon and Intake Subbasins; provided, however, that such use shall be limited to 4100 acre-feet per year for the first 50 years after the Effective Date as set forth in the Settlement Agreement. The Tribe's right to pump applies to all Groundwater, whether replenished by Natural Recharge or by Supplemental Water. In addition, the Tribe shall have the right to purchase additional water from the Watermaster during the fifty years that its use is limited to 4,100 AFA at the rate then being charged to the Public Agencies under the Water Management Plan. In the event the Soboba Tribe is unable, except for mechanical failure of its wells, pumps or water facililties, to produce from its existing wells or equivalent replacements up to 3000 AFA production from the Canyon Sub-basin and the remainder of its Tribal Water Rights from the Intake Sub-basin, Eastern and Lake Hemet shall deliver any shortage to the Soboba

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Tribe as provided in Section 4.1C of the Settlement Agreement. Pumping for such purpose shall not be subject to Administrative or Replenishment Assessments, and shall not be counted as part of Adjusted Production Rights.

5.2 Metropolitan Water. The Soboba settlement provides, among other matters, that Metropolitan will use its best efforts to deliver sufficient Imported Water to yield 7,500 acre-feet per year, based upon 15 year averages, for recharge in the Management Area at its untreated replenishment water rate, or any successor rate as provided in Section 4.4A of the Settlement Agreement.

5.3 Settlement Payment. Subject to the Effective Date of the Settlement Agreement and funding by the United States, Eastern pursuant to the terms set forth in the Water Management Plan, will pay the Soboba Tribe $17 million dollars pursuant to Article 4.7A of the Settlement Agreement in consideration, in part, of the Tribe's agreement to limit its water use up to 4,100 acre-feet per year for the first 50 years after the Effective Date according to the build-up schedule set forth in the Settlement Agreement as Exhibit I. Subject to contracts with Eastern, the Public Agencies shall have the right to pump and use all Imported Water not used by the Tribe, and the unused portion of the Tribal Water Rights shall be available for use by the Parties, pursuant to their rights herein.

5.4 Capital Facilities. Eastern on behalf of the Water Management Plan participants will receive $10 million from the United States, to be applied to the costs of constructing and operating the Phase I capital facilities necessary to import and recharge Supplemental Water as described in the Plan. Additional grant funds from the State of California or the United States may also be available for such capital facilities. The rights of the Public Agencies to the

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use of such facilities will be affirmed by contract as set forth in Sections 9.6.4(a) and 9.6.4(c).

5.5 Acknowledgement of Soboba Tribe Settlement. The Parties to this Judgment hereby recognize the Tribal Water Rights, as set forth above, and the applicable provisions of the Soboba Tribe Settlement Agreement, and acknowledge that protection of Tribal Water Rights is one of the goals of the Water Management Plan.

6. PHYSICAL SOLUTION.

6.1 Purpose and Objective. Pursuant to California water law and the California Constitution, Article X, Section 2, the Court adopts this Physical Solution to maximize reasonable beneficial use of Surface Water, Groundwater and Supplemental Water for water users in or dependent upon the Management Area, to eliminate overdraft, to protect the prior rights of the Soboba Tribe, and to provide the Parties with the substantial enjoyment of their respective rights, including, the priorities thereof.

6.2 Need for Flexibility. In order to adapt to potential changes in hydrology, land use, and social and economic conditions, the Physical Solution must provide some degree of flexibility and adaptability. Accordingly, the Court retains broad jurisdiction to supplement the discretion granted to the Watermaster.

6.3 Rights to Groundwater. Groundwater in the Management Area may occur from: natural recharge; spreading operations of natural flows; recharge with Supplemental Water acquired with Assessment funds; return flows,

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fallowing or in-lieu recharge programs financed with Assessment funds. All such Groundwater shall be available to support the pumping of the Parties as allowed herein, and shall not be the property of any individual Party. Subject to the provisions of Section 6.7.2, this Section does not preclude any Party, pursuant to a Storage Agreement, from storing Supplemental Water at its own cost, retaining title thereto, and pumping such water without Assessment.

6.4 Resolution of Priorities. By reason of the long and continuous overdraft of the Management Area, the contribution of all parties to the overdraft, the economies that have developed on the basis of the overdraft, the severe economic disruption that could occur under strict priorities and the doctrines of prescription and laches, the complexity of determining appropriative priorities, and the need to make the maximum beneficial use of the water resources of the State, the Parties are estopped and barred from asserting specific priorities or preferences to the pumping of groundwater in the Management area, except as provided in this Judgment, and the Court finds that the provisions of this Judgment provide for the substantial enjoyment of the respective rights of the Parties.

6.5 Water Management Plan. The Watermaster will approve and implement a Water Management Plan to enforce and implement the Physical Solution, and may modify such Plan as conditions require, subject to the provisions of the Settlement Agreement. The Plan will also facilitate and accommodate the settlement of the water rights of the Soboba Tribe, and shall be subject to the approval of the Soboba Tribe and the United States as trustee for the Tribe. The Parties agree that the Plan shall incorporate and serve to implement the following goals:

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6.5.1 Groundwater levels within the Management Area have generally been declining for a number of years, and the Management Area is presently in a condition of Overdraft. The Plan will, within a reasonable period, eliminate Groundwater Overdraft and provide for excess production by implementing a combination of available water resources management elements. These elements include: reduction in natural Groundwater production; enhanced Recharge with native and/or Supplemental Water; increased use of recycled water; in-lieu replenishment; acquisition and development of Supplemental Water; and water conservation programs.

6.5.2 The Management Area is expected to experience residential, commercial, and industrial growth and development over the next decade. The estimated amount of Supplemental Water that will be necessary to provide for and adequately serve this new growth and development is 15,000 acre feet per year. The Water Management Plan shall accommodate the orderly expansion of existing water production and service systems, and provide a clear planning process for meeting these projected growth trends.

6.5.3 The Plan should be implemented in a manner to protect and/or enhance Management Area water quality. However, implementation of certain elements of the Plan may cause limited localized water quality degradation. If such degradation impedes the then current beneficial uses of water by any Public Agency in the Management Area, the Watermaster shall implement appropriate mitigation measures to ensure the water supply to the affected Public Agency, and to bear the associated costs. The standards for local water quality degradation shall be defined in the Plan.

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6.5.4 The Water Management Plan should serve to support the pursuit of cost-effective water supply and water treatment by the Public Agencies, both individually and collectively.

6.5.5 The Water Management Plan should serve to protect Tribal Water Rights.

6.5.6 The Watermaster shall implement a monitoring program to ensure that Plan activities follow best management and engineering principles to protect Management Area water resources, and to compile and analyze data on groundwater production, water levels, water quality and groundwater in storage.

6.6 Replenishment Program. The groundwater replenishment program shall be administered by the Watermaster. The program shall include: the acquisition of Supplemental Water; the collection and expenditure of Replenishment Assessments; the recharge of the Management Area; and the construction and operation of all necessary facilities, including but not limited to, development of surface and sub-surface percolation and injection facilities. In addition, a source of Recharge Water for agencies contributing to the Settlement Payment described in Section 5.3 will be Imported Water provided by Metropolitan under the Settlement Agreement, and not used by the Soboba Tribe.

6.6.1 Priority for replenishment will be based on an equitable apportionment of available replenishment water among the sub-basins after full consideration of:

6.6.1.1 The Public Agency's participation in the payment in the Settlement Payment described in Section 5.3.

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6.6.1.2 Hydrologic conditions in the Management Area.

6.6.1.3 The Management Area's Water demands.

6.6.1.4 The availability of storage capacity to accommodate the Natural Recharge of surface flows.

6.6.1.5 The availability of appropriate conveyance facilities.

6.6.1.6 The availability of Supplemental Water,

6.6.1.7 Protection of Tribal Water Rights.

6.6.2 The Watermaster is encouraged to take advantage of surplus imported water from Metropolitan that occasionally may be available at low cost, and to use available Assessment funds to bank such Recharge Water against future production in excess of Adjusted Production Rights.

6.6.3 The Public Agencies shall independently or jointly operate their present facilities to maximize the existing spreading and Recharge operations of natural flow in the Management Area. Such Recharge Water shall be available to support the pumping of all users, and shall not be the property of the spreading Public Agency.

6.6.4 All water used to replenish any sub-basin in the Management Area shall meet the Regional Water Quality Control Board, Santa Ana

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Region requirements, and the provisions of Article 4.2 of the Settlement Agreement, and may be used in any sub-basin where such requirements are met.

6.7 Storage Rights. Unused storage capacity may exist in the Management Area, and this capacity will be managed by the Watermaster conjunctively with natural and available Supplemental Water supplies.

6.7.1 Subject to availability of Assessment funds and unused storage capacity as determined by Watermaster, the Management Area may be Recharged when water is available, to be drawn upon by the Public Agencies in later years when such Supplemental Water may not be available.

6.7.2 Unused storage capacity, as determined by Watermaster, and pursuant to a Storage Agreement, may be used for "put and take" operations of Supplemental Water that is paid for by any Public Agency provided that:

6.7.2.1 Such operations do not interfere with the rights of any other pumper, or with the use of the storage capacity for recharge and storage under the Water Management Plan.

6.7.2.2 The Watermaster shall have the first right to purchase any water available for Recharge for use under the Plan.

6.7.2.3 Later recovery of Stored Water shall exclude losses, and shall not be subject to either Administrative or Replenishment Assessments.

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6.7.2.4 Such recovered water may be used anywhere within the service area of the Party.

6.7.2.5 Such Stored Water may be transferred while still in storage.

6.7.3 Any conjunctive use programs for the benefit of territory outside of the Management Area shall be subject to the Watermaster and the governance provisions herein. Any storage, conjunctive use programs by third parties, or in-lieu recharge programs financed with assessment funds, shall be subject to the Watermaster and the governance provisions herein; provided that Metropolitan has the right under the Soboba Settlement Agreement to use up to 40,000 acre-feet of storage capacity in the San Jacinto Upper Pressure Sub-basin for the pre-delivery of water required under Section 5.2.

6.7.4 Eastern and Lake Hemet have previously provided water for replenishment of the Management Area. As of May 1, 2005 these amounts, less losses, were 12,694 acre-feet for Eastern and 950 acre-feet for Lake Hemet Such Parties shall have Recharge Rights to recover these amounts, less any future losses, without either Administrative or Replenishment Assessments, and may be used to offset excess pumping in lieu of Replenishment Assessments. The water available under such Recharge Rights shall be pumped within 15 years of the entry of this Judgment, but at not more than 2000 acre-feet in a single year. The Public Agencies shall notify the Watermaster when such Recharged Water is being pumped, and in what amounts, and the Watermaster shall keep an accounting of the amounts remaining. The use of such credits shall be interpreted and administered so as not to increase the replenishment obligations or assessments of those parties without such past credits, or after such credits have been fully used.

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6.7.5 The accounting for recovery of Stored Water or Recharge Water from the Management Area shall not include any water that escapes therefrom and migrates downstream beyond the Management Area. Losses will be calculated based upon best engineering principles.

6.8 Recycled Water. The use of Recycled Water produced by Eastern can be of substantial benefit in providing additional water in the Management Area. The Watermaster shall have a right of first refusal to purchase all recycled water produced from treatment facilities serving the Management Area that is not subject to then existing contracts. Such recycled water may be used for recharge or direct use within the Management Area..

6.8.1 Each Public Agency may implement its own Recycled Water program, for direct use, subject to the availability of recycled water. The Public Agency shall be responsible for financing, operating and maintaining the facilities necessary for that program. The Watermaster will support loan or grant applications, and the Public Agencies will work to integrate Recycled Water into the Water Management Plan, to the extent economically feasible while meeting regulatory standards.

6.8.2 Currently only Eastern has Recycled Water available for Recharge. To the extent such Recycled Water is not acquired by the Watermaster for use under the Plan, the water if recharged in the Management Area shall remain the property of Eastern and may be pumped (less losses) without Replenishment Assessments.

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6.9 Assessment Program. The assessment program contemplated by the Water Management Plan shall be administered by Eastern pursuant to a contract with the Watermaster pursuant to the provisions of Section 9.6.4(e).

6.9.1 All Assessments shall be used for Replenishment Expenses and Administrative Expenses.

6.9.2 Subject to the limitations in this Judgment, each Public Agency that produces less than its Adjusted Production Right and share of Imported Water, and any Class B Participant producing less than its Base Production Right, shall have the following Carry-Over Credit:

6.9.2.1 Carry-Over Credit shall be the difference in acre-feet between a Party's Adjusted Production Right and share of Imported Water, or the Class B Participant's Base Production Right, and the Party's actual production in a calendar year.

6.9.2.2 The Carry-Over Credit may be applied to reduce the amount of acre feet upon which a Party must pay a Replenishment Assessment. Carry-Over Credits are transferable among the Parties, and may be retained for more than one calendar year. The Parties shall notify the Watermaster if a Carry-Over Credit is being retained.

6.9.2.3 The Watermaster shall keep an accounting of all Carry-Over Credits.

6.9.3 All Watermaster assessment invoices shall be payable to Watermaster within 60 days of notice. Any delinquent assessments shall bear

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interest at a rate to be set by the Watermaster. Watermaster is entitled to recover its reasonable expenses in collecting any assessment, including attorney's fees and costs.

6.10 Export. The Public Agencies may export water outside the Management Area, on a temporary basis, upon approval by the Watermaster. However, any water exported shall be replenished with an appropriate amount of similar or better quality water as determined by Watermaster. Water exports by the Public Agencies shall not interfere with the Water Management Plan or any other Public Agency's operations. The Water Management Plan will set forth the specific criteria for the export of water, including, but not limited to, conjunctive use programs.

6.11 Capital Facilities. Each Public Agency shall continue to own its existing capital facilities for water supply and management, subject to the provisions of Section 9.6.6. However, the Phase I capital facilities necessary to implement the Water Management Plan shall be owned and operated by Eastern, pursuant to the Plan and in a fiduciary capacity for the benefit of all Parties under this Judgment, pursuant to Sections 5.4; 9.6.4(a); 9.6.4(c).

6.11.1 Financing of Water Management Plan facilities may be funded by Assessments, regional capital fees, loans and grants, contributions for storage rights by Metropolitan or other third-parties, and municipal bonds. Responsibility for the costs of future capital facilities necessary to implement the Plan, beyond the Phase I facilities, shall be determined by the Watermaster and apportioned on relative benefit to be derived by each Public Agency.

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6.11.2 Any of the participating Public Agencies may propose projects to be included in the Water Management Plan to increase the Management Area water supply. Such proposals, after evaluation by the Watermaster, shall be included or rejected. If the Watermaster chooses to reject the proposal, the proposing Public Agency may implement the rejected project at its own cost so long as it does not significantly impact the implementation of the Management Plan and/or interfere with the ongoing production by the Public Agencies.

7. INJUNCTION.

Each Party and his, her or its officers, agents, employees, successors and assigns, is enjoined and restrained from:

7.1 Producing water from the Management Area without payment of required Administrative Assessments.

7.2 Producing water from the Management Area in excess of the Party's Adjusted Production Right and share of Imported Water, or the Base Production Right in the case of a Class B Participant, without payment of required Replenishment Assessments.

7.3 Transferring Production Rights except as authorized in this Judgment.

7.4 Recharging water in the Management Area except as authorized in this Judgment.

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7.5 Storing or exporting water except as authorized in this Judgment.

8. CONTINUING JURISDICTION.

8.1 Full Jurisdiction. Full jurisdiction, power and authority is reserved to the Court as to all matters contained in this Judgment, including expedited intervention by successors in interest to Private Pumpers, except:

8.1.1 To redetermine Base Production Rights of the Public Agencies or Class B Participants.

8.1.2 As otherwise limited by law.

8.2 Motion to Interpret. By motion to the Court, upon 30 days written notice and after hearing, any Party or Watermaster may request the Court to make such further or supplemental orders to interpret, enforce, carry-out or amend this Judgment. Any such motion shall be reviewed de novo by the Court. Any such motion shall be served on all Parties and Watermaster at the addresses on the Watermaster's notice list.

9. WATERMASTER.

9.1 Composition. The Watermaster shall consist of a board composed of one elected official selected by each of the Public Agencies and one Private Pumper representative selected by the Class A and Class B Private Pumpers.

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9.2 Terms. Each member of the Watermaster shall serve until replaced by the Public Agency or Private Pumpers that made the original appointment.

9.3 Removal and Replacement. Any Watermaster member may be removed and replaced by the same procedure used in his or her appointment.

9.4 Voting. Each member of the Watermaster shall have one vote. Four affirmative votes shall be required in order to constitute Watermaster action on each of the following matters. (1) any change sought in the form of governance; (2) any change in voting requirements; (3) retaining the services of legal counsel and Advisor; (4) establishing, levying, increasing or decreasing all assessment amounts; (5) adopting or amending an annual budget; (6) determining the extent of overdraft and quantifying safe yield; (7) determining Adjusted Production Rights; (8) decisions regarding the financing of Supplemental Water or facilities, other than any financing provisions included in this Stipulated Judgment as provided in Sections 5.3, 5.4, 5.5 hereof; (9) decisions regarding ownership of facilities, other than ownership of the Phase I facilities described in the Water Management Plan, which shall be owned by Eastern Municipal Water District, subject to a right of use by those parties participating in the financing thereof; (10) policies for the management of the Management Area; (11) and any decision that involves a substantial commitment by the Watermaster, including any contracts for conserved water. All other actions by the Watermaster shall require three affirmative votes.

9.5 Court Review. Any action by the Watermaster, or any failure to act by virtue of insufficient votes, may be reviewed by the Court on motion by

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any party, with notice to all other parties. The Court's review shall be de novo, and the Court's decision shall constitute action by the Watermaster.

9.6 Powers and Duties. In order to implement the provisions of this Judgment, the Watermaster shall have the following duties and powers:

9.6.1 Water Management Plan. Watermaster shall develop and implement a Water Management Plan, with such additions and modifications as may from time to time be appropriate, and shall administer the provisions of this Judgment. The Water Management Plan shall be subject to approval by the Court, by the Soboba Tribe, and by the United States.

9.6.2 Independent Counsel. The Watermaster shall retain independent legal counsel to provide such legal services as the Watermaster may direct.

9.6.3 Advisor. The Watermaster shall retain either an independent engineering firm or qualified individual experienced in hydrology to evaluate and analyze the data collected by Eastern, and any conclusions based thereon, and to make recommendations to the Watermaster, referred to herein as "Advisor." The Advisor shall also provide general coordination among Eastern, the Technical Advisory Committee and the Watermaster with respect to their respective functions, and perform such executive functions as the Watermaster may direct. The Watermaster reserves the right to refer any matter it may choose to any person it may select for assistance in carrying out its duties under this Judgment.

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9.6.4 Operations and Other Functions.

(a) *Operations – Phase I Facilities*. The Phase I Facilities (including capital facilities and spreading basins, as more particularly defined in the Water Management Plan) are either existing facilities of Eastern that will be expanded or improved as part of the Water Management Plan, or are new facilities that will be integrated into Eastern's existing facilities and will be owned by Eastern. Pursuant to the terms and conditions of contracts to be entered into between Eastern and the Watermaster, and Eastern and the other Public Agencies, Eastern shall construct, install, and operate the Phase I Facilities consistent with the Water Management Plan.

(b) *Operations – Other Facilities*. The Water Management Plan anticipates the need for the construction and installation of other facilities in order to accomplish the goals of the Judgment. Such facilities may be constructed, installed and operated under contract with the Watermaster, by a member of the Watermaster or, in circumstances approved by the Watermaster, by other responsible entities.

(c) *Purchase of Water for Groundwater Recharge.* The Soboba settlement requires Metropolitan to use its best efforts to deliver an average of 7500

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acre-feet per year of Imported Water for recharge of the Management Area. This supply is dedicated first to satisfy the rights of the Soboba Tribe as provided in the Settlement Agreement. Such portion of the supply that is not used by the Soboba Tribe will be available to those Parties who have participated in the cost thereof. Subject to the approval of the Watermaster, Eastern shall enter into a contract with Metropolitan for the purchase and delivery of such Imported Water supply. Eastern shall also purchase as a member agency of Metropolitan, or otherwise acquire, such additional supplies of water as may be directed by the Watermaster to implement the Water Management Plan, subject to availability and transmission capacity. All such water delivered by Metropolitan, or otherwise acquired by Eastern, and all Eastern facilities used to deliver, recharge and recapture such water, shall be subject to rights of use by the Parties entitled thereto. Such rights of use shall be confirmed in detail in written contracts with Eastern. Recyled water is also available for direct and indirect groundwater recharge from Eastern's wastewater treatment facilities serving the Management Area. The Watermaster shall have a right of first refusal to purchase all recycled water produced from such plant that is not subject to then existing contracts. Nothing contained herein shall limit the right of the Watermaster to acquire Imported or Supplemental Water supplies from any of the Parties, or from other responsible entities.

(d) *Data Collection*. The Watermaster shall provide for the collection and maintenance of all production, water level, water quality, and other

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technical data necessary under or required by the Water Management Plan ("Data"). Pursuant to the terms and conditions of a contract to be entered into between Eastern and the Watermaster, Eastern shall collect and maintain all such Data and transmit such Data to the Watermaster, its Advisor, and the Technical Advisory Committee as directed by the Watermaster. The foregoing clause does not restrict the ability of the Watermaster to enter into other agreements with other members of the Watermaster and/or private firms and individuals for the collection of Data.

(e) *Accounting*. The Watermaster shall provide for the levy, billing, and collection of all assessments provided for under the Judgment, for the payment of costs and expenses of the Watermaster, and for the performance of such accounting and related functions as may be required in connection with those functions ("Accounting Functions"). All funds collected shall be held in a segregated account. All expenses and disbursements shall be separately accounted for. Pursuant to the terms and conditions of a contract to be entered into between Eastern and the Watermaster, Eastern shall initially perform the Accounting Functions for Watermaster. The foregoing clause does not restrict the ability of the Watermaster to enter into other agreements with other members of the Watermaster and/or private firms and individuals to provide some or all of the Accounting Functions.

9.6.5 Technical Advisory Committee. There has been a Technical Advisory Committee that has functioned throughout the development of the Water Management Principles and Plan, and this Stipulated Judgment. That Committee has been composed of such managerial and technical representatives as the individual parties decide to appoint. Each party has paid the costs of its own representatives, and shall continue to do so in the future. The Technical Advisory Committee shall continue to function, and to provide such technical assistance as

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the Watermaster may request. The Technical Advisory Committee shall make recommendations to the Watermaster's Advisor and to the Watermaster on all matters requiring four votes for Watermaster action, and shall receive from Eastern all data associated with such matters for its review and evaluation. The Technical Advisory Committee and its members shall also function as a way to keep the City Councils, Boards of Directors and participating Private Pumpers fully informed about the implementation of this Judgment.

9.6.6 Reservation of Rights. The Watermaster reserves the right to assume, on its own, any functions set forth in Section 9.6.4, except as provided in Section 9.6.4(a), and to undertake all other acts required to implement the Plan and this Judgment, so long as it is legally capable of performing such functions. The Watermaster, if it should choose, may also act through or in conjunction with the other Public Agencies, or through a Joint Powers Agency composed of all the Public Agencies hereunder. Except as specifically provided in Section 9.6.4(a) with respect to Eastern's facilities used in Phase I, the Watermaster shall have no right to use or acquire the water facilities of any of the Parties, without their consent, provided that it is the intent of the Parties that their individual facilities will be available where appropriate to implement the Water Management Plan, upon terms equitable to all parties, and consistent with their respective obligations to their own customers.

9.6.7 Rules and Regulations. The Watermaster may make such rules and regulations as may be necessary for its own operations as well as for the operation of the Plan and this Judgment, subject to Court approval. Meetings of the Watermaster shall be subject to the Brown Act .

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9.6.8 Reports to Court. The Watermaster shall file annually with the Court, and serve on all Parties, a report regarding its activities during the preceding year, including an audited statement of all accounts and financial activities.

9.6.9 Notice to Parties. Watermaster shall maintain a current list of the Parties and their addresses for notice purposes. Rules for service shall be governed by the California Code of Civil Procedure and the California Rules of Court. Each Party shall notify Watermaster in writing of the name and address for its receipt of notice and service under this Judgment. A Party may change this information by written notice to Watermaster. Notice shall be deemed sufficient if directed to the most recent address provided by the Watermaster.

9.7 Watermaster Records. Watermaster's records shall be kept at the office of Eastern unless changed by the Watermaster and approved by the Court. These records shall be treated as public records under the Public Records Act. Cal. Gov't Code §§ 6250-6277 (West 1995 and Supp. 2002).

10. MISCELLANEOUS.

10.1 Intervention After Judgment. Any Person who is not a Party and who proposes to Produce water from the Management Area, or who is an heir, successor or assign of an existing party, may become a Party to this action and Judgment, subject to the conditions contained herein, by filing a petition in intervention. The petition may be filed and approved ex parte with notice to the Watermaster. Such intervener shall thereafter be a Party bound by this Judgment, and entitled to the rights and privileges accorded under this Judgment.

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3750 UNIVERSITY AVENUE
P.O. BOX 1028
RIVERSIDE, CALIFORNIA 92502

10.2 Loss of Rights. No right adjudicated in this Judgment shall be lost by non-use, abandonment, forfeiture or otherwise, except upon a written election by the owner of the right filed with Watermaster, or by order of the Court upon noticed motion and after hearing.

10.3 Attorney's Fees and Costs. No Party shall recover any attorney's fees or costs in this proceeding from any Party.

Dated: _____, 200_

_____
Judge of the Superior Court

LAW OFFICES OF
BEST BEST & KRIEGER LLP
3750 UNIVERSITY AVENUE
P.O. BOX 1028
RIVERSIDE, CALIFORNIA 92502

EXHIBIT B

List of Parties to this Judgment

1. Parties

   A. Eastern Municipal Water District ("Eastern)
   B. Lake Hemet Municipal Water District ("Lake Hemet")
   C. City of Hemet ("Hemet")
   D. City of San Jacinto ("San Jacinto")

2. Class A Participants

   A.
   B.
   C.
   D.

3. Class B Participants

   A.
   B.
   C.

LAW OFFICES OF
BEST BEST & KRIEGER LLP
3750 UNIVERSITY AVENUE
P.O. BOX 1028
RIVERSIDE, CALIFORNIA 92502

Exhibit C

Base Production Rights

1. Public Agencies

Agency Name	Base Production Rights (Acre-feet per year)
Eastern Municipal Water District	10,869
Lake Hemet Municipal Water District	11,063
City of Hemet	6,320
City of San Jacinto	4,031

2. Class B Participants

LAW OFFICES OF
BEST BEST & KRIEGER LLP
3750 UNIVERSITY AVENUE
P.O. BOX 1028
RIVERSIDE, CALIFORNIA 92502

APPENDIX C LIST OF GOVERNING BODIES

Eastern Municipal Water District:

Name	Title
David J. Slawson	Board President, Division 5
Ronald Sullivan	Board Vice President, Division 4
Joe Kuebler, CPA	Director Division 2, EMWD Board Treasurer
Philip E. Paule	Director Division 1
Randy A. Record	Director Division 3, MWD Director

Lake Hemet Municipal Water District:

Name	Title
Frank Douglas Marshall III	Board President
Patrick Searl	Board Vice President
Herbert C. Forst	Board Secretary
John S. Fricker	Board Treasurer
Larry Minor	Director

City of Hemet:

Name	Title
Marc Searl	Mayor
Lori Van Arsdale	Vice- Mayor
C. Robin Resser Lowe	Councilperson
Brian Christie	Councilperson
Eric Mc Bride	Councilperson
Steve Clayton	City Clerk
Judith Oltman	City Treasurer

City of San Jacinto:

Name	Title
Jim Ayres	Mayor
Chris Carlson	Vice- Mayor
Dale Stubblefield	Council Member
Robert Ritchie	Council Member
John Mansperger	Council Member

APPENDIX D PRINCIPLES FOR WATER MANAGEMENT

PRINCIPLES FOR WATER MANAGEMENT

1. Water Management Plan. These Principles, approved by the appropriate authority of each party, are intended to form the basis from which the parties will develop a Water Management Plan ("Management Plan") for the area described in Section 2. The Management Plan is being developed to ensure an adequate and reliable source of future water supply. The Management Plan is also intended to facilitate and accommodate a settlement of the claims of the Soboba Band of Luiseno Indians ("Soboba Tribe").

2. Management Area. The area included in the Management Plan consists of the Canyon Sub-basin and the San Jacinto Upper Pressure Sub-basin, downstream to Bridge Street, and the Hemet Basins ("Management Area"). The Management Area is shown upon the attached map.

3. Pumpers within the Management Area. The primary pumpers within the Management Area are: Eastern Municipal Water District ("Eastern"), Lake Hemet Municipal Water District ("Lake Hemet"), City of San Jacinto ("San Jacinto"), and City of Hemet ("Hemet") (individually

"Public Agency," collectively "Public Agencies"); the Soboba Tribe (not a Management Plan participant); and approximately 62 individual agricultural and other private pumpers who pump more than 25 acre-feet per year ("Private Pumpers").

4. Goals. The parties agree that the Management Plan shall incorporate and serve to implement the following goals:

A. Allowing for Future Urban Growth. The parties acknowledge that the Management Area will continue to experience residential, commercial, and industrial growth and development, and that existing water production and service systems will need to be expanded to meet this growth. It is estimated that at least 15,000 afy incremental water supply capacity over the existing base production rights of the Public Agencies must be dedicated to adequately serve this growth. The Management Plan should serve and provide a clear planning process so that each affected Public Agency will be able to meet these projected growth needs.

B. Water Quality Protection. Implementation of the Management Plan should protect and/or enhance Management Area water quality. However, implementation of certain elements of the Management Plan may cause limited localized water quality degradation. If such degradation impedes the then current beneficial use of any Public Agency in the Management Area, the Watermaster described in Section 22 ("Watermaster") shall implement appropriate mitigation measures to ensure water supply to the affected Public Agency and bear the associated costs. The standards for local water quality degradation shall be defined in the Management Plan.

C. Cost-Effective Management. The Management Plan should serve to support the pursuit of cost-effective water supply and water treatment by the Public Agencies, both individually and collectively.

D. Overdraft. The groundwater levels within the Management Area have generally been declining for a number of years, and the Management Area is presently in a condition of overdraft. It is recognized that the Management Plan will, within a reasonable period, eliminate groundwater overdraft and enhance operational yield by

implementing a combination of available water resources management elements. These elements include: reduction in native groundwater production; enhanced recharge with native, imported and/or recycled water; development of supplemental supplies such as imported and recycled water; and water conservation programs.

E. Monitoring. The Watermaster shall implement a monitoring program to ensure the Management Plan activities follow best management and engineering principles to protect Management Area water resources.

5. Public Agencies Base Production Rights.

A. The base production rights of Eastern, Lake Hemet and Hemet in the first year of the Management Plan shall be based upon their average production for calendar years 1995-1999. This period was chosen to reflect these Public Agencies' recent pumping, and shall determine their base production rights.

B. The base production right of San Jacinto in the first year of the Management Plan, shall be based upon its average production for calendar years 1995-1999, plus 500 afy. The 500 afy is added because San Jacinto's recent production does not reflect its historic production because of water purchases and other factors.

C. Pursuant to Section 21 below, for the life of the Management Plan, Hemet and San Jacinto shall each add an additional 900 afy to their base production rights. The additional 900 afy shall not be subject to reduction by the Watermaster as provided in Section 5.D and shall not be subject to any Administrative or Replenishment Assessments as provided in Section 6, or other fee or charge imposed under the Management Plan.

D. It is the goal of the Management Plan to adjust base production rights over time to a level consistent with the Watermaster's calculation of the Public Agencies' share of safe yield for the Management Area. Based on current information, it appears that the total reduction in base production rights will need to be approximately 35%. The ultimate reduction will be based on periodic demand, hydrology, recharge and

availability of imported water. In order to implement this reduction in a phased manner, each Public Agency's base production rights shall be subject to adjustment as follows:

(1) A 10% reduction from the base production rights in the first year of the Management Plan; and

(2) Until base production rights are consistent with the Public Agencies' share of safe yield, Watermaster shall determine the reductions in base production rights in each subsequent year of the Management Plan, to achieve this goal within 6 years of approval of the Management Plan. Each reduction shall not be more than 10% of the base production right of the prior year.

(3) Pursuant to Section 7(A)(2)(b), upon conversion of a Class B Participant's land from agricultural to a use that requires water service from a Public Agency, the Public Agency shall receive an increase in its base production rights equal to the adjusted base production right of the Class B Participant.

6. Public Agency Production Assessments. The Public Agency production will be subject to the following assessments:

A. An Administrative Assessment on each acre-foot pumped by a Public Agency up to its adjusted base production right. The parties contemplate that the Administrative Assessment will be $50.00 per acre-foot of water pumped in the first year of the Management Plan, and that such amount will thereafter be set by the Watermaster.

B. A Replenishment Assessment on each acre-foot pumped by a Public Agency in excess of its adjusted base production right equal to the cost of providing a like quantity of supplemental water to recharge the Management Area, including recharge losses. Pumping by a Public Agency in excess of its adjusted base production right in order to meet increasing demands is expected and permissible, provided that such excess extractions shall be subject to the Replenishment Assessment. The costs of providing a like quantity of supplemental water shall include the costs of water, O&M costs of the replenishment system, capital recovery and other administrative costs. Currently, the total of these cost items is estimated to be in the range

of $300 to $400 per acre-feet; the actual amount will reflect the costs at the time incurred.

7. Private Pumpers Water Rights. The Public Agencies recognize the overlying water rights of the Private Pumpers, and do not intend to take or adversely impact these rights without an agreement with the owner of such rights. The Management Plan will lay out alternatives for the retention, protection, or transfer of such rights, leaving selection of the alternative to the individual overlying water rights owner. A Private Pumper can elect not to participate in the Management Plan and not to formally acknowledge its existence. Such Pumpers shall be referred to herein as "Non-Participants"; such Pumpers shall continue to exercise whatever water rights they may hold under California law unaffected by the Management Plan. There is no intent to affect water use that is consistent with the historical use of the Private Pumpers. However, other pumpers under the Management Plan do not waive their rights to challenge new or expanded water rights. Non-Participants will not have the option of joining the program at a later date. The alternatives available to participants are as follows:

A. (1) Class A Participation. A Private Pumper can elect to sign a written agreement acknowledging the existence of the Management Plan. Such Pumper shall be a Class A Participant and shall be entitled to vote for and/or be elected to serve as the Private Pumper representative on the Management Plan's governing board or body described in Paragraph 22 below, but shall not otherwise be required to participate in the Management Plan implementation. A Class A Participant may, without any financial assessment by the Watermaster, pump from his/her/its property within the Management Area the amount of water that can be put to reasonable and beneficial use on the Pumper's land as may be authorized under California law. Class A Participants shall have the right to convert to Class B Participation during a grace period that shall end three (3) years after the effective date of the Management Plan, as approved by a judgment of the Superior Court for Riverside County, upon payment of the total assessments the Pumper would have paid had the Pumper elected to be a member of Class B from the outset, plus interest.

(2) Class B Participation. A Private Pumper can become a Class B Participant by electing to limit annual pumping to the Pumper's average annual production during the calendar years 1995 through

1999 and to pay replenishment assessments on amounts in excess of that average annual production. A Class B Participant shall enjoy the following benefits of Plan Participation:

a. Vote for and/or be elected to serve as the Private Pumper's representative on the Management Plan's Governing Board;

b. Upon conversion of Pumper's land from agricultural use to a use that requires water service from a participating Public Agency, Public Agency shall credit to the extent legally permissible, Pumper or Pumper's successor-in-interest's adjusted production right, using the formula in Section 5 towards satisfaction of any requirement then in effect for water supply assessment requirements. Furthermore, Pumper or Pumper's successor-in-interest shall be given a credit for Pumper's adjusted production right using the formula in Section 5 towards any fees associated with water supply that the Public Agency may then have in effect. The Public Agency serving the converted land shall receive a credit to its production right as set forth in Section 5.

c. To the extent the Pumper's land is not covered under Section 7(A)(2)(b), Pumper will be eligible to enter into a contract with the Management Plan, or a participating Public Agency, to sell for a defined period of time some portion of Pumper's adjusted production right, under terms and conditions mutually agreed upon by the Pumper and the Management Plan. Criteria used in consideration of such contract shall include:

(i) Management Plan's need to acquire additional water supplies to address Basin overdraft and recovery;

(ii) Submission of a water conservation plan, including use of in lieu water, by Pumper that will reasonably guarantee conservation of water that would otherwise be produced from the Basin;

(iii) Public policy considerations of local government jurisdictions, including economic and land use impacts of proposed water conservation plan.

B. In-Lieu Water Use. In the event a Private Pumper (or successor) receives recycled and/or imported water from a Public Agency to serve an overlying use in place of groundwater, or otherwise engages in an in-lieu program, the overlying water right of the Private Pumper (or successor) shall not be diminished by the receipt and use of such recycled and/or imported water or by engaging in an in-lieu program.

C. Well Monitoring. To become a Class A or B Participant, a Private Pumper shall authorize the metering of the Pumper's well(s) and the collection of groundwater level and quality data, and the reading thereof by Management Plan personnel. The metering and reading shall be at no cost to the Pumper, and the Pumper shall receive copies of the reports and information obtained upon request.

D. Future Production Participation. Any new Pumper after the effective date of the Management Plan, as approved by a judgment of the Superior Court for Riverside County, can only participate as a Class A Participant as described in Section 7A(1).

E. Replacement Wells. The redrilling of existing wells and the drilling of new wells to replace existing wells will not be considered new private production.

8. Capital Facilities. Each Public Agency shall continue to own its existing capital facilities for water management. However, capital facilities may be jointly constructed and owned by the Management Plan. Joint financing of such facilities may be funded by regional capital fees, loans and grants, contributions for storage by The Metropolitan Water District of Southern California ("Metropolitan") or other third-parties, and municipal bonds. Responsibility for the costs of any existing and future capital facility of the Management Plan should be apportioned among the Public Agencies based on relative benefit to be derived by each Public Agency. Any of the participating Public Agencies may propose projects to be included in the Management Plan to increase Management Area water supply. Such proposals, after evaluation by the Watermaster, shall be included or rejected. If the Watermaster chooses to reject the proposal, the proposing Public Agency may implement the rejected project as long as it does not significantly impact the implementation of the Management Plan and/or interfere with the ongoing production by the Public Agencies.

9. Soboba Tribe's Water Rights. The Soboba Tribe's water rights shall be determined as part of a settlement among the Soboba Tribe, the United States, Eastern, Lake Hemet and Metropolitan. Major points of the proposed settlement are:

A. The Soboba Tribe shall have a senior, prior right in the Canyon and San Jacinto Upper Pressure Sub-basins of 9000 afy, but its use shall be limited to a maximum of 4100 afy during the first 50 years after the effective date of the settlement.

B. The Soboba Tribe shall have the right to purchase replenishment water for use pursuant to the Principles of Settlement at the Management Plan replenishment rate.

C. The Soboba settlement provides that, among other things, Metropolitan will use its best efforts to deliver sufficient water to yield a 15-year average of 7,500 afy to the Management Plan until 2035 at its long-term interruptible rate (currently $233/af).

D. Subject to full funding of the settlement by the United States, the Management Plan shall pay the Soboba Tribe $10 million.

E. The Management Plan will also pay the Soboba Tribe $7 million. A Public Agency's payment of its share of this amount is optional, but in order to obtain the benefits of the low-cost Metropolitan water delivered pursuant to the settlement, a Public Agency shall pay its share of this amount.

F. The Management Plan will receive $10 million for capital improvements from the United States, and all unused Soboba Tribe water based on the Public Agency's participation in the payment in Section 9(E) above.

10. Implementation of These Principles. These Interim Principles for Water Management shall be used by the parties as a basis for the preparation of the Management Plan, and a stipulated judgment in a water rights adjudication. As explained below, the Management Plan shall be administered by the Watermaster. The Watermaster will be under the continuing jurisdiction of the Court.

11. Assessment Program. The assessment program contemplated by the Management Plan shall be administered by the Watermaster subject to the governance provisions herein. All payments shall be made to the Watermaster and shall be maintained in a separate restricted fund. All assessments shall be used exclusively to acquire imported, recycled or Metropolitan water for the recharge of the Management Area, and for the facilities and operational and administrative expenses associated with the assessment and recharge programs. Subject to Management Plan approval, assessments may also be used by affected parties to acquire and deliver water for direct use by the parties, in lieu of pumping.

12. Replenishment Program. The replenishment program contemplated by the Management Plan shall also be administered by the Watermaster. The program shall include: the acquisition of supplemental water supplies (including imported, recycled and Soboba Tribe water); the expenditure of assessments; the recharge of the Management Area; and the construction and operation of all necessary facilities, including but not limited to, development of surface and sub-surface percolation and injection facilities. Priority for replenishment will be based on an equitable

apportionment of available replenishment water among the sub-basins after full consideration of: the Public Agency's participation in the payment in Section 9(E) above; the Management Area conditions; water demands; the availability of storage capacity to accommodate the recharge of natural flows; the availability of appropriate conveyance facilities; and the availability of replenishment or imported water. The Watermaster is encouraged to take advantage of surplus imported water that occasionally may be available at low cost, and to use available assessment funds to bank such recharge against future pumping in excess of adjusted production rights.

13. Rights to Groundwater. Groundwater in the Management Area may occur from: natural recharge; spreading operations of natural flows; replenishment with imported, recycled or Metropolitan water acquired with assessment funds; or in-lieu recharge programs financed with assessment funds. All such groundwater shall be available to support the pumping of the parties as allowed herein, and shall not be the property of any individual party, subject to the provisions of Section 14.

14. Storage Rights. The parties recognize that unused storage capacity exists in the Management Area, and the Management Plan contemplates that this capacity will be managed conjunctively with available imported and recycled water supplies. Subject to availability of the Management Plan fund for assessments and unused storage capacity as determined by Watermaster, the Management Area will be recharged and water stored therein when such supplies are available, and drawn upon by the Public Agencies in dry years when such supplemental water supplies may not be available. In addition, unused storage capacity as determined by Watermaster may be used for "put and take" operations of recycled or imported water that is paid for by any party to the Management Plan provided that:

A. Such operations do not interfere with the rights of any other pumper, or with the use of the storage capacity for recharge and storage under the Management Plan;

B. Water available for recharge is purchased first, as needed, for the Management Plan;

C. Later recovery of stored water shall exclude losses; and

D. Such recovered water may be used anywhere within the service area of the party.

Any conjunctive use programs for the benefit of territory outside of the Management Area shall be subject to the governance provisions herein. Any storage, conjunctive use programs by third parties or in-lieu recharge programs financed with assessment funds shall be subject to the governance provisions herein.

15. Spreading Operations. The Public Agencies shall independently or jointly operate their respective facilities to maximize the existing spreading and recharge operations of natural flow in the Management Area.

16. Recharge Water Quality. Consistent with Section 4(E) above all water used to replenish any sub-basin in the Management Area shall meet the Regional Water Quality Control Board requirements, and may be used in any sub-basin where such requirements are met.

17. Recharge Losses. The accounting for storage recharge of the Management Area shall not include any water that escapes therefrom and migrates downstream beyond the Management Area. Losses will be calculated based upon best engineering principles.

18. Recycled Water. The use of recycled water can be of substantial benefit in providing additional water in the Management Area. Each Public Agency may implement a recycled water program, including the ownership, operation and construction of all necessary facilities, and the application for and administration of any loan or grant applications. The Management Plan will support loan or grant applications, and the Public Agencies will work to integrate recycled water into the Management Plan to the extent economically feasible while meeting regulatory standards. Subject to existing recycled water contracts, the Management Plan will have a first right of refusal to purchase excess recycled water for recharge. Priority shall be given to Management Area recharge for the use of recycled water which originates therefrom.

19. Export. The Public Agencies may export water outside the Management Area, on a temporary basis, upon approval by the Watermaster.

However, any water exported shall be replenished with an appropriate amount of similar or better quality water as determined by Watermaster. Also, water exports by the Public Agencies shall not interfere with the Management Plan or any other Public Agency's operations. The Management Plan will set forth the specific criteria for the export of water, including, but not limited to, conjunctive use programs.

20. Credits. Recharge credits documented before the Management Plan shall be calculated pursuant to the Management Plan. Future recharge credits shall be established by replenishment of water or by not exercising the full, adjusted base production right, and shall be calculated pursuant to the Management Plan.

21. Tunnel Seepage, Stream Diversions, Fruitvale To resolve Eastern's use of Tunnel seepage, Lake Hemet's stream diversions and Eastern's use of Fruitvale water, 900 afy shall be added to Hemet's adjusted base production and 900 afy shall be added to San Jacinto's adjusted base production right as discussed in Section 5 above. This is intended to provide Hemet and San Jacinto a fair share of water from these disputed issues.

22. Governance. The Management Plan will be administered by a Watermaster as follows:

A. The governing board of the Watermaster shall consist of one elected official from each of the Public Agencies and one Private Pumper representative selected by the Private Pumpers who participate in the Management Plan. Each member shall have one vote.

B. The Watermaster's duties shall include: determining safe yield; determining replenishment needs; determining annual adjusted base production rights; purchasing and selling imported and recycled water; constructing future capital facilities; establishing assessment rates; initiating necessary conservation and drought management measures; and implementing other responsibilities identified in the Management Plan documents.

Dated: _____, 2004.

EASTERN MUNICIPAL WATER DISTRICT

By: _____

Dated: _____, 2004. LAKE HEMET MUNICIPAL WATER DISTRICT

By: _____

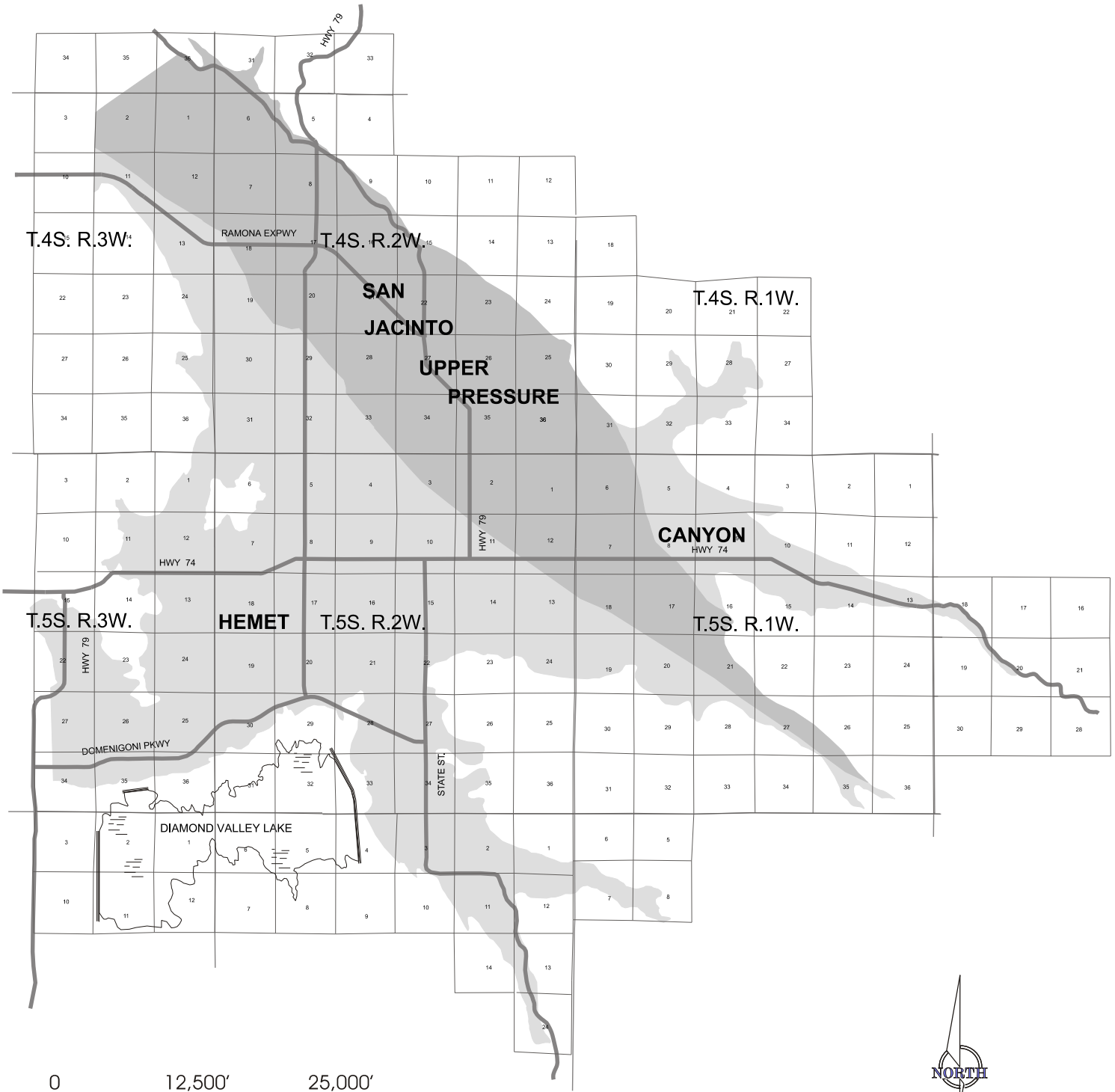
Dated: _____, 2004. CITY OF HEMET

By: _____

Dated: _____, 2004. CITY OF SAN JACINTO

By: _____

MANAGEMENT AREA



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APPENDIX E LIST OF COMMITTEE ATTENDEES

The attendees of the PC who contributed to this plan:

Name	Title	Affiliation
Debi Lara	Administrative Assistant	City of Hemet
Marc Searl	Member, City Council	City of Hemet
Steve Temple	City Manager	City of Hemet
Eric Vail	Attorney	City of Hemet
Lori VanArsdale	Member, City Council	City of Hemet
Dennis Williams	Consultant	City of Hemet
Chris Carlson-Buydos	Member, City Council	City of San Jacinto
Bob Hargreaves	Attorney	City of San Jacinto
Steven Johnson	Consultant	City of San Jacinto
Barry McClellan	City Manager	City of San Jacinto
Ken Shaw	Member, City Council	City of San Jacinto
Samson Haile-Selassie	Project Manager	DWR
Eric Hong	Project Manager	DWR
Dale Schafer	Facilitator	DWR
Ali Taghavi	Consultant	DWR
Mike Garner	Asst. General Manager	EMWD
Richard Hall	Member, BOD	EMWD
Behrooz Mortazavi	Asst. General Manager	EMWD
Tony Pack	General Manager	EMWD
Ravi Ravishanker	Deputy General Manager	EMWD
Gerry Shoaf	Attorney	EMWD
Rodger Siems	Member, BOD	EMWD
Herb Forst	Member, BOD	LHMWD
John Fricker	Member, BOD	LHMWD
Rob Lindquist	General Manager	LHMWD
Art Littleworth	Attorney	LHMWD
John Loncar	Consultant	LHMWD
Tom Wagoner	General Manager	LHMWD
Bruce Scott	Private Water Producer	Private Water Producer
Jim Conner	Private Water Producer	Private Water Producer
Bill Corwin	Private Water Producer	Private Water Producer
Gary McMillan	Private Water Producer	Private Water Producer
Randy Record	Private Water Producer	Private Water Producer
Joe Garcia	Environmental Specialist	Soboba Tribe

The members of the TC who contributed to this plan:

Name	Title	Affiliation
Mike Gow	Director of Public Works	City of Hemet
Dennis Williams	Consultant	City of Hemet
Steve Johnson	Consultant	City of San Jacinto
Maurice Hall	Project Manager	DWR
Eric Hong	Project Manager	DWR
Dale Schafer	Facilitator	DWR
Ali Taghavi	Consultant	DWR
Khos Ghaderi	Director of Operations	EMWD
Joe Lewis	Director of Engineering Svcs.	EMWD
Fahkri Manghi	Hydrologist	EMWD
Behrooz Mortazavi	Asst. General Manager	EMWD
Peter Odencrans	Public Affairs Officer	EMWD
Ralph Phraner	Senior Geologist	EMWD
Ravi Ravishanker	Deputy General Manager	EMWD
John Loncar	Consultant	LHMWD
Tom Wagoner	General Manager	LHMWD
Dick Kelley	Private Water Producer	Private Water Producer
Bruce Scott	Private Water Producer	Private Water Producers
Joe Garcia	Environmental Specialist	Soboba Tribe
Peter Pyle	Consultant	Soboba Tribe

The representatives of each Public Agency and DWR at CAM Committee meetings who contributed to this plan:

Name	Title	Affiliation
Steve Temple	City Manager	City of Hemet
Eric Vail	Attorney	City of Hemet
Dennis Williams	Consultant	City of Hemet
Bob Hargreaves	Attorney	City of San Jacinto
Steve Johnson	Consultant	City of San Jacinto
Barry McClellan	City Manager	City of San Jacinto
Samson Haile-Selassie	Project Manager	DWR
Eric Hong	Project Manager	DWR
Dale Schafer	Facilitator	DWR
Ali Taghavi	Consultant	DWR
Mike Garner	Asst. General Manager	EMWD
Behrooz Mortazavi	Asst. General Manager	EMWD
Tony Pack	General Manager	EMWD
Chuck Rathbone	Director of Finance	EMWD
Gerry Shoaf	Attorney	EMWD
Art Littleworth	Attorney	LHMWD
John Loncar	Consultant	LHMWD
Tom Wagoner	General Manager	LHMWD

APPENDIX F HISTORICAL WATER SUPPLIES

LHMWD SURFACE WATER DIVERSION

EMWD IMPORTED WATER USAGE

EMWD RECYCLED WATER PRODUCTION

EMWD RECYCLED WATER SALES

EMWD
Historical Water Supply Components (AF)

Year	Groundwater*	Imports	Recycled Water**	Sales to other Agencies	Conveyance Water	Total
1984	11,763	2,228	0	(1,811)	0	12,181
1985	11,859	971	0	(2,301)	0	10,529
1986	11,605	605	0	(1,750)	0	10,460
1987	12,217	2,889	37	(3,549)	0	11,594
1988	14,539	4,463	42	(2,929)	0	16,116
1989	14,762	5,712	40	(4,500)	0	16,014
1990	16,533	5,774	24	(8,417)	0	13,915
1991	12,051	378	24	(2,667)	0	9,786
1992	11,810	92	25	(2,149)	0	9,778
1993	10,483	0	1	(155)	0	10,329
1994	12,253	0	0	(1,823)	0	10,430
1995	11,055	50	7	(707)	0	10,406
1996	16,349	0	57	(1,902)	(2,583)	11,921
1997	16,282	183	31	(1,133)	(3,120)	12,242
1998	14,692	0	4	(417)	(3,656)	10,623
1999	17,458	0	0	(1,658)	(3,130)	12,670
2000	17,634	198	0	(2,236)	(2,690)	12,906
2001	15,127	1,761	0	(2,853)	(907)	13,128
2002	15,370	0	0	(4,895)	(929)	9,546
2003	13,693	325	0	(1,864)	(686)	11,468
2004	12,515	5,636	0	(4,283)	0	13,868

* Groundwater includes conveyance water

** Recycled water does not include water sold to land owners for irrigation

LHMWD
Historical Water Supply Components (AF)

Year	Groundwater	Purchases from EMWD	Surface Water	Total
1984	4,901	1811	*	*
1985	6,609	2074	6,557	15,241
1986	6,961	1750	6,078	14,789
1987	6,929	3396	4,418	14,743
1988	7,427	2792	6,424	16,642
1989	6,481	4338	6,837	17,656
1990	5,829	8382	1,902	16,114
1991	7,559	2300	2,057	11,917
1992	7,770	2149	2,206	12,125
1993	6,748	155	6,064	12,967
1994	9,780	1820	1,633	13,233
1995	9,166	653	4,328	14,146
1996	10,932	1841	3,359	16,132
1997	12,472	507	2,959	15,938
1998	9,356	266	4,019	13,641
1999	13,390	952	3,033	17,375
2000	13,093	1808	1,765	16,666
2001	12,490	2103	1,348	15,941
2002	12,595	4100	441	17,136
2003	12,044	1343	1,530	14,918
2004	11,900	3635	1,330	16,865

* Surface water data unavailable for 1984

City of Hemet Water Service Area
Historical Water Supply Components (AF)

Year	Groundwater	Purchases from EMWD	Total
1984	3,514	0	3,514
1985	3,810	227	4,037
1986	5,531	0	5,531
1987	4,669	153	4,822
1988	6,306	137	6,443
1989	6,549	162	6,711
1990	5,776	35	5,811
1991	5,138	367	5,505
1992	5,597	0	5,597
1993	5,478	0	5,478
1994	5,327	3	5,330
1995	5,643	1	5,644
1996	5,961	14	5,975
1997	5,891	27	5,918
1998	4,801	31	4,832
1999	4,805	642	5,447
2000	5,048	428	5,476
2001	4,735	749	5,484
2002	4,955	761	5,716
2003	4,999	518	5,517
2004	5,684	345	6,029

City of San Jacinto Water Service Area
Historical Water Supply Components (AF)

Year	Groundwater	Purchases from EMWD	Total
1984	2,805	0	2,805
1985	2,840	0	2,840
1986	2,763	0	2,763
1987	2,746	0	2,746
1988	2,980	0	2,980
1989	2,662	0	2,662
1990	3,841	0	3,841
1991	3,051	0	3,051
1992	3,481	0	3,481
1993	2,802	0	2,802
1994	2,793	0	2,793
1995	2,637	54	2,691
1996	2,831	47	2,878
1997	2,337	600	2,937
1998	2,585	120	2,705
1999	2,766	65	2,831
2000	2,780	0	2,780
2001	2,742	1	2,743
2002	3,231	34	3,265
2003	3,154	2	3,156
2004	2,794	303	3,097

Private Water Producers
Historical Water Supply Components (AF)

Year	Groundwater	Recycled Water	Total
1984	27,420	2086	29,506
1985	30,465	4076	34,541
1986	29,317	4480	33,797
1987	28,512	4461	32,973
1988	27,933	5010	32,943
1989	27,390	5571	32,961
1990	24,725	4439	29,164
1991	23,894	3688	27,582
1992	23,904	3076	26,980
1993	26,130	3301	29,431
1994	30,777	2416	33,193
1995	28,777	3847	32,624
1996	27,216	4312	31,528
1997	28,566	4507	33,073
1998	27,630	3926	31,556
1999	29,358	4975	34,333
2000	33,123	4596	37,719
2001	28,678	4319	32,997
2002	19,962	4888	24,850
2003	15,465	3898	19,363
2004	17,179	5047	22,226

Soboba Tribe
Historical Water Supply Components (AF)

Year	Groundwater	Total
1984	398	398
1985	948	948
1986	912	912
1987	450	450
1988	450	450
1989	450	450
1990	450	450
1991	450	450
1992	450	450
1993	450	450
1994	246	246
1995	951	951
1996	1,324	1,324
1997	1,190	1,190
1998	1,000	1,000
1999	1,545	1,545
2000	1,321	1,321
2001	1,536	1,536
2002	2,016	2,016
2003	1,773	1,773
2004	1,315	1,315

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APPENDIX G

EMWD LICENSE FOR SAN JACINTO RIVER DIVERSION

STATE OF CALIFORNIA
THE RESOURCES AGENCY
STATE WATER RESOURCES CONTROL BOARD
DIVISION OF WATER RIGHTS

License for Diversion and Use of Water

APPLICATION 924 PERMIT 468 LICENSE 10667

THIS IS TO CERTIFY, *That* EASTERN MUNICIPAL WATER DISTRICT
P. O. BOX 858, HEMET, CALIFORNIA 92343

HAS *made proof as of* JANUARY 23, 1969 *(the date of inspection)* *to the satisfaction of the State Water Resources Control Board of a right to the use of the water of* SAN JACINTO RIVER IN RIVERSIDE COUNTY

tributary to LAKE ELSINORE

for the purpose of IRRIGATION AND DOMESTIC USES *under Permit* 468 *of the Board and that the right to the use of this water has been perfected in accordance with the laws of California, the Regulations of the Board and the permit terms; that the priority of this right dates from* FEBRUARY 14, 1918 *and that the amount of water to which this right is entitled and hereby confirmed is limited to the amount actually beneficially used for the stated purposes and shall not exceed* FIVE THOUSAND SEVEN HUNDRED SIXTY (5,760) ACRE-FEET PER ANNUM, TO BE COLLECTED TO UNDERGROUND STORAGE BY SPREADING FROM NOVEMBER 1 OF EACH YEAR TO JUNE 30 OF THE SUCCEEDING YEAR AT A RATE OF 41 CUBIC FEET PER SECOND AND SUBSEQUENTLY EXTRACTED AND PLACED TO BENEFICIAL USE. SO LONG AS THERE IS NO INTERFERENCE WITH OTHER RIGHTS, JUNIOR, AS WELL AS SENIOR, LICENSEE MAY INCREASE HIS RATE OF DIVERSION TO A MAXIMUM OF 100 CUBIC FEET PER SECOND; PROVIDED THAT THE TOTAL QUANTITY DIVERTED IN ANY 30-DAY PERIOD DOES NOT EXCEED 2,442 ACRE-FEET.

THE POINTS OF DIVERSION OF SUCH WATER ARE LOCATED:

(1) SOUTH 2,900 FEET AND EAST 1,400 FEET FROM NW CORNER OF SECTION 10, T5S, R1E, SBB&M, BEING WITHIN NE1/4 OF SW1/4 OF SAID SECTION 10, AND
(2) NORTH 1,600 FEET AND WEST 900 FEET FROM SW CORNER OF SECTION 4, T5S, R1E, SBB&M, BEING WITHIN NW1/4 OF SW1/4 OF SAID SECTION 4.

A DESCRIPTION OF LANDS OR THE PLACE WHERE
SUCH WATER IS PUT TO BENEFICIAL USE IS AS FOLLOWS:

DOMESTIC USE AND IRRIGATION OF 7,500 ACRES NET WITHIN A GROSS AREA OF 29,500 ACRES WITHIN T4S, R1W; T4S, R1E; T5S, R1E; T5S, R1W; T5S, R2W, SBB&M, AS SHOWN ON MAP FILED WITH STATE WATER RESOURCES CONTROL BOARD.

DIVERSION OF WATER UNDER THIS LICENSE IS, AND SHALL BE, SUBJECT TO THE PROVISION OF JUDGMENT AND DECREE ISSUED IN CASE NUMBER 51,546 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA IN AND FOR THE COUNTY OF RIVERSIDE, SAID JUDGMENT AND DECREE BEING DATED 3 JUNE, 1954.

Licensee shall allow representatives of the Board and other parties, as may be authorized from time to time by the Board, reasonable access to project works to determine compliance with the terms of this license.

All rights and privileges under this license including method of diversion, method of use and quantity of water diverted are subject to the continuing authority of the Board in accordance with law and in the interest of the public welfare to prevent waste, unreasonable use, unreasonable method of use or unreasonable method of diversion of said water.

Reports shall be filed promptly by licensee on appropriate forms which will be provided for the purpose from time to time by the Board.

The right hereby confirmed to the diversion and use of water is restricted to the point or points of diversion herein specified and to the lands or place of use herein described.

This license is granted and licensee accepts all rights herein confirmed subject to the following provisions of the Water Code:

Section 1625. Each license shall be in such form and contain such terms as may be prescribed by the Board.

Section 1626. All licenses shall be under the terms and conditions of this division (of the Water Code).

Section 1627. A license shall be effective for such time as the water actually appropriated under it is used for a useful and beneficial purpose in conformity with this division (of the Water Code) but no longer.

Section 1628. Every license shall include the enumeration of conditions therein which in substance shall include all of the provisions of this article and the statement that any appropriator of water to whom a license is issued takes the license subject to the conditions therein expressed.

Section 1629. Every licensee, if he accepts a license does so under the conditions precedent that no value whatsoever in excess of the actual amount paid to the State therefor shall at any time be assigned to or claimed for any license granted or issued under the provisions of this division (of the Water Code), or for any rights granted or acquired under the provisions of this division (of the Water Code), in respect to the regulation by any competent public authority of the services or the price of the services to be rendered by any licensee or by the holder of any rights granted or acquired under the provisions of this division (of the Water Code) or in respect to any valuation for purposes of sale to or purchase, whether through condemnation proceedings or otherwise, by the State or any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State, of the rights and property of any licensee, or the possessor of any rights granted, issued, or acquired under the provisions of this division (of the Water Code).

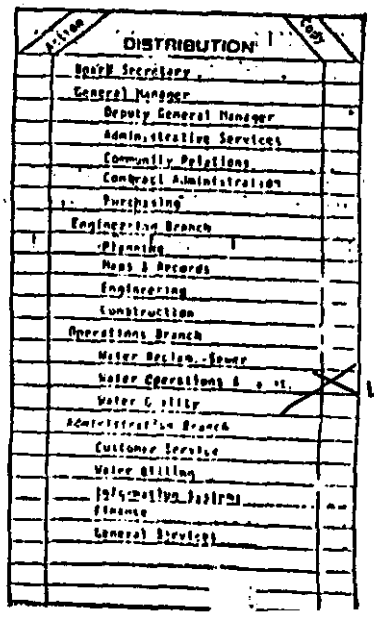
Section 1630. At any time after the expiration of twenty years after the granting of a license, the State or any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State shall have the right to purchase the works and property occupied and used under the license and the works built or constructed for the enjoyment of the rights granted under the license.

Section 1631. In the event that the State, or any city, city and county, municipal water district, irrigation district, lighting district, or political subdivision of the State so desiring to purchase and the owner of the works and property cannot agree upon the purchase price, the price shall be determined in such manner as is now or may hereafter be provided by law for determining the value of property taken in eminent domain proceedings.

Dated: MAY 25 1976

STATE WATER RESOURCES CONTROL BOARD

R. L. Rosenberger
Chief, Division of Water Rights



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APPENDIX H MEMORANDA OF UNDERSTANDING

APPENDIX H1: **PREPARATION OF WATER MANAGEMENT PLAN**

APPENDIX H2: **DRAFT AGREEMENT REGARDING PHASE 1 FACILITIES CONSTRUCTION COST AND USE**

APPENDIX H3: **MONITORING PROGRAM**

APPENDIX H4: **INTERIM WATER SUPPLY PLAN**

MEMORANDUM OF UNDERSTANDING

PREPARATION OF WATER MANAGEMENT PLAN FOR THE HEMET/SAN JACINTO MANAGEMENT AREA

This Memorandum Of Understanding: Preparation of Water Management Plan for the Hemet/San Jacinto Management Area ("MOU"), is hereby entered into this 17th day of June, 2004 by and between the EASTERN MUNICIPAL WATER DISTRICT, a California municipal water district ("EMWD"), LAKE HEMET MUNICIPAL WATER DISTRICT, a California municipal water district ("LHMWD"), CITY OF HEMET, a California general law city ("Hemet"), and CITY OF SAN JACINTO, a California general law city ("San Jacinto"), (collectively referred to hereinafter as the "Parties"), based on the following facts:

RECITALS

A. Groundwater in the Hemet/San Jacinto Management area has been, and will remain, a significant source of water for the people and agribusiness of Riverside County providing an invaluable contribution to the local economy and public good. As a result, the Parties have acknowledged their collective interest in the management of local water resources within the Hemet/San Jacinto Management area.

B. In furtherance of this collective interest, the Parties entered into that "Memorandum of Understanding to Work Cooperatively to Promote Conjunctive Use Projects and Programs in Upper San Jacinto River Basins" dated June 19, 2001 (the "Conjunctive Use MOU"). The purpose of the Conjunctive Use MOU is to encourage cooperation among the Parties to facilitate and support local groundwater management efforts and conjunctive use programs particularly those that could increase dry-year water supplies, within the safe-yield and without the overdraft of San Jacinto groundwater basins.

C. In the cooperative spirit of the Conjunctive MOU and with assistance from the State Department of Water Resources, the parties engaged in several rounds of policy discussions and technical investigations into suitable methods to alleviate the overdraft, manage long term water supplies, and provide for demands of growth. As the result of these efforts, the Parties each approved a statement of principles entitled "Principles for Water Management" (the "Principles") in February 2004 with regard to the Hemet and San Jacinto Basins. The Principles established the framework from which the Parties agreed to develop a Water Management Plan for the Hemet and San Jacinto Basins.

D. The intent of this MOU is to provide for the creation of the Water Management Plan ("WMP") called for in the Principles, to appoint Eastern Municipal Water District as the Contract Administrator for preparation of the WMP, and to establish an equitable mechanism for funding the WMP by the Parties.

OPERATIVE PROVISIONS

NOW, THEREFORE, in consideration of the promises made and recited herein, the Parties do hereby enter into this Memorandum of Understanding setting forth their pledges, commitments, understandings and appropriate limiting conditions, as follows:

ARTICLE 1.0 AGREEMENT TO UNDERTAKE WMP

1.1 **Cooperation**. The Parties agree that the WMP shall be timely undertaken and completed in accordance with this MOU. In order to ensure the timely and efficient completion of the WMP within the budget described in this MOU, the Parties agree to cooperate with and amongst each other, to share information necessary for the preparation of the WMP, and to take such other reasonable actions as may be necessary for the timely completion of the WMP, provided such actions do not result in additional costs to the Parties.

1.2. **Scope of Work**. The WMP shall be prepared in accordance with the Scope of Work attached hereto and incorporated herein by reference as Attachment 1 (hereinafter referred to as the "Scope of Work"). The Scope of Work defines the extent of the WMP, the tasks necessary for its completion, assigns responsibility for those tasks, and outlines the basic content of each constituent section.

1.3. **Consultant**. The Parties agree that the WMP shall be prepared by an independent contractor, except for those sections which the Scope of Work designates will be prepared by EMWD or the Parties collectively. The Parties agree that Water Resources & Information Management Engineering, Inc, (hereinafter "WRIME") is hereby selected to be the independent contractor principally responsible for undertaking and completing the Scope of Work. However, it is contemplated that WRIME will subcontract with, or EMWD will enter into separate contracts with, GEOSCIENCE, Support Services, Inc., and Stetson Engineering (hereinafter collectively referred to as "Subconsultants") for certain work identified in the Scope of Work. Subconsultants shall serve as consultants for WRIME with regard to performance of the Scope of Work and shall not serve as consultants for Hemet or San Jacinto or their attorneys for performance of the Scope of Work.

1.4. **Project Cost**. The Parties agree that the amount to be paid to WRIME and Subconsultants for undertaking and completing the Scope of Work shall not exceed that amounts reflected on the WMP Budget attached hereto and incorporated herein by reference as Attachment 2. The WMP Budget reflects a total, not to exceed, project cost of $180,894 ("Total Project Cost"). The Parties agree that the approximately $16,869 remaining in the budget for the Hemet/San Jacinto Groundwater Association ("GWA") and the approximately $20,000 remaining in the budget for the Integrated Water Management Plan ("IWMP") shall be reprogrammed and allocated toward payment of the Total Project Cost. After application of these funds, a cost of $144,025 remains to be funded by and apportioned among the Parties ("Adjusted Project Cost"). The Adjusted

Project Cost excludes individual expenses of the Parties regarding for their own review, comment, and approval of the WMP as well as expenses of EMWD in preparing sections of the WMP for which the Scope of Work indicates it is principally responsible.

ARTICLE 2.0 OBLIGATIONS OF THE PARTIES

2.1 **Funding of WMP**. Each of the Parties individually agrees to fund up to their apportioned share of the Adjusted Project Cost as determined in Article 3.0 "Apportionment of Cost" and to pay such share in a lump sum payment within thirty (30) calendar days of receipt of an invoice from EMWD, provided that EMWD invoices the parties in July of 2004 or thereafter in accordance with Attachment 3.

2.2 **Administration of Contract**. EMWD hereby agrees to act as the contracting agency for the preparation of the WMP. In this regard, EMWD shall enter into and execute the appropriate contract(s) with WRIME and the Subconsultants to perform the Scope of Work for an amount not to exceed the Project Cost. EMWD shall also perform the duties set forth in Attachment 3.

ARTICLE 3.0 APPORTIONMENT OF COST

3.1. **Method of Apportionment**. The Parties agree to apportion the Adjusted Project Cost among themselves based on each Party's pro rata share of the total base production of all the Parties as determined by the Hemet/San Jacinto Policy Committee and shown below:

Apportionment of Adjusted Project Cost (*900 af credit taken out)			
Agency	**Base Production (AF)**	**Percentage**	**Cost Contribution**
City of Hemet*	5,420	17.7 %	$ 25,492
City of San Jacinto*	3,131	10.3 %	$ 14,835
LHMWD.	11,063	36.3 %	$ 52,281
EMWD	10,869	35.7 %	$ 51,417
Totals	**30,483**	**100.0 %**	**$144,025**

ARTICLE 4.0 MISCELLANEOUS PROVISIONS

4.1 **Term**. This MOU shall terminate, unless extended by the mutual agreement of the Parties memorialized in writing, upon acceptance of the completed WMP by the governing boards of each of the Parties, provided the Consultant has been fully paid for the Scope of Work and has released the Parties, and each of them, from any claims for further or additional compensation for the Scope of Work.

4.2 **Ownership of Documents**. The WMP together with all data, information, materials and reports (including electronically or digitally stored materials) produced in the preparation of the WMP shall become the joint property of the Parties upon acceptance of the WMP.

4.3 **Individual Costs & Expenses**. Except for the costs and expenses which the Parties have collectively agreed to fund as provided in Article 3.0 "Apportionment of Funding" of this MOU, any cost or expense incurred any one of the Parties with regard to the WMP or its review or approval, shall remain the sole cost and expense of the incurring Party.

4.4 **Authority**. The individuals executing this Agreement on behalf of the Parties and the instruments referenced on behalf of the Parties represent and warrant that they have the legal power, right and actual authority to bind the Parties to the terms and conditions hereof and thereof.

4.5 **Counterpart Originals**. This Agreement may be executed in original counterparts, which together shall constitute a single agreement.

4.6 **Effective Date**. This MOU has become effective among and between the Parties on the date by which each Party's governing board or council has approved the MOU and the authorized representative of each Party has executed the MOU.

IN WITNESS WHEREOF, the Parties hereto have executed this Memorandum of Understanding on the date and year first above written.

EASTERN MUNICIPAL WATER DISTRICT

By: _____
_____, General Manager

LAKE HEMET MUNICIPAL WATER DISTRICT

By: _____
ROBERT V. LINDQUIST, JR., General Manager

[additional signatures on following page]

CITY OF HEMET

By: _____
Steve Temple, City Manager

ATTEST:

By: Sarah McComas
~~for Stephen Clayton~~ Sarah McComas
Deputy City Clerk

Approved as to Form:

By: Julie H. Biggs
~~Eric S. Vail~~ Julie H. Biggs
Assistant City Attorney

CITY OF SAN JACINTO

By: Peter A. Cosentino
Peter A. Cosentino, City Manager

ATTEST:

By: Dorothy L. Chauvard
City of San Jacinto
City Clerk

Approved as to Form:

By: Robert Hargrave & Bob Ratzlaff manager
City Attorney

AGREEMENT TO DEVELOP A GROUNDWATER MONITORING PROGRAM IN THE HEMET/SAN JACINTO MANAGEMENT AREA

THIS AGREEMENT is made and entered into by and among the following entities, which are hereinafter collectively referred to as the "AGENCIES."

City of Hemet
Lake Hemet Municipal Water District

City of San Jacinto
Eastern Municipal Water District

I. RECITALS

A - Background:

1. Groundwater in the Hemet/San Jacinto Management Area has been, and will remain, a significant source of water for the people and agribusiness of Riverside County providing an invaluable contribution to the local economy and public good.
2. The Cities of Hemet and San Jacinto, Lake Hemet Municipal Water District, and Eastern Municipal Water District strive to increase the availability and reliability of local surface and ground water resources in the area.
3. The Cities of Hemet and San Jacinto, Lake Hemet Municipal Water District, and Eastern Municipal Water District have an interest in the management of local water resources within the Hemet/San Jacinto Management Area.
4. The Department of Water Resources seeks to support local groundwater management efforts, particularly those that could increase dry-year water supplies, within the safe yield and without the overdraft of groundwater resources.
5. Through cooperation, open communication, and consensus building among the AGENCIES, the Hemet/San Jacinto Groundwater Policy and Technical Committees were formed in June of 2001 to identify programs needed to improve groundwater resources management in the area.
6. The AGENCIES have determined that development and implementation of a groundwater monitoring program is necessary for the accurate evaluation of the operational yield of the Hemet/San Jacinto Management Area.

B – The Purpose of this Agreement:

1. Develop a Monitoring Program in the Hemet/San Jacinto Management Area.
2. Appoint Eastern Municipal Water District as the Monitoring Program Administrator.
3. Establish an equitable funding mechanism among the Agencies to collect and fund the Monitoring Program.

II. COVENANTS

NOW, THEREFORE, in consideration of the foregoing recitals and mutual covenants contained herein, the AGENCIES hereby agree as follows:

A Develop a Groundwater Monitoring Program:
The AGENCIES and other private groundwater producers in the area hereby agree to develop the Groundwater Monitoring Program, as more specifically provided for in Attachment 1.

B Roles and Responsibilities of the AGENCIES:
The AGENCIES shall perform the duties as more specifically provided for in Attachment 1.

C Monitoring Program Costs:
A total of $200,000 is estimated to be required for the meter installation and first year operation of the monitoring program. This amount includes contingencies and uncertainties associated with such monitoring programs. Attachment 1 contains detailed cost estimates.
It is anticipated that Department of Water Resources (DWR) will contribute $100,000 of the $200,000 estimated cost for the meter installation and first year implementation of the monitoring program, provided the Agencies agree to fund and implement the monitoring program into future years pursuant to Covenant II.D, below.

D Cost Sharing of the Monitoring Program:
Until the full implementation of the Water Management Plan, the AGENCIES will share the annual Monitoring Program costs based on their base groundwater production percentages as determined by the Hemet/San Jacinto Groundwater Policy Committee and shown below:

Cost Sharing Prior to Plan Implementation			
Agency	**Base Production (AF)**	**Percentage**	**Cost Contribution**
City of Hemet	6,320	19.6 %	$ 19,600
City of San Jacinto	4,031	12.5 %	$ 12,500
LHMWD.	11,063	34.2 %	$ 34,200
EMWD	10,869	33.7 %	$ 33,700
Totals	**32,283**	**100.0 %**	**$100,000**

As noted above, the AGENCIES' share of the first year's budget is $100,00. Future years' budgets will be approved by the Hemet/San Jacinto Groundwater Policy Committee, and incorporate any excesses or deficits from prior years.

E Term of the Agreement:
This Agreement shall terminate, unless extended by mutual agreement of the AGENCIES, on the date a stipulated judgment for the Water Management Plan is executed by the AGENCIES provided that all debts and liabilities of the Monitoring Program are satisfied.

An Agency may terminate its participation in this agreement on an anniversary date of the Agreement by given the other Agencies written notice three months prior to that anniversary date.

F Ownership of Documents:
All data and reports produced shall become the joint property of the AGENCIES.

G Effective Date:
This Agreement shall become effective upon execution by all AGENCIES pursuant to authorization by each AGENCY's Governing Board.

H Counterparts:
This Agreement may be executed in original counterparts, which together shall constitute a single agreement.

IN WITNESS WHEREOF, the AGENCIES have executed this Agreement on the date set forth below.

CITY OF HEMET

DATE 9/13/03 BY _____
City Manager

CITY OF SAN JACINTO

DATE 9-16-03 BY _____
City Manager

LAKE HEMET MUNICIPAL WATER DISTRICT

DATE 9/16/03 BY _____
General Manager

EASTERN MUNICIPAL WATER DISTRICT

DATE 9/19/03 BY _____
General Manager

AGREEMENT TO IMPLEMENT THE 2005 WATERSHED MONITORING PROGRAM IN THE HEMET/SAN JACINTO MANAGEMENT AREA

THIS AGREEMENT is made and entered into by and among the following entities, which are hereinafter collectively referred to as the "AGENCIES."

City of Hemet
Lake Hemet Municipal Water District
City of San Jacinto
Eastern Municipal Water District

I. RECITALS

A - Background:

1. Groundwater in the Hemet/San Jacinto Management area has been, and will remain, a significant source of water for the people and agribusiness of Riverside County providing an invaluable contribution to the local economy and public good.
2. The Cities of Hemet and San Jacinto, Lake Hemet Municipal Water District, and Eastern Municipal Water District strive to increase the availability and reliability of local surface and ground water resources in the area.
3. The Cities of Hemet and San Jacinto, Lake Hemet Municipal Water District, and Eastern Municipal Water District have an interest in the management of local water resources within the Hemet/San Jacinto Management area.
4. The Department of Water Resources seeks to support local groundwater management efforts, particularly those that could increase dry-year water supplies, within the safe yield and without the overdraft of groundwater resources.
5. Through cooperation, open communication, and consensus building among the AGENCIES, the Hemet/San Jacinto Policy and Technical Committees was formed in June of 2001 to identify programs needed to improve groundwater resources management in the area.
6. The AGENCIES developed and implemented a groundwater monitoring program for the year 2004 for the accurate evaluation of groundwater changes within the Hemet/San Jacinto Management area.
7. The AGENCIES are interested in the continuation of the groundwater monitoring program for the accurate evaluation of water resources in the Hemet/San Jacinto Management area.
8. The AGENCIES are interested in overseeing the current USGS surface water monitoring program for better evaluation of the recharge into the Hemet/San Jacinto Management area.
9. The AGENCIES have determined that implementation of a watershed monitoring program which consists of groundwater and surface water monitoring is necessary for the accuate evaluation of the safe yield of the Hemet/San Jacinto Management area.

B – The Purpose of this Agreement:

1. Conduct a Watershed Monitoring Program which consists of groundwater and surface water monitoring in the Hemet/San Jacinto Management area for year 2005.
2. Appoint Eastern Municipal Water District as the Monitoring Program Administrator.
3. Establish an equitable funding mechanism to collect the corresponding shares of each entity to fund the Monitoring Program for 2005.

II. COVENANTS

NOW, THEREFORE, in consideration of the foregoing recitals and mutual covenants contained herein, the AGENCIES hereby agree as follows:

A Watershed Monitoring Program:
The AGENCIES and other private groundwater producers in the area hereby will implement a Watershed Monitoring Program during 2005.

B Roles and Responsibilities of the AGENCIES:
The AGENCIES shall continue the duties as performed during implementation of the Groundwater Monitoring Program in 2004 and oversee the surface water monitoring conducted by U.S. Department of Interior - Geological Survey (USGS).

C Monitoring Program Costs:
A total of $112,000 is estimated to be required for the operation of the watershed monitoring program during 2005. This amount includes participation in a cooperative surface water monitoring program with USGS in addition to the groundwater monitoring program conducted during 2004. Contingencies and uncertainties associated with such monitoring programs are also included in this amount.

D Cost Sharing of the Monitoring Program:
Until the full implementation of the Water Management Plan, the AGENCIES will share the Watershed Monitoring Program costs based on their base groundwater production percentages that are subject to assessments as determined by the Hemet/San Jacinto Policy Committee and shown below:

Cost Sharing For 2005				
Agency	**Base Production (AF)**	**Production subject to Assessment**	**Percentage**	**Cost Contribution**
City of Hemet	**6,320**	**5,420**	**17.8%**	**$ 19,900**
City of San Jacinto	**4,031**	**3,131**	**10.3%**	**$ 11,500**
LHMWD.	**11,063**	**11,063**	**36.3%**	**$ 40,700**
EMWD	**10,869**	**10,869**	**35.7%**	**$ 39,900**

Totals	**32,283**	**30,483**	**100.0%**	**$ 112,000**

If the above costs increase by more than 10%, the AGENCIES shall meet and confer on the cost allocation amendment.

E Term of the Agreement:
This Agreement shall terminate, unless extended by mutual agreement of the AGENCIES, on the date a stipulated judgment for the Water Management Plan is executed by the AGENCIES provided that all debts and liabilities of the Monitoring Program are satisfied.

F Ownership of Documents:
All data and reports produced shall become the joint property of the AGENCIES.

G Effective Date:
This Agreement shall become effective upon execution by all AGENCIES pursuant to authorization by each AGENCY's Governing Board.

H Counterparts:
This Agreement may be executed in original counterparts, which together shall constitute a single agreement.

IN WITNESS WHEREOF, the AGENCIES have executed this Agreement on the date set forth below.

CITY OF HEMET

DATE 1/26/05 **BY** _____
City Manager

CITY OF SAN JACINTO

DATE 1-12-05 **BY** _____
City Manager

LAKE HEMET MUNICIPAL WATER DISTRICT

DATE JAN. 12, 2004 BY _____
General Manager

EASTERN MUNICIPAL WATER DISTRICT

DATE Jan 19, 2005 BY _____
General Manager

MEMORANDUM OF UNDERSTANDING

2006-2008 WATERSHED MONITORING PROGRAM

HEMET/SAN JACINTO MANAGEMENT AREA

This Memorandum Of Understanding; 2006-2008 Watershed Monitoring Program, Hemet/San Jacinto Management Area ("MOU"), is hereby dated for reference purposes as of May 23, 2006, by and between the EASTERN MUNICIPAL WATER DISTRICT, a California municipal water district ("EMWD"), LAKE HEMET MUNICIPAL WATER DISTRICT, a California municipal water district ("LHMWD"), CITY OF HEMET, a California general law city ("Hemet"), and CITY OF SAN JACINTO, a California general law city ("San Jacinto"), (collectively referred to hereinafter as the "Parties"), based on the following facts:

RECITALS

A. The Parties previously entered into an "Agreement to Implement the 2004 Watershed Monitoring Program in the Hemet/San Jacinto Management Area" dated September 19, 2003 ("2004 MOU") and an "Agreement to Implement the 2005 Watershed Monitoring Program in the Hemet/San Jacinto Management Area" dated January 26, 2005 ("2005 MOU"). The purpose and rationale of the Watershed Monitoring Program ("WMP") as reflected in the 2004 MOU and 2005 MOU is to conduct a program which consists of groundwater and surface water monitoring in the Hemet/San Jacinto Management Area ("Management Area") for years 2004 and 2005.

B. The Parties agree that the groundwater in the Management Area has been, and will remain, a significant source of water for the people and agribusiness of Riverside County, thus providing an invaluable contribution to the local economy and public good, for which the Parties strive to increase the availability and reliability of local surface and groundwater resources in the area.

C. The Parties have an interest in the management of local water resources within the Management Area. To this end, the California Department of Water Resources seeks to support local groundwater management efforts, particularly those that could increase dry-year water supplies, within the safe yield and without the overdraft of groundwater resources.

D. Through cooperation, open communication, and consensus building among the Parties, the Hemet/San Jacinto Policy and Technical Committees were formed in June of 2001, to identify programs needed to improve groundwater resources management in the area. Through these committees, the Parties developed and implemented the 2004 MOU and 2005 MOU for the accurate evaluation of groundwater changes within the Management Area. The parties desire to continue the WMP for the accurate evaluation of water resources within the Management Area.

E. The Parties further desire to oversee the current U.S. Department of Interior - Geological Survey ("USGS") Surface Water Monitoring Program for a better evaluation of the

recharge into the Management Area. Accordingly, the Parties have determined that implementation of a WMP which consists of groundwater and surface water monitoring is necessary for the accurate evaluation of the safe yield of the Management Area.

F. In furtherance thereof, it is the purpose and intent of the Parties in entering into this MOU to continue the WMP consisting of groundwater and surface water monitoring in the Management Area for years 2006 through 2008, appoint Eastern Municipal Water District as the WMP Administrator, and establish an equitable funding mechanism to collect the corresponding shares of each entity to fund the WMP for 2006 through 2008. To implement this goal, the Parties pledge to undertake the following actions.

OPERATIVE PROVISIONS

NOW, THEREFORE, in consideration of the promises made and recited herein, the Parties do hereby enter into this Memorandum of Understanding setting forth their pledges, commitments, understandings and appropriate limiting conditions, as follows:

1.0 THE PARTIES' PLEDGES AND CONDITIONS

1.1 **Pledges by the Parties**. Subject to the conditions set forth in Section 1.2, the Parties pledge the following:

1.1.1 Implementation of the WMP. The Parties agree to implement, and other local private groundwater producers have separately agreed to implement outside of this MOU, a WMP for the years 2006 through 2008, and agree to continue the duties as performed during implementation of the 2004 MOU and 2005 MOU to oversee the surface water monitoring conducted by U.S. Department of Interior - Geological Survey (USGS).

1.1.2 Appointment of EMWD as WMP Administrator. The Parties agree that EMWD shall be appointed as the WMP Administrator, whose duties shall include the administration of the WMP and the invoicing of the other Parties as provided below.

1.1.3 WMP Costs. An annual cost of $112,000 is estimated to be required for the operation of the WMP for each of the three years from 2006 through 2008. This amount includes participation in a cooperative Surface Water Monitoring Program with USGS in addition to the WMP conducted during 2004 and 2005. Contingencies and uncertainties associated with such monitoring programs are also included in this amount. If the above cost increases by more than 10%, the Parties agree to meet and confer on the cost allocation amendment.

1.1.4 Cost Sharing of the WMP. Until the full implementation of the Water Management Plan, the Parties agree to share the WMP costs based on their base groundwater production percentages that are subject to assessments as determined by the Hemet/San Jacinto Policy Committee and shown in the table below:

Cost Sharing For 2006 through 2008				
Agency	Base Production (AF)	Production subject to Assessment	Percentage	Cost Contribution
Hemet	6,320	5,420	17.8%	$ 19,900
San Jacinto	4,031	3,131	10.3%	$ 11,500
LHMWD	11,063	11,063	36.3%	$ 40,700
EMWD	10,869	10,869	35.7%	$ 39,900
Totals	32,283	30,483	100.0%	$ 112,000

1.2 **Cooperation with Other Parties**. The Parties agree to cooperate with each other to reasonably facilitate each Party's performance of their pledge, to share information and to regularly meet and confer concerning implementation of this MOU as part of the regularly scheduled meetings of the Groundwater Policy Committee or such sub-committee as the Policy Committee shall designate from time to time.

2.0 MISCELLANEOUS PROVISIONS

2.1 **Term and Continuation of the WMP**. This MOU shall terminate, unless extended by the mutual agreement of the Parties memorialized in writing, on the earlier of the following dates: (i) the date upon which two or more Parties mutually agree to terminate the MOU; (ii) the date upon which all Parties have adopted the Water Management Plan; or (iii) December 31, 2008. During the Term of this MOU, all of the obligations of the Parties shall be continued and carried over to the next calendar year, subject to adjustment if the WMP cost increases by more than 10%. The Parties shall meet and confer during the last quarter of the preceding year to determine the anticipated cost to be apportioned among the Parties for the forthcoming year and memorialized in a statement signed by the managers of all Parties. In any year subsequent to 2006, no Party shall be obligated to contribute more than one hundred twenty-five percent (125%) of its contribution assigned for the prior year without approval of its Board or Council

2.2 **Invoicing**. The Parties agree that EMWD shall invoice each Party for its contribution to the WMP and subsequent years, either in one lump sum during the year, or in installments over the year as is agreed upon by the Party being invoiced and arranged by that Party with EMWD.

2.3 **Ownership of Documents**. The Parties agree that all data and reports produced shall become the joint property of the Parties.

2.4 **Costs & Expenses**. Other than as set forth above, the Parties shall bear their own costs and expenses of otherwise participating in this MOU.

2.5 **Authority**. The individuals executing this MOU on behalf of the Parties and the instruments referenced on behalf of the Parties represent and warrant that they have the legal

power, right and actual authority to bind the Parties to the terms and conditions hereof and thereof.

2.6 **Counterpart Originals**. This Agreement may be executed in duplicate originals, each of which is deemed to be an original.

2.7 **Effective Date**. This MOU has become effective among and between the Parties on the date by which each Party's governing board or council has approved the MOU and the authorized representative of each Party has executed the MOU.

IN WITNESS WHEREOF, the Parties hereto have executed this Memorandum of Understanding on the date and year first above written.

[SIGNATURE ON FOLLOWING PAGES]

EASTERN MUNICIPAL WATER DISTRICT

By: _____
Tony Pack
General Manager

ATTEST:

By: _____
Board Secretary

Approved as to Form:

By: _____
Gerry Schoaf
General Counsel

LAKE HEMET MUNICIPAL WATER DISTRICT

By: _____
Tom Wagoner, General Manager

ATTEST:

By: _____
District, Secretary

Approved as to Form:

By: _____
Arthur Littleworth, General Counsel

CITY OF HEMET

By: _____
Steve Temple, City Manager

ATTEST:

By: _____
Stephen Clayton, City Clerk

Approved as to Form:

By: _____
Eric S. Vail, City Attorney

CITY OF SAN JACINTO

By: _____
Barry McClellan, City Manager

ATTEST:

By: _____
Dorothy Chouinard, City Clerk

Approved as to Form:

By: _____
Robert Hargreaves, Special Counsel

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MEMORANDUM OF UNDERSTANDING

INTERIM WATER SUPPLY PLAN

UPPER SAN JACINTO SUB-BASINS

This Memorandum Of Understanding; Interim Water Supply Plan, Upper San Jacinto Sub-Basins ("MOU"), is hereby entered into this 1st day of April, 2004 by and between the EASTERN MUNICIPAL WATER DISTRICT, a California municipal water district ("EMWD"), LAKE HEMET MUNICIPAL WATER DISTRICT, a California municipal water district ("LHMWD"), CITY OF HEMET, a California general law city ("Hemet"), and CITY OF SAN JACINTO, a California general law city ("San Jacinto"), (collectively referred to hereinafter as the "Parties"), based on the following facts:

RECITALS

A. The Parties have entered into that "Memorandum of Understanding to Work Cooperatively to Promote Conjunctive Use Projects and Programs in Upper San Jacinto River Basins" dated June 19, 2001 (the "Conjunctive Use MOU"). The purpose of the Conjunctive Use MOU is to encourage cooperation among the Parties to facilitate and support local groundwater management efforts and conjunctive use programs particularly those that could increase dry-year water supplies, within the safe-yield and without the overdraft of San Jacinto groundwater basins.

B. The Parties have also entered into that "Agreement to Develop a Groundwater Monitoring Program in the Hemet/San Jacinto Management Area" dated _____ 2003 ("GWM Program"). The purpose of the GWM Program is to measure and monitor groundwater levels to assist in the accurate evaluation of conditions of overdraft and the evaluation of operational safe yield in the Hemet/San Jacinto Management Area.

C. Furthermore, in February of 2004, the Parties each approved a statement of principles entitled "Principles for Water Management" (the "PWM") with regard to the Hemet and San Jacinto Basins. The PWM establishes the framework from which the Parties will develop a Water Management Plan for the Hemet and San Jacinto Basins.

D. The Conjunctive Use MOU and the PWM recognize that the Parties, individually and collectively, have an interest in managing and preserving the ground and surface water resources within the Hemet and San Jacinto Basins in order to alleviate an escalating condition of overdraft within those Basins.

E. Through the ongoing GWM Program conducted by the Parties, it has been discovered that well levels within certain portions of the Canyon and Intake sub-areas of the San Jacinto Basin ("Upper San Jacinto Sub-Basins") have declined more than the Parties had originally projected. This fact suggests that the condition of overdraft in the Upper San Jacinto Sub-Basins may be deteriorating more rapidly than anticipated,

making a collective effort to address the situation prudent prior to establishment of the Water Management Plan.

F. Therefore, in furtherance of the goals stated in the Conjunctive Use MOU and the PWM, it is the purpose and intent of the Parties in entering into this MOU to provisionally address the deteriorating situation by providing interim stabilization of the Upper San Jacinto Sub-Basins through the application of approximately 6,000 acre feet of direct and indirect groundwater recharge during calendar year 2004. To implement this goal, the Parties pledge to undertake the following actions during the calendar year 2004.

OPERATIVE PROVISIONS

NOW, THEREFORE, in consideration of the promises made and recited herein, the Parties do hereby enter into this Memorandum of Understanding setting forth their pledges, commitments, understandings and appropriate limiting conditions, as follows:

ARTICLE 1.0 - EMWD's PLEDGES AND CONDITIONS

1.1 **Pledges by EMWD**. Subject to the conditions set forth in Section 1.2, EMWD pledges the following:

1.1.1 Purchase and Recharge of Water. EMWD will contribute up to Eight Hundred Eighty Three Thousand Dollars and No Cents ($883,000.00) for the acquisition, transportation, operations, and recharge of imported water into the Upper San Jacinto Sub-Basins. EMWD will coordinate and cooperate with LHMWD and MWD regarding the acquisition of imported water. EMWD understands and agrees that it will implement the transportation and recharge of the purchased imported water into the Upper San Jacinto Sub-Basins using its existing conveyance and spreading facilities within the Management Area.

1.1.2 Restriction on Conveyances and Exports. EMWD will use its best efforts to eliminate flows from San Jacinto Basin to the Homeland and Juniper flats area during July, August, and September 2004, and will eliminate the use of any conveyance water during the 2004 calendar year in the Menifee Area. EMWD will not otherwise export any water intended for groundwater recharge, or made available due to groundwater recharge, in the Upper San Jacinto Sub-Basins during the 2004 calendar year. In addition, EMWD will pursue construction of Reach 16 to deliver recycled water to the Heartland Area and will investigate water supply contingency plans.

1.2 **EMWD's Conditions**. The pledges of EMWD stated in Section 1.1 are subject to the following conditions:

1.2.1 Optimizing Capacity. That the Parties cooperate with EMWD's efforts to optimize its delivery capacity during the months of July, August, and September 2004, by refraining, to the extent feasible, from exercising their rights to

delivery of Entitlement Water and/or Excess Water ("Fruitvale Water") under EMWD's Improvement District No. 24 program as provided in those agreements between the Parties individually and EMWD ("Fruitvale Agreements"). It is understood and agreed that any Party's cooperation with such effort by EMWD will not result in a loss, waiver, abrogation or diminishment of their contract rights under the Fruitvale Agreements or such other rights as the Party may have to purchase and receive Fruitvale Water.

1.2.2 Compliance by Other Parties. That each other party use its best efforts in good faith to perform and fulfill their respective pledges as expressed in Sections 2.1, 3.2, and 4.2.

1.3 **Acceptance of Other Parties' Conditions**. EMWD hereby accepts each other Party's conditions on their respective pledges.

1.4 **Cooperation with Other Parties**. EMWD agrees to cooperate with the other Parties to reasonably facilitate each Party's performance of their pledge, to share information and to regularly meet and confer concerning implementation of this MOU as part of the regularly scheduled meetings of the Groundwater Policy Committee or such sub-committee as the Policy Committee shall designate from time to time.

ARTICLE 2.0 - LHMWD'S PLEDGES AND CONDITIONS

2.1 **Pledges by LHMWD**. Subject to the conditions set forth in Section 2.2, LHMWD pledges the following:

2.1.1 Purchase and Recharge of Water. LHMWD will contribute up to Eight Hundred Twenty-eight Thousand Dollars and No Cents ($828,000.00) for the acquisition, transportation, operations, and recharge of imported water into the Upper San Jacinto Sub-Basins. LHMWD will coordinate and cooperate with EMWD and MWD regarding the acquisition of imported water. LHMWD understands and agrees that EMWD will implement the transportation and recharge of the purchased imported water into the Upper San Jacinto Sub-Basins using its existing conveyance and spreading facilities within the Management Area.

2.1.2 Optimizing Capacity. LHMWD will cooperate with EMWD's efforts to optimize EMWD's delivery capacity during the months of July, August, and September 2004, by refraining during such months, to the extent feasible, from exercising their rights to delivery of Entitlement Water and/or Excess Water ("Fruitvale Water") under EMWD's Improvement District No. 24 program as provided in those agreements between the Parties individually and EMWD. It is understood and agreed that LHMWD's cooperation with such effort by EMWD will not result in a loss, waiver, abrogation or diminishment of LHMWD's contract rights under the Fruitvale Agreements or such other rights as LHMWD may have to purchase and receive Fruitvale Water.

2.2 **LHMWD's Conditions**. The pledges of LHMWD stated in Section 2.1 are subject to the following conditions:

2.2.1 Emergency Production of Water. In the event LHMWD experiences an emergency loss of water production capacity or is otherwise unable to satisfy its municipal demand through the use of its own facilities, as determined by the LHMWD, LHMWD reserves the right to exercise its rights to delivery of Fruitvale Water during the months of July, August and September 2004 and shall pay EMWD the standard rate for Fruitvale Water, for amounts delivered within LHMWD's entitlement. For amounts required by LHMWD and delivered by EMWD over the entitlement amount, LHMWD shall pay EMWD's then current wholesale water rates.

2.2.2 Restriction on Conveyance Water and Exports. That EMWD use its best efforts to eliminate flows from San Jacinto Basin to the Homeland and Juniper flats area during July, August, and September 2004, and to eliminate the use of any conveyance water during the 2004 calendar year in the Menifee Area. EMWD will not otherwise export any water intended for groundwater recharge, or made available due to groundwater recharge, in the Upper San Jacinto Sub-Basins during the 2004 calendar year.

2.2.3 Preservation of Fruitvale Water Rights. Notwithstanding LHMWD's pledge to not exercise its entitlements to purchase and receive Fruitvale Water during July, August and September 2004, such pledge and non-exercise shall not be construed by the Parties or any of them as a waiver, failure to exercise, or other abrogation of LHMWD's rights under the Fruitvale Agreements or Fruitvale Adjudication and such rights shall be preserved, survive without diminishment, and remain valid and in full force and effect.

2.2.4 Compliance by Other Parties. That each other party use its best efforts in good faith to perform and fulfill their respective pledges as expressed in Sections 1.1, 3.2, and 4.2.

2.3 **Acceptance of Other Parties' Conditions**. LHMWD hereby accepts each other Party's conditions on their respective pledges.

2.4 **Cooperation with Other Parties**. LHMWD agrees to cooperate with the other Parties to reasonably facilitate each Party's performance of their pledge, to share information and to regularly meet and confer concerning implementation of this MOU as part of the regularly scheduled meetings of the Groundwater Policy Committee or such sub-committee as the Policy Committee shall designate from time to time.

ARTICLE 3.0 - HEMET'S PLEDGES AND CONDITIONS

3.1 **Acknowledgement of Conditions**. Hemet acknowledges the need of the Parties to cooperatively minimize the impacts on water resources in the Upper San Jacinto Sub-Basins. The Parties acknowledge that groundwater resources and well levels surrounding Hemet's water production facilities in the Hemet Basin have not experienced the same rate of decline, as have facilities of the Parties in the San Jacinto Basin. The Parties further acknowledge that Hemet's temporary reallocation of production from the Upper San Jacinto Sub-Basins to the Hemet Basin, as stated in

Section 3.2.1 [Reallocation of Water Production], is provided by Hemet as a means of cooperating with, and providing benefit to, the other Parties to address the conditions in the Upper San Jacinto Sub-Basins. The Parties also acknowledge that Hemet's temporary reallocation of production will not adversely impact the rights, interests, or facilities of the other Parties, and will not unreasonable contribute to the overdraft of the Hemet Basin.

3.2 **Pledges by Hemet**. Subject to the conditions set forth in Section 3.3, Hemet pledges the following:

3.2.1 Reallocation of Water Production. Hemet will reduce its water production and/or receipt from the Upper San Jacinto Sub-Basins during calendar year 2004 by a total of 1072 acre feet. The reduction will be accomplished by: (i) reducing groundwater production from Hemet wells No. 6 and No. 9, by approximately 300 acre feet over the 2004 calendar year; and (ii) by foregoing the exercise of its right to receive deliveries of Entitlement Water or Excess Water ("Fruitvale Water") – currently 772 acre feet -- under EMWD's Improvement District No. 24 program as provided in that Agreement between Hemet and EMWD dated June 13, 1972 ("Fruitvale Agreement") during calendar year 2004. Hemet will off-set this decrease in water production and/or receipt with an increase in groundwater production from Hemet's new or existing facilities in the Hemet Basin.

3.2.2 Optimizing Capacity. Hemet will cooperate with EMWD's efforts to optimize EMWD's delivery capacity during the months of July, August, and September 2004, by refraining during such months, to the extent feasible, from exercising its rights to delivery of Entitlement Water and/or Excess Water ("Fruitvale Water") under EMWD's Improvement District No. 24 program as provided in those agreements between the Parties individually and EMWD ("Fruitvale Agreements"). It is understood and agreed that Hemet's cooperation with such effort by EMWD will not result in a loss, waiver, abrogation or diminishment of Hemet's contract rights under the Fruitvale Agreements or such other rights as Hemet may have to purchase and receive Fruitvale Water.

3.3 **Hemet's Conditions**. The pledge's of Hemet stated in Section 3.2 are subject to the following conditions:

3.3.1 Emergency Production of Water. In the event Hemet experiences an emergency loss of water production capacity, or is otherwise unable to satisfy its municipal demand from its own facilities, as determined by the Hemet Water District, Hemet shall be entitled to increase water production from Hemet Well No. 6 and No. 9, or receive Fruitvale Water during the duration of the emergency. Hemet's pledge to reallocate water production as provided in Section 3.2 shall be reduced by the same amount. However, Hemet shall contribute an amount of funds equal to the acre feet of water produced multiplied by EMWD's then current wholesale water rate for the acquisition of replacement water.

3.3.2 Preservation of Water Lease Obligations. Hemet has an obligation to produce one hundred (100) acre feet of water per year each from Well No. 6 and Well No. 9. Notwithstanding anything to the contrary in Section 3.2, Hemet shall be entitled to produce such amounts from these wells. Hemet anticipates that it will be able to meet both its pledged reduction and its lease obligations.

3.3.3 Preservation of Fruitvale Water Rights. Notwithstanding Hemet's pledge to not exercise its entitlements to purchase and receive Fruitvale Water during calendar year 2004, such pledge and non-exercise shall not be construed by the Parties or any of them as a waiver, failure to exercise, or other abrogation of Hemet's rights under the Fruitvale Agreements or Fruitvale Adjudication and such rights shall be preserved, survive without diminishment, and remain valid and in full force and effect.

3.3.4 Restriction on Conveyance Water and Exports. That EMWD use its best efforts to eliminate flows from San Jacinto Basin to the Homeland and Juniper flats area and to eliminate the use of any conveyance water during the 2004 calendar year in the Menifee Area. EMWD will not otherwise export any water intended for groundwater recharge in the Upper San Jacinto Sub-Basins during the 2004 calendar year.

3.3.5 Compliance by Other Parties. That each other party use its best efforts in good faith to perform and fulfill their respective pledges as expressed in Sections 1.1, 2.1, and 4.2.

3.4 **Acceptance of Other Parties' Conditions**. Hemet hereby accepts each other Party's conditions on their respective pledges.

3.5 **Cooperation with Other Parties**. Hemet agrees to cooperate with the other Parties to reasonably facilitate each Party's performance of their pledge, to share information and to regularly meet and confer concerning implementation of this MOU as part of the regularly scheduled meetings of the Groundwater Policy Committee or such sub-committee as the Policy Committee shall designate from time to time.

ARTICLE 4.0 - SAN JACINTO'S PLEDGES AND CONDITIONS

4.1 **Acknowledgement of Conditions**. San Jacinto acknowledges the need of the Parties to cooperatively minimize the impacts on water resources in the Upper San Jacinto Sub-Basins.

4.2 **Pledges by San Jacinto**. Subject to the conditions set forth in Section 4.3, San Jacinto pledges the following:

4.2.1 Pledge of Future Credits. San Jacinto pledges 243 acre feet (the current equivalent of $78,260 at the import water rate of $322) of future recharge credits that are anticipated to accrue to San Jacinto pursuant to Section 20 of the Principles For Water Management. San Jacinto's recharge credits will be reduced by 243 acre feet once accrued. Another Party may purchase these credits from the

Watermaster for $78,260, which amount will then be applied to the 2004 interim recharge program.

4.2.2 Optimizing Capacity. San Jacinto will make a good faith effort to cooperate with EMWD's efforts to optimize EMWD's delivery capacity during the months of July, August, and September 2004, by refraining, to the extent feasible in its sole discretion, from exercising its rights to delivery of Entitlement Water and/or Excess Water ("Fruitvale Water") under EMWD's Improvement District No. 24 program as provided in those agreements between the Parties individually and EMWD ("Fruitvale Agreements"). It is understood and agreed that San Jacinto's cooperation with such effort by EMWD will not result in a loss, waiver, abrogation or diminishment of San Jacinto's contract rights under the Fruitvale Agreements or such other rights as San Jacinto may have to purchase and receive Fruitvale Water.

4.3 **San Jacinto's Conditions**. San Jacinto's pledges as stated in Section 4.2 are subject to the following conditions:

4.3.1 Emergency Production of Water. In the event San Jacinto experiences an emergency loss of water production capacity or is otherwise unable to satisfy its municipal demand through the use of its own facilities, as determined by the San Jacinto, San Jacinto reserves the right to exercise its rights to delivery of Fruitvale Water during the months of July, August and September 2004 and shall pay EMWD the standard rate for Fruitvale Water, for amounts delivered within San Jacinto's entitlement. For amounts required by San Jacinto and delivered by EMWD over the entitlement amount, San Jacinto shall pay EMWD's then current wholesale water rates.

4.3.2 Preservation of Fruitvale Rights. Notwithstanding San Jacinto's pledge to not otherwise exercise its entitlements to purchase and receive Fruitvale Water during July, August and September 2004, such pledge and non-exercise shall not be construed by the Parties or any of them as a waiver, failure to exercise, or other abrogation of San Jacinto's rights under the Fruitvale Agreement or Fruitvale Adjudication and such rights shall be preserved, survive without diminishment, and remain valid and in full force and effect.

4.3.3 Restriction on Conveyances and Exports. That EMWD use its best efforts to eliminate flows from San Jacinto Basin to the Homeland and Juniper flats area and will eliminate the use of any conveyance water during the 2004 calendar year in the Menifee Area. EMWD will not otherwise export any water intended for groundwater recharge in the Upper San Jacinto Sub-Basins during the 2004 calendar year.

4.3.4 Compliance by Other Parties. That each other party use its best efforts in good faith to perform and fulfill their respective pledges as expressed in Sections 1.1, 2.1, and 3.2.

4.4 **Acceptance of Other Parties' Conditions**. San Jacinto hereby accepts each other Party's conditions on their respective pledges.

4.5 **Cooperation with Other Parties**. San Jacinto agrees to cooperate with the other Parties to reasonably facilitate each Party's performance of their pledge, to share information and to regularly meet and confer concerning implementation of this MOU as part of the regularly scheduled meetings of the Groundwater Policy Committee or such sub-committee as the Policy Committee shall designate from time to time.

ARTICLE 5.0 - MISCELLANEOUS PROVISIONS

5.1 **Term**. This MOU shall terminate, unless extended by the mutual agreement of the Parties memorialized in writing, on December 31, 2004.

5.2 **Costs & Expenses**. The Parties shall bear the costs of implementing their own pledges, and shall bear their own costs and expenses otherwise participating in this MOU.

5.3 **Authority**. The individuals executing this Agreement on behalf of the Parties and the instruments referenced on behalf of the Parties represent and warrant that they have the legal power, right and actual authority to bind the Parties to the terms and conditions hereof and thereof.

5.4 **Counterpart Originals**. This Agreement may be executed in duplicate originals, each of which is deemed to be an original.

5.5 **Effective Date**. This MOU has become effective among and between the Parties on the date by which each Party's governing board or council has approved the MOU and the authorized representative of each Party has executed the MOU.

IN WITNESS WHEREOF, the Parties hereto have executed this Memorandum of Understanding on the date and year first above written.

EASTERN MUNICIPAL WATER DISTRICT

By: _____

Its: GENERAL MANAGER

LAKE HEMET MUNICIPAL WATER DISTRICT

By: _____

Its: GENERAL MANAGER

CITY OF HEMET

By: _____

Steve Temple, City Manager

ATTEST:

By: _____

Stephen Clayton
City Clerk

Approved as to Form:

By: _____

Eric S. Vail
Assistant City Attorney for the City of Hemet

CITY OF SAN JACINTO

By: _____

Peter A. Cosentini, City Manager

ATTEST:

_____

Dorothy L. Chouinard, City Clerk

Approved as to Form:

By: _____

City Attorney for the City of San Jacinto
Best Best & Krieger LLP

MEMORANDUM OF UNDERSTANDING

2005 INTERIM WATER SUPPLY PLAN

UPPER SAN JACINTO SUB-BASINS

This Memorandum Of Understanding; 2005 Interim Water Supply Plan, Upper San Jacinto Sub-Basins ("MOU"), is hereby entered into this 1ST day of March, 2005 by and between the EASTERN MUNICIPAL WATER DISTRICT, a California municipal water district ("EMWD"), LAKE HEMET MUNICIPAL WATER DISTRICT, a California municipal water district ("LHMWD"), CITY OF HEMET, a California general law city ("Hemet"), and CITY OF SAN JACINTO, a California general law city ("San Jacinto"), (collectively referred to hereinafter as the "Parties"), based on the following facts:

RECITALS

A. The Parties previously entered into that "Memorandum of Understanding Interim Water Supply Plan Upper San Jacinto Sub-Basins" dated April 1, 2004 ("2004 MOU") to purchase supplemental water for recharge into certain portions of the canyon and intake sub-areas of the San Jacinto Basin ("Upper San Jacinto Sub-Basins"). The purpose and rationale of the Interim Water Supply Plan ("IWSP") is more fully recited in the 2004 MOU and is incorporated herein by reference.

B. The Parties have determined that it is in the best interest of each of them to continue the IWSP through calendar year 2005 on the terms and conditions set forth in this MOU. The Parties have also affirmed that continuation of the IWSP in this manner is consistent with their effort to engage in collective approaches to addressing the overdraft while the Parties work toward completion of the Water Management Plan.

C. In furtherance thereof, it is the purpose and intent of the Parties in entering into this MOU to assist in providing for interim stabilization of the Upper San Jacinto Sub-Basins through the application of approximately 8,000 acre feet of direct and indirect groundwater recharge during the calendar year 2005. To implement this goal, the Parties pledge to undertake the following actions during the calendar year 2005.

OPERATIVE PROVISIONS

NOW, THEREFORE, in consideration of the promises made and recited herein, the Parties do hereby enter into this Memorandum of Understanding setting forth their pledges, commitments, understandings and appropriate limiting conditions, as follows:

ARTICLE 1.0 - EMWD's PLEDGES AND CONDITIONS

1.1 **Pledges by EMWD**. Subject to the conditions set forth in Section 1.2, EMWD pledges the following:

1.1.1 Purchase and Recharge of Water. EMWD will contribute up to One Million One Hundred Fifty-eight Thousand Two Hundred Dollars and No Cents ($1,158,200.00) for the acquisition, transportation, operation, and recharge of imported water into the Upper San Jacinto Sub-Basins. EMWD will coordinate and cooperate with LHMWD and MWD regarding the acquisition of imported water. EMWD understands and agrees that it will implement the transportation and recharge of the purchased imported water into the Upper San Jacinto Sub-Basins using its existing conveyance and spreading facilities within the Management Area.

1.1.2 Restriction on Conveyances and Exports. EMWD will use its best efforts to eliminate flows from San Jacinto Basin to the Homeland and Juniper Flats area during July, August, and September 2005, and will eliminate the use of any conveyance water during the 2005 calendar year in the Menifee Area. EMWD will not otherwise export any water intended for groundwater recharge, or made available due to groundwater recharge, in the Upper San Jacinto Sub-Basins during the 2005 calendar year. In addition, EMWD will pursue construction of Reach 16 to deliver recycled water to the Heartland Area and will investigate water supply contingency plans.

1.2 **EMWD's Conditions**. The pledges of EMWD stated in Section 1.1 are subject to the following conditions:

1.2.1 Optimizing Capacity. That the Parties cooperate with EMWD's efforts to optimize its delivery capacity during the months of July, August, and September 2005, by refraining, to the extent feasible, from exercising their rights to delivery of Entitlement Water and/or Excess Water ("Fruitvale Water") under EMWD's Improvement District No. 24 program as provided in those agreements between the Parties individually and EMWD ("Fruitvale Agreements"). It is understood and agreed that any Party's cooperation with such effort by EMWD will not result in a loss, waiver, abrogation or diminishment of their contract rights under the Fruitvale Agreements or such other rights the Party may have to purchase and receive Fruitvale Water.

1.2.2 Compliance by Other Parties. That each other Party use its best efforts in good faith to perform and fulfill their respective pledges as expressed in Sections 2.1, 3.1, and 4.1.

1.3 **Acceptance of Other Parties' Conditions**. EMWD hereby accepts each other Party's conditions on their respective pledges.

1.4 **Cooperation with Other Parties**. EMWD agrees to cooperate with the other Parties to reasonably facilitate each Party's performance of their pledge, to share information and to regularly meet and confer concerning implementation of this MOU as part of the regularly scheduled meetings of the Groundwater Policy Committee or such sub-committee as the Policy Committee shall designate from time to time.

ARTICLE 2.0 - LHMWD'S PLEDGES AND CONDITIONS

2.1 **Pledges by LHMWD**. Subject to the conditions set forth in Section 2.2, LHMWD pledges the following:

2.1.1 Purchase and Recharge of Water. LHMWD will contribute up to Nine Hundred Eighty-seven Thousand Six Hundred Dollars and No Cents ($987,600.00) for the acquisition, transportation, operation, and recharge of imported water into the Upper San Jacinto Sub-Basins. LHMWD will coordinate and cooperate with EMWD and MWD regarding the acquisition of imported water. LHMWD understands and agrees that EMWD will implement the transportation and recharge of the purchased imported water into the Upper San Jacinto Sub-Basins using its existing conveyance and spreading facilities within the Management Area.

2.1.2 Optimizing Capacity. LHMWD will cooperate with EMWD's efforts to optimize EMWD's delivery capacity during the months of July, August, and September 2005, by refraining during such months, to the extent feasible, from exercising their rights to delivery of Entitlement Water and/or Excess Water ("Fruitvale Water") under EMWD's Improvement District No. 24 program as provided in those agreements between the Parties individually and EMWD. It is understood and agreed that LHMWD's cooperation with such effort by EMWD will not result in a loss, waiver, abrogation or diminishment of LHMWD's contract rights under the Fruitvale Agreements or such other rights as LHMWD may have to purchase and receive Fruitvale Water.

2.2 **LHMWD's Conditions**. The pledges of LHMWD stated in Section 2.1 are subject to the following conditions:

2.2.1 Emergency Production of Water. In the event LHMWD experiences an emergency loss of water production capacity or is otherwise unable to satisfy its municipal demand through the use of its own facilities, as determined by the LHMWD, LHMWD reserves the right to exercise its rights to delivery of Fruitvale Water during the months of July, August and September 2005 and shall pay EMWD the standard rate for Fruitvale Water, for amounts delivered within LHMWD's entitlement. For amounts required by LHMWD and delivered by EMWD over the entitlement amount, LHMWD shall pay EMWD's then current wholesale water rates.

2.2.2 Restriction on Conveyance Water and Exports. That EMWD use its best efforts to eliminate flows from San Jacinto Basin to the Homeland and Juniper Flats area during July, August, and September 2005, and to eliminate the use of any conveyance water during the 2005 calendar year in the Menifee Area. EMWD will not otherwise export any water intended for groundwater recharge, or made available due to groundwater recharge, in the Upper San Jacinto Sub-Basins during the 2005 calendar year.

2.2.3 Preservation of Fruitvale Water Rights. Notwithstanding LHMWD's pledge to not exercise its entitlements to purchase and receive Fruitvale Water during July, August and September 2005, such pledge and non-exercise shall not be construed by the Parties or any of them as a waiver, failure to exercise, or other abrogation of LHMWD's rights under

the Fruitvale Agreements or Fruitvale Adjudication and such rights shall be preserved, survive without diminishment, and remain valid and in full force and effect.

2.2.4 Compliance by Other Parties. That each other Party use its best efforts in good faith to perform and fulfill their respective pledges as expressed in Sections 1.1, 3.1, and 4.1.

2.3 **Acceptance of Other Parties' Conditions**. LHMWD hereby accepts each other Party's conditions on their respective pledges.

2.4 **Cooperation with Other Parties**. LHMWD agrees to cooperate with the other Parties to reasonably facilitate each Party's performance of their pledge, to share information and to regularly meet and confer concerning implementation of this MOU as part of the regularly scheduled meetings of the Groundwater Policy Committee or such sub-committee as the Policy Committee shall designate from time to time.

ARTICLE 3.0 - HEMET'S PLEDGES AND CONDITIONS

3.1 **Pledges by Hemet**. Subject to the conditions set forth in Section 3.2, Hemet pledges the following:

3.1.1 Purchase and Recharge of Water. Hemet will contribute up to One Hundred Sixty-four Thousand Dollars and No Cents ($164,000.00) for the acquisition, transportation, operation, and recharge of imported water into the Upper San Jacinto Sub-Basins. Hemet will coordinate and cooperate with EMWD and MWD regarding the acquisition of imported water. Hemet understands and agrees that EMWD will implement the transportation and recharge of the purchased imported water into the Upper San Jacinto Sub-Basins using its existing conveyance and spreading facilities within the Management Area.

3.1.2 Optimizing Capacity. Hemet will cooperate with EMWD's efforts to optimize EMWD's delivery capacity during the months of July, August, and September 2005, by refraining during such months, to the extent feasible, from exercising its rights to delivery of Entitlement Water and/or Excess Water ("Fruitvale Water") under EMWD's Improvement District No. 24 program as provided in those agreements between the Parties individually and EMWD ("Fruitvale Agreements"). It is understood and agreed that Hemet's cooperation with such effort by EMWD will not result in a loss, waiver, abrogation or diminishment of Hemet's contract rights under the Fruitvale Agreements or such other rights Hemet may have to purchase and receive Fruitvale Water.

3.2 **Hemet's Conditions**. The pledges of Hemet stated in Section 3.1 are subject to the following conditions:

3.2.1 Emergency Production of Water. In the event Hemet experiences an emergency loss of water production capacity, or is otherwise unable to satisfy its municipal demand from its own facilities, as determined by the Hemet Water District, Hemet shall be entitled to increase water production from Hemet Well No. 6 and No. 9, or receive Fruitvale

Water during the duration of the emergency. Hemet's pledge to reallocate water production as provided in Section 3.2 shall be reduced by the same amount. However, Hemet shall contribute an amount of funds equal to the acre feet of water produced multiplied by EMWD's then current wholesale water rate for the acquisition of replacement water.

3.2.2 Preservation of Fruitvale Water Rights. Notwithstanding Hemet's pledge to not exercise its entitlements to purchase and receive Fruitvale Water during calendar year 2005, such pledge and non-exercise shall not be construed by the Parties or any of them as a waiver, failure to exercise, or other abrogation of Hemet's rights under the Fruitvale Agreements or Fruitvale Adjudication and such rights shall be preserved, survive without diminishment, and remain valid and in full force and effect.

3.2.3 Restriction on Conveyance Water and Exports. That EMWD use its best efforts to eliminate flows from San Jacinto Basin to the Homeland and Juniper flats area and to eliminate the use of any conveyance water during the 2005 calendar year in the Menifee Area. EMWD will not otherwise export any water intended for groundwater recharge in the Upper San Jacinto Sub-Basins during the 2005 calendar year.

3.2.4 Compliance by Other Parties. That each other Party use its best efforts in good faith to perform and fulfill their respective pledges as expressed in Sections 1.1, 2.1, and 4.1.

3.3 **Acceptance of Other Parties' Conditions**. Hemet hereby accepts each other Party's conditions on their respective pledges.

3.4 **Cooperation with Other Parties**. Hemet agrees to cooperate with the other Parties to reasonably facilitate each Party's performance of their pledge, to share information and to regularly meet and confer concerning implementation of this MOU as part of the regularly scheduled meetings of the Groundwater Policy Committee or such sub-committee as the Policy Committee shall designate from time to time.

ARTICLE 4.0 - SAN JACINTO'S PLEDGES AND CONDITIONS

4.1 **Pledges by San Jacinto**. Subject to the conditions set forth in Section 4.3, San Jacinto pledges the following:

4.1.1 Purchase and Recharge of Water. San Jacinto will contribute up to Ninety Thousand Two Hundred Dollars and No Cents ($90,200.00) for the acquisition, transportation, operation, and recharge of imported water into the Upper San Jacinto Sub-Basins. San Jacinto will coordinate and cooperate with EMWD and MWD regarding the acquisition of imported water. San Jacinto understands and agrees that EMWD will implement the transportation and recharge of the purchased imported water into the Upper San Jacinto Sub-Basins using its existing conveyance and spreading facilities within the Management Area.

4.1.2 Optimizing Capacity. San Jacinto will make a good faith effort to cooperate with EMWD's efforts to optimize EMWD's delivery capacity during the months of

July, August, and September 2005, by refraining, to the extent feasible in its sole discretion, from exercising its rights to delivery of Entitlement Water and/or Excess Water ("Fruitvale Water") under EMWD's Improvement District No. 24 program as provided in those agreements between the Parties individually and EMWD ("Fruitvale Agreements"). It is understood and agreed that San Jacinto's cooperation with such effort by EMWD will not result in a loss, waiver, abrogation or diminishment of San Jacinto's contract rights under the Fruitvale Agreements or such other rights as San Jacinto may have to purchase and receive Fruitvale Water.

4.2 **San Jacinto's Conditions**. San Jacinto's pledges as stated in Section 4.2 are subject to the following conditions:

4.2.1 Emergency Production of Water. In the event San Jacinto experiences an emergency loss of water production capacity or is otherwise unable to satisfy its municipal demand through the use of its own facilities, as determined by San Jacinto, San Jacinto reserves the right to exercise its rights to delivery of Fruitvale Water during the months of July, August and September 2005 and shall pay EMWD the standard rate for Fruitvale Water, for amounts delivered within San Jacinto's entitlement. For amounts required by San Jacinto and delivered by EMWD over the entitlement amount, San Jacinto shall pay EMWD's then current wholesale water rates.

4.2.2 Preservation of Fruitvale Rights. Notwithstanding San Jacinto's pledge to not otherwise exercise its entitlements to purchase and receive Fruitvale Water during July, August and September 2005, such pledge and non-exercise shall not be construed by the Parties or any of them as a waiver, failure to exercise, or other abrogation of San Jacinto's rights under the Fruitvale Agreement or Fruitvale Adjudication and such rights shall be preserved, survive without diminishment, and remain valid and in full force and effect.

4.2.3 Restriction on Conveyances and Exports. That EMWD use its best efforts to eliminate flows from San Jacinto Basin to the Homeland and Juniper flats area and will eliminate the use of any conveyance water during the 2004 calendar year in the Menifee Area. EMWD will not otherwise export any water intended for groundwater recharge in the Upper San Jacinto Sub-Basins during the 2005 calendar year.

4.2.4 Compliance by Other Parties. That each other party use its best efforts in good faith to perform and fulfill their respective pledges as expressed in Sections 1.1, 2.1, and 3.1.

4.3 **Acceptance of Other Parties' Conditions**. San Jacinto hereby accepts each other Party's conditions on their respective pledges.

4.4 **Cooperation with Other Parties**. San Jacinto agrees to cooperate with the other Parties to reasonably facilitate each Party's performance of their pledge, to share information and to regularly meet and confer concerning implementation of this MOU as part of the regularly scheduled meetings of the Groundwater Policy Committee or such sub-committee as the Policy Committee shall designate from time to time.

ARTICLE 5.0 - MISCELLANEOUS PROVISIONS

5.1 **Term**. This MOU shall terminate, unless extended by the mutual agreement of the Parties memorialized in writing, on December 31, 2005.

5.2 **Invoicing**. The Parties agree that EMWD shall invoice each Party for its contribution to the 2005 IWSP either in one lump sum during the Term, or in installments over the Term as is agreed upon by the Party being invoiced and arranged by that Party with EMWD.

5.3 **Costs & Expenses**. The Parties shall bear the costs of implementing their own pledges, and shall bear their own costs and expenses of otherwise participating in this MOU.

5.4 **Authority**. The individuals executing this Agreement on behalf of the Parties and the instruments referenced on behalf of the Parties represent and warrant that they have the legal power, right and actual authority to bind the Parties to the terms and conditions hereof and thereof.

5.5 **Counterpart Originals**. This Agreement may be executed in duplicate originals, each of which is deemed to be an original.

5.6 **Effective Date**. This MOU has become effective among and between the Parties on the date by which each Party's governing board or council has approved the MOU and the authorized representative of each Party has executed the MOU.

IN WITNESS WHEREOF, the Parties hereto have executed this Memorandum of Understanding on the date and year first above written.

[SIGNATURE PAGES FOLLOW]

EASTERN MUNICIPAL WATER DISTRICT

By: _____
Tony Pack
General Manager

ATTEST:

By: _____
Board Secretary

Approved as to Form:

By: _____
Gerry Schoaf
General Counsel

LAKE HEMET MUNICIPAL WATER DISTRICT

By: _____
Rob Lindquist, General Manager

ATTEST:

By: _____
Karen Hornbarger, ~~Secretary~~
Assistant Secretary

Approved as to Form:

By: _____
Arthur Littleworth, General Counsel

CITY OF HEMET

By:_____
Steve Temple, City Manager

ATTEST:

By:_____
Stephen Clayton, City Clerk

Approved as to Form:

By:_____
Eric S. Vail, City Attorney

CITY OF SAN JACINTO

By: _____
Peter Cosentini, City Manager

ATTEST:

By: _____
City Clerk

Approved as to Form:

By: _____
Robert Hargreaves, Special Counsel

MEMORANDUM OF UNDERSTANDING

2006 INTERIM WATER SUPPLY PLAN

UPPER SAN JACINTO SUB-BASINS

This Memorandum Of Understanding; 2006 Interim Water Supply Plan, Upper San Jacinto Sub-Basins ("MOU"), is hereby dated for reference purposes as of May 9, 2006, by and between the EASTERN MUNICIPAL WATER DISTRICT, a California municipal water district ("EMWD"), LAKE HEMET MUNICIPAL WATER DISTRICT, a California municipal water district ("LHMWD"), CITY OF HEMET, a California general law city ("Hemet"), and CITY OF SAN JACINTO, a California general law city ("San Jacinto"), (collectively referred to hereinafter as the "Parties"), based on the following facts:

RECITALS

A. The Parties previously entered into that "Memorandum of Understanding, Interim Water Supply Plan, Upper San Jacinto Sub-Basins" dated April 1, 2004 ("2004 MOU") and that "Memorandum of Understanding, 2005 Interim Water Supply Plan, Upper San Jacinto Sub-Basins" dated March 1, 2005 ("2005 MOU"). The purpose and rationale of the Interim Water Supply Plan ("IWSP") as reflected in the 2004 MOU and 2005 MOU is to purchase supplemental water for recharge into certain portions of the canyon and intake sub-areas of the San Jacinto Basin ("Upper San Jacinto Sub-Basins").

B. The IWSP was undertaken by the parties as an interim measure pending completion and adoption of a Water Management Plan and entry of a Stipulated Judgment (collectively "WMP") by a Court of competent jurisdiction, binding the Parties to a long term solution to managing and resolving the overdraft of the Hemet / San Jacinto Basin ("Management Area"). Although the Parties have been working earnestly toward completion of the WMP, it is anticipated that the WMP will not be finalized and adopted by all Parties sufficiently early in 2006 so as to supersede the need for the IWSP.

C. Based on this state of affairs, the Parties have determined that it is in their mutual best interests to continue the IWSP through calendar year 2006 and/or until such time as the WMP is finalized and adopted by all of the Parties. The Parties have also affirmed that continuation of the IWSP in this manner is consistent with their effort to engage in collective approaches to addressing the overdraft while the Parties work toward completion of the WMP.

D. In furtherance thereof, it is the purpose and intent of the Parties in entering into this MOU to assist in providing for interim stabilization of the Upper San Jacinto Sub-Basins through the application of approximately 6,000 acre feet of direct and indirect groundwater recharge during the calendar year 2006 and an equivalent or greater amount of water, adequate supply providing, in subsequent years. To implement this goal, the Parties pledge to undertake the following actions.

OPERATIVE PROVISIONS

NOW, THEREFORE, in consideration of the promises made and recited herein, the Parties do hereby enter into this Memorandum of Understanding setting forth their pledges, commitments, understandings and appropriate limiting conditions, as follows:

ARTICLE 1.0 - EMWD's PLEDGES AND CONDITIONS

1.1 **Pledges by EMWD**. Subject to the conditions set forth in Section 1.2, EMWD pledges the following:

1.1.1 Purchase and Recharge of Water. During the Term of this MOU, EMWD agrees to contribute funds, in the amounts provided for in this MOU, for the acquisition, transportation, operation, and recharge of imported water into the Upper San Jacinto Sub-Basins. EMWD will coordinate and cooperate with LHMWD and MWD regarding the acquisition of imported water. EMWD understands and agrees that it will implement the transportation and recharge of the purchased imported water into the Upper San Jacinto Sub-Basins using its existing conveyance and spreading facilities within the Management Area. For calendar 2006, EMWD agrees to contribute up to Six Hundred Seventy-Five Thousand Seven Hundred Dollars and No Cents ($675,700.00) for imported water under the MOU.

1.1.2 Restriction on Conveyances and Exports. EMWD will use its best efforts to eliminate flows from San Jacinto Basin to the Homeland and Juniper Flats area during July, August, and September 2006, and will eliminate the use of any conveyance water during the 2006 calendar year in the Menifee Area. EMWD will not otherwise export any water intended for groundwater recharge, or made available due to groundwater recharge, in the Upper San Jacinto Sub-Basins during the 2006 calendar year. In addition, EMWD will investigate water supply contingency plans.

1.1.3 Continued Participation in IWSP. Subject to Section 5.1 EMWD agrees that it will continue its participation in the Interim Water Supply Plan in the same manner and to the same extent as set forth in Article 1.0 of the MOU during each subsequent calendar year until the WMP has been finalized and adopted by all parties.

1.2 **EMWD's Conditions**. The pledges of EMWD stated in Section 1.1 are subject to the following conditions:

1.2.1 Optimizing Capacity. That the Parties cooperate with EMWD's efforts to optimize its delivery capacity during the months of July, August, and September 2006, by refraining, to the extent feasible, from exercising their rights to delivery of Entitlement Water and/or Excess Water ("Fruitvale Water") under EMWD's Improvement District No. 24 program as provided in those agreements between the Parties individually and EMWD ("Fruitvale Agreements"). It is understood and agreed that any Party's cooperation with such effort by EMWD will not result in a loss, waiver, abrogation or diminishment of their contract rights under the Fruitvale Agreements or such other rights the Party may have to purchase and receive Fruitvale Water.

1.2.2 Compliance by Other Parties. That each other Party use its best efforts in good faith to perform and fulfill their respective pledges as expressed in Sections 2.1, 3.1, and 4.1.

1.3 **Acceptance of Other Parties' Conditions**. EMWD hereby accepts each other Party's conditions on their respective pledges.

1.4 **Cooperation with Other Parties**. EMWD agrees to cooperate with the other Parties to reasonably facilitate each Party's performance of their pledge, to share information and to regularly meet and confer concerning implementation of this MOU as part of the regularly scheduled meetings of the Groundwater Policy Committee or such sub-committee as the Policy Committee shall designate from time to time.

ARTICLE 2.0 - LHMWD'S PLEDGES AND CONDITIONS

2.1 **Pledges by LHMWD**. Subject to the conditions set forth in Section 2.2, LHMWD pledges the following:

2.1.1 Purchase and Recharge of Water. During the Term of this MOU, LHMWD agrees to contribute funds, in the amounts provided for in this MOU, for the acquisition, transportation, operation, and recharge of imported water into the Upper San Jacinto Sub-Basins. LHMWD will coordinate and cooperate with EMWD and MWD regarding the acquisition of imported water. LHMWD understands and agrees that EMWD will implement the transportation and recharge of the purchased imported water into the Upper San Jacinto Sub-Basins using its existing conveyance and spreading facilities within the Management Area. For calendar 2006, LHMWD agrees to contribute up to Eight Hundred Forty-Two Thousand Four Hundred Dollars and No Cents ($842,400.00) for imported water under the MOU.

2.1.2 Optimizing Capacity. LHMWD will cooperate with EMWD's efforts to optimize EMWD's delivery capacity during the months of July, August, and September 2006, by refraining during such months, to the extent feasible, from exercising their rights to delivery of Entitlement Water and/or Excess Water ("Fruitvale Water") under EMWD's Improvement District No. 24 program as provided in those agreements between the Parties individually and EMWD. It is understood and agreed that LHMWD's cooperation with such effort by EMWD will not result in a loss, waiver, abrogation or diminishment of LHMWD's contract rights under the Fruitvale Agreements or such other rights as LHMWD may have to purchase and receive Fruitvale Water.

2.1.3 Continued Participation in IWSP. Subject to Section 5.1, LHMWD agrees that it will continue its participation in the Interim Water Supply Plan in the same manner and to the same extent as set forth in Article 2.0 of the MOU during each subsequent calendar year until the WMP has been finalized and adopted by all parties.

2.2 **LHMWD's Conditions**. The pledges of LHMWD stated in Section 2.1 are subject to the following conditions:

2.2.1 Emergency Production of Water. In the event LHMWD experiences an emergency loss of water production capacity or is otherwise unable to satisfy its municipal demand through the use of its own facilities, as determined by the LHMWD, LHMWD reserves the right to exercise its rights to delivery of Fruitvale Water during the months of July, August and September 2006 and shall pay EMWD the standard rate for Fruitvale Water, for amounts delivered within LHMWD's entitlement. For amounts required by LHMWD and delivered by EMWD over the entitlement amount, LHMWD shall pay EMWD's then current wholesale water rates.

2.2.2 Restriction on Conveyance Water and Exports. That EMWD use its best efforts to eliminate flows from San Jacinto Basin to the Homeland and Juniper Flats area during July, August, and September 2006, and to eliminate the use of any conveyance water during the 2005 calendar year in the Menifee Area. EMWD will not otherwise export any water intended for groundwater recharge, or made available due to groundwater recharge, in the Upper San Jacinto Sub-Basins during the 2006 calendar year.

2.2.3 Preservation of Fruitvale Water Rights. Notwithstanding LHMWD's pledge to not exercise its entitlements to purchase and receive Fruitvale Water during July, August and September 2006, such pledge and non-exercise shall not be construed by the Parties or any of them as a waiver, failure to exercise, or other abrogation of LHMWD's rights under the Fruitvale Agreements or Fruitvale Adjudication and such rights shall be preserved, survive without diminishment, and remain valid and in full force and effect.

2.2.4 Compliance by Other Parties. That each other Party use its best efforts in good faith to perform and fulfill their respective pledges as expressed in Sections 1.1, 3.1, and 4.1.

2.3 **Acceptance of Other Parties' Conditions**. LHMWD hereby accepts each other Party's conditions on their respective pledges.

2.4 **Cooperation with Other Parties**. LHMWD agrees to cooperate with the other Parties to reasonably facilitate each Party's performance of their pledge, to share information and to regularly meet and confer concerning implementation of this MOU as part of the regularly scheduled meetings of the Groundwater Policy Committee or such sub-committee as the Policy Committee shall designate from time to time.

ARTICLE 3.0 - HEMET'S PLEDGES AND CONDITIONS

3.1 **Pledges by Hemet**. Subject to the conditions set forth in Section 3.2, Hemet pledges the following:

3.1.1 Purchase and Recharge of Water. During the Term of this MOU, Hemet agrees to contribute funds, in the amounts provided for in this MOU, for the acquisition, transportation, operation, and recharge of imported water into the Upper San Jacinto Sub-Basins. Hemet will coordinate and cooperate with EMWD and MWD regarding the acquisition of imported water. Hemet understands and agrees that EMWD will implement the transportation and recharge of the purchased imported water into the Upper San Jacinto Sub-Basins using its

existing conveyance and spreading facilities within the Management Area. For calendar 2006, Hemet agrees to contribute up to One Hundred Ninety-Four Thousand Dollars and No Cents ($194,000.00) for imported water under the MOU.

3.1.2 Optimizing Capacity. Hemet will cooperate with EMWD's efforts to optimize EMWD's delivery capacity during the months of July, August, and September 2006, by refraining during such months, to the extent feasible, from exercising its rights to delivery of Entitlement Water and/or Excess Water ("Fruitvale Water") under EMWD's Improvement District No. 24 program as provided in those agreements between the Parties individually and EMWD ("Fruitvale Agreements"). It is understood and agreed that Hemet's cooperation with such effort by EMWD will not result in a loss, waiver, abrogation or diminishment of Hemet's contract rights under the Fruitvale Agreements or such other rights Hemet may have to purchase and receive Fruitvale Water.

3.1.3 Continued Participation in IWSP. Subject to Section 5.1, Hemet agrees that it will continue its participation in the Interim Water Supply Plan in the same manner and to the same extent as set forth in Article 3.0 of the MOU during each subsequent calendar year until the WMP has been finalized and adopted by all parties.

3.2 **Hemet's Conditions**. The pledges of Hemet stated in Section 3.1 are subject to the following conditions:

3.2.1 Emergency Production of Water. In the event Hemet experiences an emergency loss of water production capacity, or is otherwise unable to satisfy its municipal demand from its own facilities, as determined by the Hemet Water Department, Hemet shall be entitled to increase water production from any one or more of Hemet's wells located within the Upper San Jacinto Sub-Basins, or receive Fruitvale Water during the duration of the emergency for which Hemet shall pay EMWD the standard rate for Fruitvale Water, for amounts delivered within Hemet's entitlement. For amounts required by Hemet and delivered by EMWD over the entitlement amount, Hemet shall pay EMWD's then current wholesale water rates.

3.2.2 Preservation of Fruitvale Water Rights. Notwithstanding Hemet's pledge to not exercise its entitlements to purchase and receive Fruitvale Water during calendar year 2006, such pledge and non-exercise shall not be construed by the Parties or any of them as a waiver, failure to exercise, or other abrogation of Hemet's rights under the Fruitvale Agreements or Fruitvale Adjudication and such rights shall be preserved, survive without diminishment, and remain valid and in full force and effect.

3.2.3 Restriction on Conveyance Water and Exports. That EMWD use its best efforts to eliminate flows from San Jacinto Basin to the Homeland and Juniper flats area and to eliminate the use of any conveyance water during the 2006 calendar year in the Menifee Area. EMWD will not otherwise export any water intended for groundwater recharge in the Upper San Jacinto Sub-Basins during the 2006 calendar year.

3.2.4 Compliance by Other Parties. That each other Party use its best efforts in good faith to perform and fulfill their respective pledges as expressed in Sections 1.1, 2.1, and 4.1.

3.3 **Acceptance of Other Parties' Conditions**. Hemet hereby accepts each other Party's conditions on their respective pledges.

3.4 **Cooperation with Other Parties**. Hemet agrees to cooperate with the other Parties to reasonably facilitate each Party's performance of their pledge, to share information and to regularly meet and confer concerning implementation of this MOU as part of the regularly scheduled meetings of the Groundwater Policy Committee or such sub-committee as the Policy Committee shall designate from time to time.

ARTICLE 4.0 - SAN JACINTO'S PLEDGES AND CONDITIONS

4.1 **Pledges by San Jacinto**. Subject to the conditions set forth in Section 4.3, San Jacinto pledges the following:

4.1.1 Purchase and Recharge of Water. During the Term of this MOU, San Jacinto agrees to contribute funds, in the amounts provided for in this MOU, for the acquisition, transportation, operation, and recharge of imported water into the Upper San Jacinto Sub-Basins. San Jacinto will coordinate and cooperate with EMWD and MWD regarding the acquisition of imported water. San Jacinto understands and agrees that EMWD will implement the transportation and recharge of the purchased imported water into the Upper San Jacinto Sub-Basins using its existing conveyance and spreading facilities within the Management Area. For calendar 2006, San Jacinto agrees to contribute up to Eighty-Seven Thousand Nine Hundred Dollars and No Cents ($87,900.00) for imported water under the MOU.

4.1.2 Optimizing Capacity. San Jacinto will make a good faith effort to cooperate with EMWD's efforts to optimize EMWD's delivery capacity during the months of July, August, and September 2006, by refraining, to the extent feasible in its sole discretion, from exercising its rights to delivery of Entitlement Water and/or Excess Water ("Fruitvale Water") under EMWD's Improvement District No. 24 program as provided in those agreements between the Parties individually and EMWD ("Fruitvale Agreements"). It is understood and agreed that San Jacinto's cooperation with such effort by EMWD will not result in a loss, waiver, abrogation or diminishment of San Jacinto's contract rights under the Fruitvale Agreements or such other rights as San Jacinto may have to purchase and receive Fruitvale Water.

4.1.3 Continued Participation in IWSP. Subject to Section 5.1, San Jacinto agrees that it will continue its participation in the Interim Water Supply Plan in the same manner and to the same extent as set forth in Article 4.0 of the MOU during each subsequent calendar year until the WMP has been finalized and adopted by all parties.

4.2 **San Jacinto's Conditions**. San Jacinto's pledges as stated in Section 4.1 are subject to the following conditions:

4.2.1 Emergency Production of Water. In the event San Jacinto experiences an emergency loss of water production capacity or is otherwise unable to satisfy its municipal demand through the use of its own facilities, as determined by San Jacinto, San Jacinto reserves the right to exercise its rights to delivery of Fruitvale Water during the months of July, August and September 2006 and shall pay EMWD the standard rate for Fruitvale Water, for amounts

delivered within San Jacinto's entitlement. For amounts required by San Jacinto and delivered by EMWD over the entitlement amount, San Jacinto shall pay EMWD's then current wholesale water rates.

4.2.2 Preservation of Fruitvale Rights. Notwithstanding San Jacinto's pledge to not otherwise exercise its entitlements to purchase and receive Fruitvale Water during July, August and September 2006, such pledge and non-exercise shall not be construed by the Parties or any of them as a waiver, failure to exercise, or other abrogation of San Jacinto's rights under the Fruitvale Agreement or Fruitvale Adjudication and such rights shall be preserved, survive without diminishment, and remain valid and in full force and effect.

4.2.3 Restriction on Conveyances and Exports. That EMWD use its best efforts to eliminate flows from San Jacinto Basin to the Homeland and Juniper flats area and will eliminate the use of any conveyance water during the 2006 calendar year in the Menifee Area. EMWD will not otherwise export any water intended for groundwater recharge in the Upper San Jacinto Sub-Basins during the 2006 calendar year.

4.2.4 Compliance by Other Parties. That each other party use its best efforts in good faith to perform and fulfill their respective pledges as expressed in Sections 1.1, 2.1, and 3.1.

4.3 **Acceptance of Other Parties' Conditions**. San Jacinto hereby accepts each other Party's conditions on their respective pledges.

4.4 **Cooperation with Other Parties**. San Jacinto agrees to cooperate with the other Parties to reasonably facilitate each Party's performance of their pledge, to share information and to regularly meet and confer concerning implementation of this MOU as part of the regularly scheduled meetings of the Groundwater Policy Committee or such sub-committee as the Policy Committee shall designate from time to time.

ARTICLE 5.0 - MISCELLANEOUS PROVISIONS

5.1 **Term and Continuation of the IWSP**. This MOU shall terminate, unless extended by the mutual agreement of the Parties memorialized in writing, on the earlier of the following dates: (i) the date upon which two or more Parties mutually agree to terminate the MOU; (ii) the date upon which all Parties have adopted the WMP; or (ii) December 31, 2008. During the Term of this MOU, all of the obligations of the Parties shall be continued and carried over to the next calendar year, subject to adjustment for the amount of water to be recharged in any subsequent year. The Parties acknowledge that the amount of water to be recharged may fluctuate year to year depending upon conditions within the Management Area, the availability of Imported Water, and the ability to receive and recharge such water. The Parties agree that the goal is to purchase and recharge between 6,000 to 8,000 acre feet of Imported Water each year during the Term. The Parties shall meet and confer during the last quarter of the preceding year to determine the amount of water and the anticipated cost to be apportioned among the Parties for the forthcoming year and memorialized in a statement signed by the managers of all Parties. In any year subsequent to 2006, no Party shall be obligated to contribute more than one hundred

twenty-five percent (125%) of its contribution assigned for the prior year without approval of its Board or Council.

5.2 **Invoicing**. The Parties agree that EMWD shall invoice each Party for its contribution to the 2006 IWSP and subsequent years, either in one lump sum during the year, or in installments over the year as is agreed upon by the Party being invoiced and arranged by that Party with EMWD.

5.3 **Costs & Expenses**. The Parties shall bear the costs of implementing their own pledges, and shall bear their own costs and expenses of otherwise participating in this MOU.

5.4 **Authority**. The individuals executing this Agreement on behalf of the Parties and the instruments referenced on behalf of the Parties represent and warrant that they have the legal power, right and actual authority to bind the Parties to the terms and conditions hereof and thereof.

5.5 **Counterpart Originals**. This Agreement may be executed in duplicate originals, each of which is deemed to be an original

5.6 **Effective Date**. This MOU has become effective among and between the Parties on the date by which each Party's governing board or council has approved the MOU and the authorized representative of each Party has executed the MOU.

IN WITNESS WHEREOF, the Parties hereto have executed this Memorandum of Understanding on the date and year first above written.

[SIGNATURE ON FOLLOWING PAGES]

EASTERN MUNICIPAL WATER DISTRICT

By: _____
Anthony J. Pack
General Manager

ATTEST:

By: _____
Rosemarie V. Howell
Board Secretary

Approved as to Form:

By: _____
Gerald R. Shoaf
General Counsel

LAKE HEMET MUNICIPAL WATER DISTRICT

By: _____
Tom Wagoner, General Manager

ATTEST:

By: _____
Assistant Secretary
Karen Hornbarger

Approved as to Form:

By: _____
Arthur Littleworth, General Counsel

CITY OF SAN JACINTO

By: _____
Barry McClellan, City Manager

ATTEST:

By: _____
Dorothy Chouinard, City Clerk

Approved as to Form:

By: _____
Robert Hargreaves, Special Counsel

CITY OF HEMET

By: _____
Steve Temple, City Manager

ATTEST:

By: _____
Stephen Clayton, City Clerk

Approved as to Form:

By: _____
Eric S. Vail, City Attorney

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APPENDIX I SB1938 GROUNDWATER MANAGEMENT PLAN COMPLIANCE CHECKLIST

Water Management Plan GWMP Components

Description	Section(s)
SB 1938 Mandatory Components	
1. Documentation of public involvement	2.2.4, 11.10
2. BMO(s)	3.1
3. Monitoring and management of groundwater elevations, groundwater quality, inelastic land subsidence, and changes in surface water flows and quality that directly affect groundwater levels or quality	3.1.7, 3.2.7, 11.2
4. Plan to involve other agencies located in the groundwater basin	2
5. Adoption of monitoring protocols	11.2
6. Map of groundwater basin boundary, as delineated by DWR Bulletin 118, with agencies boundaries that are subject to GWMP	2.2, 4.1
7. For agencies not overlying groundwater basins, prepare the GWMP using appropriate geologic and hydrogeologic principles	N/A
AB 3030 and SB 1938 Voluntary Components	
1. Control of saline water intrusion	3.2.3
2. Identify and manage well protection and recharge areas	3.2, 11.2
3. Regulate the migration of contaminated groundwater	3.2
4. Administer well-abandonment and destruction program	11.2, 11.9
5. Control and mitigate groundwater overdraft	3.2, 5.3
6. Replenish groundwater	3.2, 5.3
7. Monitor groundwater levels	3.2, 11.2
8. Develop and operate conjunctive use projects	3.2, 5.3
9. Identify well-construction policies	11.9
10. Develop and operate groundwater contamination cleanup, recharge, storage, conservation, water-recycling, and extraction projects	3.2, 5.3
11. Develop relationships with state and federal regulatory agencies	1.1, 3.2, 4.10
12. Review land use plans and coordinate with land use planning agencies to assess activities that create reasonable risk of groundwater contamination	5.1
DWR Bulletin 118 Suggested Components	
1. Manage with guidance of advisory committee	2.4, 9
2. Describe area to be managed under GWMP	2.1
3. Create links between BMOs and goals and actions of GWMP	3, 11.6
4. Describe GWMP monitoring programs	3.2, 11.2
5. Describe integrated water–management planning efforts	3.2, 4.8.3, 5.3.3.1, 5.3.3.6

Description	Section(s)
6. Report of implementation of GWMP	11.2, 11.5
7. Evaluate GWMP periodically	11.5, 9.6.2

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Appendix I

2014 Hemet/San Jacinto

Groundwater Management Area Annual Report

Hemet/San Jacinto Groundwater Management Area

2014 Annual Report

Prepared for

Hemet-San Jacinto Watermaster

Prepared by

Eastern Municipal Water District
Since 1950

May 2015

Acknowledgements

Hemet-San Jacinto Watermaster Board
Frank Gorman, Chair
Linda Krupa, Vice-Chair
Phil Paule, Secretary/Treasurer
Mark Bartel
Bruce Scott

Hemet-San Jacinto Watermaster General Counsel
Lagerlof, Senecal, Gosney, & Kruse, LLP

Hemet-San Jacinto Watermaster Advisor
Behrooz Mortazavi, Ph.D., P.E.

The Hemet/San Jacinto Groundwater Management Area Annual Report is the result of a cooperative effort between private and public groundwater producers in the Hemet-San Jacinto Watermaster Area. The State of California, Department of Water Resources, facilitated the development of the Management Plan and their efforts are greatly appreciated. The Councils and Boards for the Cities of Hemet and San Jacinto, Lake Hemet Municipal Water District, and Eastern Municipal Water District are recognized for their vision, leadership, and teamwork during the implementation of the Management Plan and formation of the Hemet-San Jacinto Watermaster. Special thanks and deep appreciation are extended to all groundwater producers who participated in the Groundwater Quality, Groundwater Level, and Groundwater Extraction Monitoring Programs, without their cooperation, this report would not be possible. Thanks to Michael Nusser, Gordon Ng, Carl Reber, and Stephen Shockey for collecting and compiling the data, and drafting the 2014 Annual Report.

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Hemet-San Jacinto Watermaster

1 Executive Summary

The Hemet/San Jacinto Groundwater Management Area (Management Area) 2014 Annual Report (Annual Report) was prepared by Eastern Municipal Water District (EMWD) under contract with the Hemet-San Jacinto Watermaster (Watermaster), and is the second Annual Report to document the Watermaster activities as required by the Stipulated Judgment entered on April 18, 2013, in Riverside County Superior Court (Case No. RIC 1207274). The reporting period extends from January 1, 2014 through December 31, 2014.

The Management Area is located in the western portion of Riverside County within the San Jacinto River Watershed and includes the Cities of San Jacinto and Hemet, as well as the unincorporated areas of Winchester, Valle Vista, and Cactus Valley, as presented in Chapter 10, Figure 10-1. The Management Area encompasses approximately 90 square miles and has been divided into four (4) groundwater management zones as shown in Chapter 10, Figure 10-2.

Specifically, the Annual Report describes the status of the Management Plan implementation; discusses estimated water supplies and projected demands for the Management Area; reviews and evaluates the 2014 data compiled from the Groundwater Monitoring Programs; documents the recharge program, carry-over accounts, and other activities by the Watermaster during the 2014 budget year in the Management Area.

1.1 Monitoring Programs Summary

The Groundwater Monitoring Programs include the Groundwater Level Monitoring, Groundwater Quality Monitoring, Groundwater Extraction Monitoring, and the Inactive Well Capping/Sealing Programs. A map of all wells participating in the 2014 Groundwater Monitoring Programs can be found in Chapter 10, Figure 10-3. During 2014, 378 groundwater level measurements were taken, 112 groundwater quality samples were collected; and groundwater extraction was metered at 118 well sites, and estimated at 39 well sites, for a total of 157 well sites. There were no inactive wells capped/sealed during 2014.

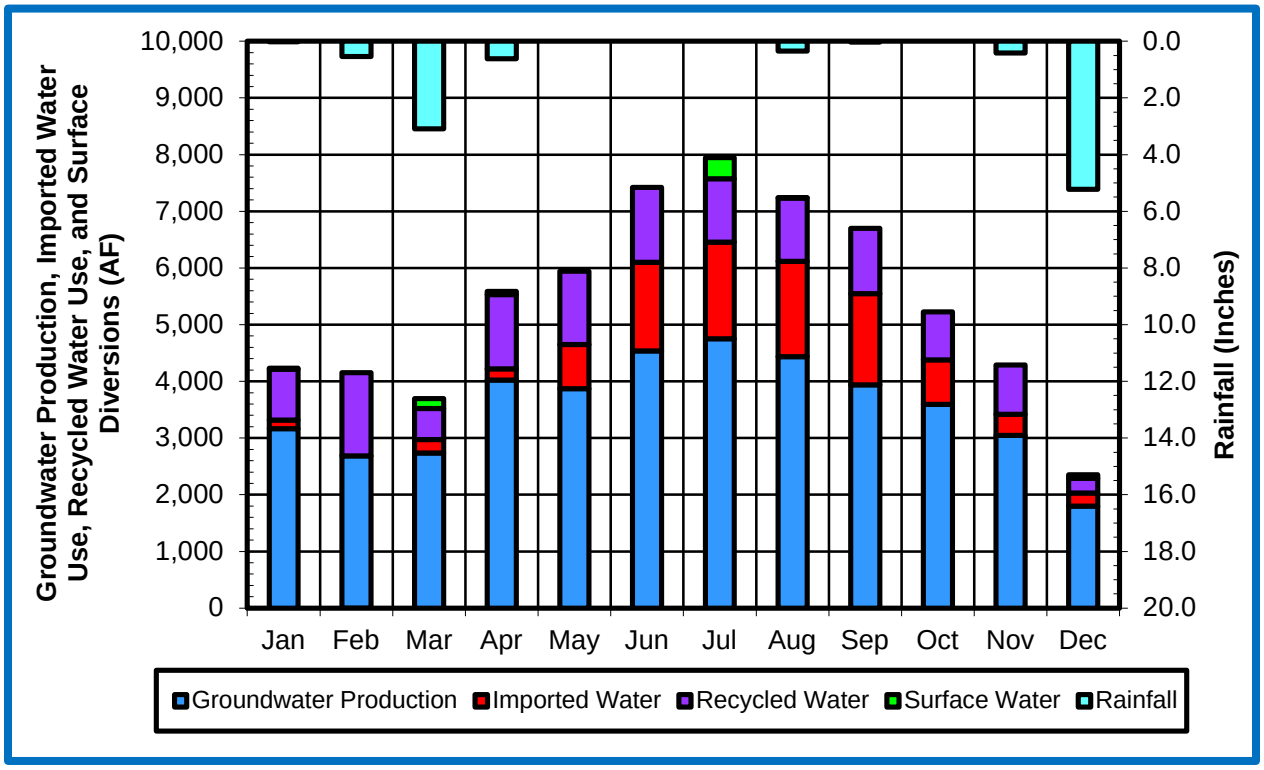
The sources of water supply within the Management Area for 2014 are shown in Chapter 4, Table 4-1. Groundwater was the main source of supply within the Management Area totaling 42,588 acre-feet (AF). Recycled water use in the Management Area accounted for 12,196 AF of demand. Imported water purchased from the Metropolitan Water District of Southern California (MWD) totaled 9,169 AF. Of that amount, 5,415 AF was used to meet current demand and 3,754 AF was recharged in-lieu into the groundwater management zones.

EMWD and LHMWD both hold water rights on the San Jacinto River allowing them to divert water when river flows are sufficient. During 2014, LHMWD diverted 686 AF of surface water;

557 AF was put to direct use or sale, while 129 AF was put into storage. During 2014, EMWD diverted 211 AF of surface water into storage.

Monthly groundwater extraction, imported water usage, recycled water usage, surface water usage, and rainfall in the Management Area during 2014 are displayed in Figure 1-1.

Figure 1-1: 2014 Groundwater Extraction, Imported Water Usage, Recycled Water Usage, Surface Water Usage, and Rainfall in the Management Area



During 2014, ten (10) permits were issued including seven (7) for the construction of agricultural wells. All of these wells are privately owned, and are actually individual domestic wells on small agricultural properties. Since these wells are for individual domestic drinking water uses, they are not considered significant to the program because it is anticipated they will produce less than 25 acre-feet per year. Of the remaining permits, two (2) were issued for small domestic wells, and one (1) was issued for well abandonment. There were no permits issued for cathodic protection wells or monitoring wells.

Hemet-San Jacinto Watermaster

2 Introduction

The Hemet/San Jacinto Groundwater Management Area (Management Area) is located in the western portion of Riverside County, California, within the San Jacinto River Watershed and includes the Cities of San Jacinto and Hemet, as well as the unincorporated areas of Winchester, Valle Vista, and Cactus Valley, as presented in Chapter 10, Figure 10-1.

The Hemet/San Jacinto Groundwater Management Area 2014 Annual Report (Annual Report) was prepared by Eastern Municipal Water District (EMWD) for the Hemet-San Jacinto Watermaster (Watermaster), and is the second Annual Report to document the Watermaster activities for the January 1, 2014 through December 31, 2014 period.

Specifically, the Annual Report describes the status of the Management Plan implementation; discusses estimated water supplies and projected demands for the Management Area; reviews and evaluates the 2014 data compiled from the Groundwater Monitoring Programs; documents the recharge program, carry-over accounts, and other activities by the Watermaster during the 2014 budget year. The report is presented in the following chapters:

Chapter 1: Executive Summary – provides a summary of the Annual Report.

Chapter 2: Introduction – provides background information; discusses the authority under which this report is prepared as well as the purpose of the report; and includes information on the Management Plan, groundwater management zones, and current Basin Plan Water Quality Objectives.

Chapter 3: Management Plan Activities – discusses the Watermaster and Technical Advisory Committee (TAC); summarizes agreements, resolutions and task orders issued by the Watermaster; discusses the *Soboba Band of Luiseño Indians Water Settlement Agreement* and the *Soboba Band of Luiseño Indians Water Settlement Act*; and the Integrated Recharge and Recovery Program.

Chapter 4: Current Water Demand – provides a discussion of current water demand in the Management Area including: groundwater; imported water; recycled water; and surface water.

Chapter 5: Projected Demands – discusses future demands and planned development in the Management Area.

Chapter 6: Monitoring, Data Compilation, and Evaluation – provides discussions of monitoring activities; data compilation of groundwater and monitoring well activities; water sources; and applicable evaluations of the data.

Chapter 7: Financial Considerations – provides budget information for the monitoring program, imported water recharge, and carry-over accounts for the year.

Chapter 8: Corrections and Errata – provides detail information of corrections and errata data from previous reports.

Chapter 9: Tables of Monitoring Programs Summaries and Trends – provides detail monitoring program information by groundwater management zone for the last ten years of data (2005-2014).

Chapter 10: Figures and Maps – presents figures and maps of the Management Area, the groundwater management zones, the monitoring programs, and other related maps.

Chapter 11: Appendices – presents Board meeting minutes, Technical Advisory Committee meeting notes; copies of agreements, resolutions, and task orders executed; and contracts approved by the Watermaster during 2014.

2.1 Management Area

The Management Area is located in the western portion of Riverside County, California, within the San Jacinto River Watershed and includes the Cities of San Jacinto and Hemet, as well as the unincorporated areas of Winchester, Valle Vista, and Cactus Valley, as presented in Chapter 10, Figure 10-1.

The Management Area encompasses approximately 90 square miles and overlies four groundwater management zones -- the Canyon, San Jacinto Upper Pressure, Hemet South, and the Hemet North portion of the Lakeview/Hemet North. The groundwater management zones and Basin Plan Objectives are shown in Chapter 10, Figure 10-2. It should be noted that only a part of the Lakeview/Hemet North groundwater management zone is included because only the Hemet North portion is within the Management Area.

With the Regional Water Quality Control Board/Santa Ana Region (RWQCB) adoption of Resolution No. R8-2004-0001 in 2004, the Basin Plan Objectives for the San Jacinto Upper Pressure management zone were established as 320 milligrams per liter (mg/L) for Total Dissolved Solids (TDS) and 1.4 mg/L for Total Inorganic Nitrogen (TIN). Several programs that are integral to the Watermaster are dependent upon recycled water use as an element of water supply management for implementation of the Management Plan. In 2007, EMWD submitted a Maximum Benefit Proposal to the RWQCB which proposed 500 mg/L TDS and 7 mg/L TIN water quality objectives for the San Jacinto Upper Pressure groundwater management zone based on maximum beneficial use of this resource in keeping with the State Water Resources Control Board Resolution No. 68-16, a *Statement of Policy with Respect to Maintaining High Quality Waters in California*. EMWD received final approval of its Maximum Benefit Proposal in April 2012 from the State Water Resources Control Board and Office of Administrative Law in Sacramento.

2.2 Background

The Stipulated Judgment estimates the groundwater safe yield of the Management Area to be approximately 45,000 acre feet per year (AFY). The Stipulated judgment also estimates the long-term basin overdraft to be approximately 10,000 AFY.

In June 2001, a Memorandum of Understanding (MOU) between the California Department of Water Resources (DWR) and the local agencies was executed to cooperatively formulate a comprehensive water management plan for the Hemet/San Jacinto area. A Groundwater Policy Committee (PC) comprised of elected officials representing the Cities of Hemet and San Jacinto, LHMWD, EMWD, and representatives of the private groundwater producers was formed. To evaluate available information, the PC formed a Technical Advisory Committee (TAC) to compile, share, interpret, and reach agreement on data, define problems, and provide guidance. The PC also formed the Consultants, Attorneys, and Managers (CAM) Committee to develop contractual agreements, side agreements, and memorandums of understanding; evaluate the financial impacts on the community; and to provide administrative or policy recommendations to the PC. DWR acted as a facilitator for the PC and brought in an outside consultant to assist the TAC and CAM.

Through a collaborative effort, the TAC developed the data set that provided the basis for understanding the area's hydrology, and has identified potentially feasible initiatives, programs, and projects to enhance the dependable yield of the groundwater management zones. The PC and CAM have analyzed, discussed, and debated issues of concern that had been on the table for half a century without resolution.

The Management Plan was released in November 2007. The Management Plan, adopted by the governing bodies of the Management Plan participants, has eight primary goals which are to:

- Address pumping overdraft and declining groundwater levels,
- Provide for Soboba Band of Luiseño Indians' prior and paramount water rights,
- Ensure reliable water supply,
- Provide for planned urban growth,
- Protect and enhance water quality,
- Develop cost-effective water supply,
- Provide adequate monitoring for water supply and water quality, and
- Supersede the Fruitvale Judgment and Decree.

In April 2013, a Stipulated Judgment (Judgment), Case Number RIC 1207274, was entered with the Superior Court of the State of California for the County of Riverside adopting the Management Plan and creating the Watermaster. The Watermaster Board replaced the PC as the governing body for the Management Area and is comprised of elected officials representing the Cities of Hemet and San Jacinto, LHMWD, EMWD, and a representative for the private groundwater producers. The Watermaster Board is supported by a TAC which provides technical assistance as the Board requires.

2.3 Authority

Stipulated Judgment entered on April 18, 2013, in Riverside County Superior Court (Case No. RIC 1207274) requires preparation of an Annual Report by the Watermaster to document activities in any given year. The Court has jurisdiction to enter this Judgment declaring and adjudicating the rights of the parties to the reasonable and beneficial use of the surface water and groundwater in the Management Area, and to impose a method of managing the water supply of the Management Area to maximize the reasonable and beneficial use of the waters, to eliminate overdraft pursuant to the provisions of the Judgment, to protect the prior rights of the Soboba Tribe, and to provide for the use of all water rights recognizing the participating parties priorities pursuant to law, including California Constitution, article X, section 2.

The Annual Report is currently prepared by EMWD under contract with the Watermaster.

2.4 Purpose of the Report

This is the second Annual Report for the Management Area by the Watermaster. The purpose of the report is to:

- Describe the status of groundwater in the Management Area;
- Discuss water supplies and projected demands for the Management Area;
- Review and evaluate the 2014 data compiled as a result of the Groundwater Monitoring Programs;
- Present information on recharge programs and other Watermaster activities in the Management Area;
- Review 2014 financial considerations.

Hemet-San Jacinto Watermaster

3 Management Plan Activities

This chapter provides an overview of the Hemet-San Jacinto Watermaster activities during 2014 including the efforts of Technical Advisory Committee (TAC); summary of agreements, resolutions, and Task Orders executed by the Watermaster; role of the *Soboba Band of Luiseño Indians Water Settlement Agreement* and the *Soboba Band of Luiseño Indians Water Settlement Act*; and the Integrated Recharge and Recovery Program (IRRP).

3.1 Hemet-San Jacinto Watermaster Activities

The Watermaster has a Board comprised of elected officials representing the Cities of Hemet and San Jacinto, Lake Hemet Municipal Water District, Eastern Municipal Water District, and a representative selected by the private groundwater producers as defined by the Stipulated Judgment and Complaint (Judgment), Case Number RIC 1207274, entered with the Superior Court of the State of California for the County of Riverside adopting the Management Plan and creating the Watermaster in April 2013. The Watermaster Board oversees the implementation of the Judgment and is the decision-making body for the Management Plan. The Watermaster Board is currently supported by its General Counsel (Lagerlof, Senecal, Gosney, & Kruse, LLP), and by its Advisor (Behrooz Mortazavi, Principal at Water Resources Engineers Inc.). The General Counsel provides legal advisory services at the direction of the Watermaster Board, and the Advisor provides necessary services at the direction of the Watermaster Board, to assist in the implementation of the Management Plan.

During 2014, Watermaster started a joint project with EMWD to update the groundwater model. This effort will provide refined safe yield estimates for the Watermaster Board to review in 2015. In addition, the data management effort was initiated allowing Watermaster Advisor to access the information in the EMWD's Regional Water Resources Database. The Cone Penetrometer Test Project was completed which provided information on infiltration capabilities under the IRRP recharge ponds.

Amongst other actions taken by the Watermaster Board, the Board set the Adjusted Base Production Rights reduction for public agencies at seven percent (7%), deferred Class B participants' replenishment assessment until after 2015, and increased base production rights for one of the Class B participants (Van Dam Family Trust) from 531 AFY to 670 AFY. The Board also authorized Advisor to receive approximately $97,000 of financial assistance from Department of Water Resources to enhance the existing groundwater monitoring program. Starting in 2015, the Board meetings will be conducted in February, May, August, and November of each year. The Board also set the 2015 Watermaster budget at $ 730,350.

To create transparency, Watermaster took direct responsibility for invoice processing and financial services, previously handled by EMWD. In addition, Watermaster required Advisor to provide administrative services that was previously provided by EMWD.

Meeting minutes from the Watermaster meetings held during 2014 are included in Chapter 11, Section 11.1 of this Annual Report.

3.2 Technical Advisory Committee Activities

The Technical Advisory Committee (TAC) was established by the Watermaster to compile, share, interpret, evaluate, and reach agreement on data; to define problems; to address the Watermaster's technical issues; and to make recommendations to the Watermaster Board and Watermaster Advisor on all matters requiring four votes for Watermaster action. TAC members also function as a way to keep the City Councils, Water District Boards of Directors, and participating private groundwater producers fully informed about the implementation of the Judgment.

Meeting notes from the TAC meetings held during 2014 are included in Chapter 11, Section 11.2 of this Annual Report.

3.3 Agreements, Resolutions, and Task Orders Initiated in 2014

During 2014, the Watermaster executed several agreements, resolutions, and task orders. These are described in the following sections.

3.3.a Agreements Initiated in 2014

During 2014, the Watermaster executed the following agreements as follows:

- Agreement for Database Management Project with Spatial Wave Inc.;
- Agreement for Insurance with Edgewood Partners Insurance Center;
- Agreement for Bookkeeping with Bell Bookkeeping Services;
- Agreement for Groundwater Management Tool Model Calibration with EMWD.

Copies of these Agreements can be found in Chapter 11, Section 11.3 of this Annual Report.

3.3.b Resolutions Initiated in 2014

During 2014, the Watermaster adopted the following resolutions:

- Resolution No. 7 – Addition of Base Production Rights to the Van Dam Family Trust;
- Resolution No. 8 – Deferral of Class B Participants Replenishment Assessment Payments Until July 2016;
- Resolution No. 1.2 – Changing the Regular Meetings to Four Per Year and Permitting Temporary Changes.

Copies of these Resolutions can be found in Chapter 11, Section 11.4 of this Annual Report.

3.3.c Task Orders Initiated in 2014

During 2014, the Watermaster executed the following Task Orders with EMWD:

- Task Order No. 6 – Water Resources Monitoring Program Support;

- Task Order No. 6, Change Order No. 1 – Water Resources Monitoring Program Support;
- Task Order No. 6, Change Order No. 2 – Water Resources Monitoring Program Support.

Copies of these Task Orders can be found in Chapter 11, Section 11.5 of this Annual Report.

3.4 Soboba Settlement Agreement and Act

On June 7, 2006, after eleven years of negotiations, the Soboba Band of Luiseño Indians (Soboba Tribe), MWD, EMWD, LHMWD, and United States (Department of Interior, Department of Justice, Bureau of Indian Affairs) signed the Water Settlement Agreement (Soboba Settlement Agreement).

On March 1, 2007, Congresswoman Mary Bono (CA-45) introduced H.R. 1276 and H.R. 4841, *The Soboba Band of Luiseño Indians Settlement Act of 2007 (Soboba Settlement Act),* which was co-sponsored by Congressmen Jerry Lewis (R, CA-41), Joe Baca (D, CA-43), and Dale Kildee (D, MI-5). In 2008, Congress passed the Bill and the President signed the Public Law 110-297 (P.L. 110-297) bringing an end to decades of conflict between the Soboba Tribe, the U.S. Government, MWD, EMWD, and LHMWD.

The Soboba Settlement Agreement terminated litigation against MWD, which was filed by the Soboba Tribe in April 2000 *(Soboba Band of Luiseño Indians v. The Metropolitan Water District of Southern California)*. That lawsuit sought damages and injunctive relief for the continuing drainage of water from the Soboba Reservation into MWD's nearby San Jacinto Tunnel which was constructed in the 1930s.

The Soboba Settlement Agreement required active management of the groundwater basins which became the basis for the Judgment, implementation of the physical solution to address groundwater overdraft, and formation of the Watermaster. The Soboba Settlement Agreement facilitated an agreement between EMWD and MWD for an average delivery of 7,500 acre-feet of water by MWD for 50 years. EMWD, LHMWD, and the cities of Hemet and San Jacinto, are recharging the San Jacinto groundwater basin with this water. The Watermaster keeps track of this activity as part of the Carry-over accounts within the Management Area.

3.5 Integrated Recharge and Recovery Program

In April 2006, a contract between EMWD and the California Department of Water Resources was executed for a Groundwater Storage Construction Grant under the Safe Drinking Water, Clean Water, Watershed Protection, and Flood Protection Act (Proposition 13). This grant assisted in funding the Hemet/San Jacinto Integrated Recharge and Recovery Program (IRRP), and the difference was jointly funded by EMWD, LHMWD, and the Cities of Hemet and San Jacinto. Total costs for this project was approximately $24.5M.

The IRRP consists of 35 acres of basins or ponds for recharging State Project Water; three extraction wells; three monitoring wells; modification to two existing pump stations; and pipelines within, and adjacent to, the San Jacinto River.

Recharge activities were initiated in June 2012. During 2014, recharge water was not available from MWD due to persistent drought conditions in the State. An agreement was executed with MWD to provide In-lieu Recharge water in the amount of 3,754 AF.

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4 Current Water Demand

The municipal water supply in the Hemet/San Jacinto Groundwater Management Area (Management Area) is primarily the responsibility of four entities: Eastern Municipal Water District (EMWD), Lake Hemet Municipal Water District (LHMWD), the City of Hemet, and the City of San Jacinto. In addition, private groundwater producers and the Soboba Band of Luiseño Indians extract groundwater for their respective uses. Groundwater, imported water (treated and raw), surface water, and recycled water are the primary sources of water supplies to the Management Area. Table 4-1 summarizes the 2014 water demand estimates. Chapter 10, Figure 10-4 shows the boundaries of the major water purveyors in the Management Plan area.

4.1 Groundwater

Groundwater is, and historically has been, the primary source of supply in the Management Area. In addition to the Soboba Tribe and other private producers, EMWD, LHMWD, and the Cities of Hemet and San Jacinto provide water service in various areas of the Canyon, San Jacinto Upper Pressure, and Hemet North and South groundwater management zones. Groundwater management zones are shown in Chapter 10, Figure 10-2.

The City of San Jacinto extracts groundwater from the San Jacinto Upper Pressure groundwater management zone, and the City of Hemet extracts groundwater from both the San Jacinto Upper Pressure and Hemet South groundwater management zones. EMWD and LHMWD both extract groundwater from the Canyon, San Jacinto Upper Pressure, and Hemet South groundwater management zones. None of the municipal producers currently extract groundwater from the Hemet North portion of the Lakeview/Hemet North groundwater management zone. Private producers extract groundwater from all four groundwater management zones and the Soboba Tribe extracts from the Canyon and San Jacinto Upper Pressure groundwater management zones.

During 2014, the majority of the 42,588 acre feet (AF) of groundwater produced in the Management Area were produced from the San Jacinto Upper Pressure groundwater management zone (24,764 AF), with lesser amounts produced from the Canyon, Hemet South, and Hemet North groundwater management zones.

4.2 Imported Water

EMWD is one of the twenty-six member agencies of the Metropolitan Water District of Southern California (MWD), and as a result, has access to imported water direct from MWD. EMWD imports and sells State Project Water (SPW) from northern California and Colorado River Water (CRW) via the Colorado River Aqueduct both as raw water and treated water.

Table 4-1: 2014 Water Demand Estimates

All values in Acre Feet

2014		EMWD	LHMWD	City of Hemet	City of San Jacinto	Private Property Owners	Soboba Tribe	Totals
Ground-water	Canyon	1,741	3,899	0	0	1,009	1,165	7,814
	SJUP	2,479	7,319	537	2,824	6,341	525	20,025
	Hemet North	0	0	0	0	2,195	0	2,195
	Hemet South	132	391	3,839	0	3,423	0	7,785
Groundwater From IRRP Wells		3,669	999	101	0	0	0	4,769
Total Groundwater		8,021	12,608	4,477	2,824	12,968	1,690	42,588
Surface Water - SJ River		0	686	0	0	0	0	686
In-lieu Recharge		3,754	0	0	0	0	0	3,754
Imported Water Treated by EMWD		2,102	0	23	0	0	0	2,125
Imported Raw Water		474	2,604	0	0	212	0	3,290
Recycled Water		0	0	0	0	5,519	0	5,519
In-Lieu Recycled Water		0	0	0	0	6,677	0	6,677
Totals		14,351	15,898	4,500	2,824	25,376	1,690	64,639

Treated MWD water can reach the Management Area via the Homeland bypass and the Simpson pumping plant, which results in blends of imported water and groundwater from wells west of the Management Area due to the complexity of the distribution system. SPW enters the system at the Mills Filtration Plant (MWD turnout EM-12). CRW can enter the system through either the Perris Water Filtration Plant (EM-4) or from Lake Skinner via the Auld Road pumping plant (EM-17). A separate system for imported raw or untreated SPW (EM-14) is maintained for the purpose of groundwater recharge in the San Jacinto area. This pipeline also serves some agricultural customers within both EMWD's and LHMWD's service areas, and provides a raw water feed to EMWD's Hemet Water Filtration Plant (HWFP).

4.2.a Hemet Water Filtration Plant

Faced with the challenge of developing additional potable water supply sources, EMWD constructed the HWFP in 2006, located on a 4.5 acre parcel at the intersection of Kirby Street and Commonwealth Avenue in Hemet. The plant receives raw SPW from Lake Silverwood and Lake Perris through the existing EMWD Warren Road Pump Station (EM-14), and then treats the water. Once treated, the water enters EMWD's potable water distribution system.

The HWFP, with a capacity of 12 million gallons per day (MGD), or 13,400 acre feet per year (AFY), meets the current demand as described in EMWD's Master Plan. Due to increasingly large projected demands for the area, the plant was constructed with the capability of being expanded to 44,800 AFY. Delivery of potable water to the Management Area began in September 2006.

The HWFP has to be operated at a constant rate. Therefore at times, demand in the Management Area may be less than plant production. As a result, EMWD operates its system in such a way that water may leave the Management Area. Watermaster requires the amount of imported water treated by the HWFP leaving the Management Area be less than the amount produced by the plant. During 2014, the HWFP treated 6,634 AF of water of which 755 AF was exported outside the Management Area.

4.2.b North San Jacinto Water Supply Pipeline

In addition to the EM-14 imported water delivery system in the Management Area, EMWD has a system which provides raw (untreated) CRW purchased from MWD to six dairy property owners in the Management Area. In turn, the property owners have agreed to reduce their groundwater extraction by substituting the imported raw water for groundwater extraction. A surcharge for every acre foot of water they use regardless of whether it is the imported raw water or groundwater is used to support a portion of this system's cost which includes a pipeline, a pump station, and a connection to the MWD system.

Both the property owners and Management Plan participants benefit. The property owners benefit in that the project reduces drawdown of groundwater levels and provides water reliability, thereby maintaining their business practices. The Management Plan benefits since groundwater extractions are reduced, which is equivalent to an equal amount of recharge to the basin -- the most beneficial use of this vital resource and a cost-effective method of increasing local supply. The decreased groundwater extraction helps to stabilize over-drafted areas in the Lakeview/Hemet North and San Jacinto Upper Pressure groundwater management zones. It should be noted that CRW has higher salinity water which may have negative impact on the water quality of the Management Area.

During 2014, the North San Jacinto Water Supply Pipeline operated serving 365 AF of raw water to the dairies, with 212 AF of that amount served within the Management Area.

4.3 Recycled Water

Recycled water in the Management Area is generally supplied by the San Jacinto Valley Regional Water Reclamation Facility (SJV RWRF) but can also be supplied from the Winchester Ponds, Moreno Valley Regional Water Reclamation Facility (MV RWRF), or the Perris Valley Regional Water Reclamation Facility (PV RWRF).

The 256-acre SJV RWRF serves the population living within its 167-square-mile service area. The plant has a current capacity of 11 MGD with ultimate expansion at the plant envisioned to be 27 MGD, and is currently being upgraded to 14 MGD. The water is recycled for use by agricultural and landscape customers within the Management Area as well as other areas such as the 10,000-acre San Jacinto Wildlife Area adjacent to Lake Perris. Recycled water from this plant also sustains the Hemet/San Jacinto Multipurpose Constructed Wetlands, an approximately 50-acre site adjacent to the plant constructed to provide additional treatment, multi-species habitat, environmental enhancement, education, and other public benefits.

The Winchester Ponds are located on an approximately 80-acre site on Simpson Road in the unincorporated community of Winchester. They are used for storage of recycled water from the Perris and Temecula Valley RWRFs. The water is sold and transported to various users within EMWD's service area including customers within the Management Area.

The PV RWRF and the MV RWRF can, based on operational necessity, supply recycled water to users in the Management Area via a pipeline through Lakeview.

During 2014, recycled water usage in the Management Area totaled 12,196 acre feet.

4.3.a Recycled Water In-Lieu Project

This project supplies recycled water from the SJV RWRF for agricultural irrigation in-lieu of pumping native groundwater. The project can deliver up to 8,540 AFY of recycled water to Rancho Casa Loma and the Scott Brothers Dairy (known as In-lieu Project Participants). The project construction cost was jointly funded by EMWD, LHMWD, and the Cities of Hemet and San Jacinto. Agreements were executed with Rancho Casa Loma and Scott Brothers Dairy in 2008 that set limits on groundwater production in return for a low rate for recycled water purchases. The EMWD recycled water rate due by the In-lieu Participants is subsidized by the Watermaster.

During 2014,4,237 AF and 2,440 AF of recycled water was delivered to Rancho Casa Loma and Scott Brothers Dairy respectively, for a total of 6,677 AF of recycled water in-lieu of groundwater production.

4.4 Surface Water

The Management Area is drained by the San Jacinto River, which rises in and drains the western slopes of the San Jacinto Mountains. Waterways tributary to the river include the North and South Forks, Strawberry Creek, Indian Creek, Poppet Creek, and Bautista Creek. The San Jacinto River and its tributaries are ephemeral -- that is, they flow only when enough precipitation occurs to produce runoff and much of this flow infiltrates to groundwater. When storms are unusually intense and prolonged, the ground saturates and the remaining precipitation runs off into streams. The river recharges the groundwater basin in the area southeast of the City of San Jacinto. The river then flows northwest past the Lakeview Mountains before turning southwest to flow across the Perris Valley toward Lake Elsinore. The San Jacinto River ultimately flows into Lake Elsinore via Railroad Canyon and Canyon Lake. Lake Elsinore, when full, overflows into Temescal Wash, which joins the Santa Ana River near Prado Dam.

During 2014, river flows were considerably higher than 2013 due to increased rainfall, but river flow was still well below long-term average for the year.

4.4.a Surface Water Diversions

EMWD and LHMWD both hold water rights on the San Jacinto River allowing them to divert water when river flows are sufficient.

LHMWD holds pre-1914 rights for the diversion and storage of surface water from the San Jacinto River and its tributaries. Such pre-1914 rights, and the applicable rights and obligations that apply to the nature of pre-1914 rights, are associated to Lake Hemet, Strawberry Creek, and the North and South Forks of the San Jacinto River. During 2014,

LHMWD diverted 686 AF of surface water – 300 AF at Lake Hemet; 0 AF at South Fork; 308 AF at North Fork; and 78 AF at Strawberry Creek. Of the 686 AF of water diverted, 557 AF was put to direct use or sale and 129 AF was put into storage.

EMWD's diversion and storage of San Jacinto River surface water takes place in the Canyon groundwater management zone at the Grant Avenue Ponds in the Valle Vista area. Per the Stipulated Judgment, EMWD is required to store any diverted water under its License No. 10667 in the groundwater aquifer. During 2014, EMWD diverted 211 AF of surface water into storage.

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5 Projected Demands Update

In recent years, development has slowed and only 229 EDUs were added in 2014. A recent absorption study projects between 300 and 600 new EDUs will be added annually for the next three years. EMWD has identified over fifty projects with 1,890 proposed homes with recent construction activity. In addition to the projects under construction, there are 21,750 homes proposed in the area along with thousands of acres of non-residential development. Although these projects may take years longer than previously anticipated to enter the market, they will bring with them a significant amount of new water demand.

Such new development brings water supply challenges, and water purveyors continue to pursue new and efficient ways to accommodate growth. This includes exploring new options and opportunities for storing and using recycled water, requiring new development to be water efficient, and encouraging water efficiency through allocation based tiered rates or other conserving rate structures.

5.1 Planned Development

EMWD maintains a database of proposed development projects within its boundaries. To assist in forecasting demand, projects can be separated into two categories based on status, active construction and planned. Projects are considered in active construction from survey staking through completion. Proposed development includes projects in planning and design, starting with agency review through active construction.

Table 5-1 provides summarized information on projects under development in the Management Area.

Each EDU represents 0.50 acre-feet per year (AFY) of demand. The water demand shown is based on the number of residential units in each project and the acres of non-residential use. These demand projections are for planning purposes only and may change as information becomes available and projects are finalized.

Due to recent economic developments, completing a project in the active construction category could take up to nine years. Timing for completion of a project still in planning could be up to 25 years in the future. Time frames are approximate with multiple factors affecting development including economic patterns and/or environmental constraints.

A map of proposed projects categorized by status in the Management Area is shown in Chapter 10, Figure 10-5.

Table 5-1: Projects Under Development in the Management Area

Entity/ Category	EMWD		LHMWD		City of Hemet		City of San Jacinto		Totals	
	EDU	AFY	EDU	AFY	EDU	AFY	EDU	AFY	EDU	AFY
Active Construction										
Residential	1,620	860	110	55	0	0	160	80	1,890	995
Non-Residential	0	0	0	0	0	0	0	0	0	0
Planning										
Residential	20,100	10,050	430	215	170	85	1,050	525	21,750	10,875
Non-Residential	10,560	5,280	490	245	300	150	240	120	11,590	5,795

5.2 Future Demands

Urban water suppliers with 3,000 or more connections are required to prepare a 2010 Urban Water Management Plan (UWMP). EMWD, Lake Hemet Municipal Water District (LHMWD), and the water departments of the cities of Hemet and San Jacinto each prepared an UWMP and demand projections are taken from those plans. EMWD's demand has been adjusted to account for only the portion of EMWD that is within the Management Area. In 2015, urban water suppliers will be required to update their UWMP's.

Projections for future demand for the private groundwater pumpers and the Soboba Reservation were initially estimated in conjunction with the Soboba Band of Luiseno Indians and the private pumpers as part of the Operational Yield Study (WRIME, Inc., 2003). At that time, the projection for the private pumpers' extraction was fixed at 32,000 acre feet (AF). In following reports the projections for the private pumpers were further refined. Projections were made using the data in Table 5-1 to determine projected agricultural demand reduction. Agricultural acreage and its water demand were reduced by the amount of development anticipated. Future demand projections are summarized in Table 5-2.

Table 5-2: Future Demand Projections

Entity / Year	2010 (AF) Actual	2015 (AF)	2020 (AF)	2025 (AF)	2030 (AF)
1. EMWD	15,867	15,000	16,100	17,900	19,600
2. LHMWD	15,325	17,210	17,254	17,874	19,113
3. City of Hemet	4,388	4,367	4,498	4,500	4,500
4. City of San Jacinto	2,794	3,469	4,271	4,271	4,271
5. Private Pumpers	19,259	19,500	16,620	15,620	13,520
6. Soboba Reservation *	1,551	2,900	3,215	3,520	3,825
Totals	59,184	62,446	61,958	63,685	64,829

* These figures are based on the Soboba Water Development Schedule per the Settlement Agreement that went into effect in 2012.

5.3 Urban Water Management Plans

Water Code Section 10620(a) of the Urban Water Management Planning Act requires urban water suppliers to prepare and adopt an Urban Water Management Plan (UWMP) and sets forth parameters for doing so. Each UWMP is to assess current and projected water supplies; evaluate demand and customer type; evaluate reliability of water supplies; describe conservation measures implemented by the water supplier; provide a response plan for times of water shortage; and compare supply and demand projections. UWMPs must be updated every five years and the next update will occur in 2015.

The Water Conservation Act of 2009, Senate Bill 7x-7 (SB 7x-7) set a requirement for water agencies to reduce their per capita water use by the year 2020. The overall goal is to reach a statewide reduction of per capita urban water use of 20 percent by December 31, 2020, with an intermediate goal of 10 percent reduction by December 31, 2015. In the 2010 UWMPs, urban suppliers were required to set targets and supply a plan to reduce per capita water consumption. Demand reduction can be achieved through both conservation and the use of recycled water as a potable demand offset.

Agencies within the Management Area are participating in implementation of the Hemet/San Jacinto Groundwater Management Area Water Management Plan (Management Plan) and importing water from the Metropolitan Water District of Southern California (MWD) to recharge the basin. As a result of the successful efforts to improve water efficiency, to recharge the basin as part of the Management Plan, and to increase the use of recycled water, water supplies will be adequate to meet demand for over 20 years into the future.

5.3.a Eastern Municipal Water District

EMWD's UWMP describes water supplied from four sources of supply: imported water purchased from MWD, local potable groundwater, local desalted groundwater, and recycled water. It is anticipated that the majority of the water demands within EMWD's jurisdiction as a result of future development will be met through additional water imports from MWD supplemented by local supplies. Local supplies include an increase in desalination of brackish groundwater, recycled water use, and water use efficiency.

In the 2010 Regional Urban Water Management Plan (2010 RUWMP), MWD analyzed the reliability of water delivery through the State Water Project (SWP) and the Colorado River Aqueduct (CRA) and concluded that with the storage and transfer programs developed by MWD, MWD will have a reliable source of water to serve its member agencies' needs through 2035 during normal, historic single-dry and historic multiple-dry years. Unprecedented shortage will be addressed through the principles of the Water Surplus and Drought Management Plan as described in the 2010 RUWMP.

In an effort to limit dependency on imported water from MWD, EMWD has developed several programs designed to take advantage of local resources. High-quality groundwater is a source of water for local customers in the Management Area. EMWD has also constructed two desalination facilities to recover poor quality groundwater with high total dissolved solids (TDS) levels in the area outside of the Management Area. The product water from the desalters enters EMWD's potable distribution system. A third desalter is now in the final stages of design. Part of managing groundwater responsibly requires the replacement of groundwater extracted beyond the safe yield. Groundwater extraction in the Management Area above EMWD's allocated amounts will be replaced with imported water as part of the Management Plan implementation.

Recycled water is extensively used in EMWD's service area in place of potable water. To offset municipal demand, recycled water is used to irrigate landscaping and for industrial purposes. The majority of EMWD's agricultural customers also use recycled water. In some cases, recycled water is used by agricultural customers in-lieu of groundwater production, increasing the amount of groundwater available for municipal use without increased recharge. Currently, the use of recycled water is limited by the amount available to serve during peak demands with live stream discharge occurring during off peak periods. EMWD has developed plans to eliminate discharge, to use all of the recycled water available within the District, to offset demand of existing potable customers, to include retrofit of potable water landscape customers, and indirect potable recharge.

In the 2010 UWMP, EMWD identified three methods for conserving water: a budget based tiered rate, requirements for water efficiency in new construction, and an active conservation program. Water use reduction will be focused on outdoor demand reduction by all customers. Through these methods of reducing water use and increasing recycled water use, EMWD has reduced potable demand to meet the requirements of SB 7x-7.

Continued efficient water use, responsible groundwater management, and increased recycled water use will reduce EMWD's demand for imported water and increase water supply reliability. EMWD's UWMP is available on EMWD's website at www.emwd.org and MWD's 2010 RUWMP is available on MWD's website at www.mwdh2o.com.

5.3.b Lake Hemet Municipal Water District

Lake Hemet Municipal Water District's UWMP projects the population served will grow from 52,914 in year 2010 to 65,017 in year 2030. LHMWD currently serves its customers from three main sources of supply: locally pumped groundwater; naturally occurring surface water and released water from Lake Hemet diverted from the San Jacinto River system; and water purchases from EMWD. Locally produced groundwater will be limited by the provisions of the Management Plan and supplemented by recharge of imported water. Surface water is released from Lake Hemet and then diverted for direct beneficial use. Projected water purchases from EMWD are limited to 1,300 AFY and used for both domestic and agricultural purposes. Recycled water is also proposed as a water supply. Recycled water would be purchased from EMWD and used for citrus agriculture. Facilities must be developed and peak supply needs must become available for this to occur. LHMWD has already met the year 2020 per capita per day demand target. According to the LHMWD UWMP, projected supply will meet demand through the year 2030.

5.3.c City of San Jacinto

The City of San Jacinto's UWMP projects that all future demands will be met through groundwater. The city will see an increase in population in its water service area from 15,200 in year 2010 up to 23,000 in year 2030. At the same time, demand will increase from 2,900 AFY in year 2010 up to 4,271 AFY in year 2030, and groundwater will be a reliable source of supply. The City of San Jacinto has already met the year 2020 per capita per day demand target. According to the UWMP, projected supply will meet demand through the year 2030.

The city's water department does not provide water to the entire city area. During 2014, the city produced 2,824 AF of groundwater, and EMWD supplied 4,678 AF of water to customers within the San Jacinto city limits.

5.3.d City of Hemet

The City of Hemet UWMP also projects that all demand will be met using groundwater. The demand for water in the City of Hemet water service area will increase from 4,240 AFY in 2010 up to 4,500 AFY in 2030, and groundwater will be a reliable source of supply. According to the UWMP, projected supply will meet demand through the year 2030.

The city's water service area does not cover the entire city area. During 2014, the city produced 4,477 AF of groundwater, and EMWD supplied 6,465 AF of water to customers within the Hemet city limits.

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6 Monitoring, Data Compilation, and Evaluation

The Monitoring Programs of the Hemet/San Jacinto Groundwater Management Area (Management Area) collects, compiles, and analyzes groundwater-related data. These programs are funded by the Hemet-San Jacinto Watermaster (Watermaster) and provide the information necessary for the Watermaster and a comprehensive view of the Management Area.

Eastern Municipal Water District's (EMWD's) Planning Department serves as the Monitoring Program Administrator. EMWD, Lake Hemet Municipal Water District (LHMWD), the Cities of Hemet and San Jacinto, and the Soboba Tribe provide data on their wells and assist in communicating with the private well owners in their respective jurisdictions.

Data management and reporting are critical activities that occur in concurrence of data collection. Collected data are compiled and entered into EMWD's Regional Water Resources Database on a monthly basis.

This chapter summarizes the monitoring activities and the results of the analyses of the monitoring data. It also provides other pertinent information regarding activities in the Management Area such as well permits issued, rainfall, conjunctive use/groundwater recharge, recycled water, groundwater storage, and surface water flows.

6.1 Groundwater Monitoring

The Groundwater Monitoring Programs of the Management Plan collects, compiles, and analyzes groundwater data, provides the information necessary for a comprehensive view of the Management Area and contain the following major elements:

- Groundwater Level Monitoring
- Groundwater Quality Monitoring
- Groundwater Extraction Monitoring
- Inactive Well Capping/Sealing

A map of all the wells participating in the Groundwater Monitoring Programs can be found in Chapter 10, Figure 10-3.

6.1.a Groundwater Level Monitoring

Static groundwater level measurements are collected twice a year - in the spring following winter rains, and in the fall following the dry season - on as many wells as possible. The spring measurements are generally collected in February and March, and fall measurements are generally taken in October and November. The set of available wells varies from year to year due to different reasons such as changes in access agreements, physical well access,

and usage of the well. Wells are required to be turned off for at least 24 hours prior to taking a static water level measurement. In some cases, wells may be in use during the semi-annual collection of water levels making the gathering of static water level measurements impractical at that location.

During 2014, 191 wells were measured in the spring effort, and 187 were measured in fall, for a total of 378 measurements. Table 6-1 shows the number of wells measured in each groundwater management zone, and the minimum and maximum measurements. The number of measurements taken in each groundwater management zone for years 2005-2014 is shown in Chapter 9, Table 9-1. The minimum and maximum measurements for years 2005 through 2014 can be found in Chapter 9, Table 9-2. A map showing the change in groundwater elevation from Spring 2013 to Spring 2014 can be found in Chapter 10, Figure 10-6. A map showing the change in groundwater elevation from Fall 2013 to Fall 2014 can be found in Chapter 10, Figure 10-7.

Table 6-1: 2014 Groundwater Level Monitoring Program in the Management Area

Management Zone	Number of Wells Measured Spring	Number of Wells Measured Fall	Minimum Depth to Water (ft)	Maximum Depth to Water (ft)
Canyon	21	20	19.1	368.5
S.J. Upper Pressure	84	83	36.6	612.2
Hemet North (partial)	23	24	153.9	278.0
Hemet South	63	60	0.4	511.9
Totals	191	187	0.4	612.2

6.1.b Groundwater Quality Monitoring

During 2014, annual water quality samples were collected on 112 wells in the Management Area. EMWD collected the samples on available private, inactive, or agricultural wells, in addition to wells owned by EMWD. LHMWD and the cities of Hemet and San Jacinto collected the samples on their drinking water wells and forwarded them to EMWD for analysis and compilation.

Of the 112 private and municipal wells sampled in 2014, 90 had an existing operable pump while 22 required having a pump set in the well in order to obtain a sample. Sampling a non-operable well without pumping equipment requires the use of a sampling rig to set a temporary pump and is more time consuming. The Standard Operating Procedures as outlined in the Groundwater Monitoring Program were followed for all sampling. Typical constituents tested in the annual water quality sampling effort are listed in Table 6-2.

Generally, the best quality groundwater occurs along the San Jacinto River in the Canyon and San Jacinto Upper Pressure groundwater management zones, where significant municipal extraction occurs. It should be noted that groundwater quality and the character of groundwater are determined by a number of factors including: mineral content of sediments; recharge and drainage patterns; historic land use practices; and casing screen intervals and depths of wells sampled.

Table 6-2: Constituents Tested in a Typical Groundwater Quality Sample

Type	Constituent:	Type	Constituent:
Cations	Calcium (Ca)	Metals	Boron (B)
	Magnesium (Mg)		Copper (Cu)
	Potassium (K)		Iron (Fe)
	Silica (SiO_3)		Manganese (Mn)
	Sodium (Na)		Zinc (Zn)
	Hardness (Calculated from Ca/Mg)	Alkalinity	Bicarbonate (HCO_3)
Anions	Chloride (Cl)		Carbonate (CO_3)
	Fluoride (F)		Hydroxide (OH)
	Nitrate as Nitrogen (NO_3-N)		Total Alkalinity as Ca CO_3
	Sulfate (SO_4)	Misc.	Electrical Conductance (EC)
Nitrogens	Ammonia as Nitrogen (NH_3-N)		Temperature at Collection
	Nitrite as Nitrogen (NO_2-N)		pH
			Total Dissolved Solids (TDS)

Table 6-3 shows the number of wells sampled, and the extreme values for Total Dissolved Solids (TDS) and Nitrate as Nitrogen (NO_3-N) in mg/L for each management zone for 2014. TDS has a secondary Maximum Contaminant Level (MCL) concentration of 1,000 mg/L, while NO_3-N has a primary MCL concentration of 10 mg/L.

The wells with the highest TDS and NO_3-N values in the southern portion of the Canyon, San Jacinto Upper Pressure, and Hemet South groundwater management zones are all located in major citrus producing areas, and it can be assumed that the high salts and nitrates are the result of agricultural practices.

Table 6-3: 2014 Groundwater Quality Monitoring in the Management Area

Management Zone	No. of Wells	TDS (mg/L)		NO_3-N (mg/L)	
		High	Low	High	Low
Canyon	19	1,100	170	9.9	< 0.2
S.J. Upper Pressure	48	1,900	160	32.0	< 0.2
Hemet North (partial)	22	1,100	300	9.0	< 0.2
Hemet South	23	1,500	190	35.0	0.43

A map showing TDS concentrations and diagrams of graphic representations of water quality characteristics (i.e., Stiff diagrams) at individual wells in the Management Area for 2014 is found in Chapter 10, Figure 10-8. A map showing NO_3-N concentrations at individual wells in the Management Area for 2014 is found in Chapter 10, Figure 10-9.

6.1.c Groundwater Extraction Monitoring

Groundwater extraction on 157 wells in the Management Area was monitored during 2014. Meters are read monthly for 118 well sites, 75 meters are read by EMWD and 45 meters

are reported to EMWD. Also, estimates of extraction by non-metered wells for 39 well sites are generated monthly. Estimates are based on various factors including acreage, crop type, weather, and in the case of dairies, number of livestock.

Groundwater extraction in the Management Area during 2014 totaled 42,588 acre feet (AF). Of that 42,588 AF of extraction, 27,930 AF (66%) was by municipalities, 12,968 AF (30%) was by private producers, and 1,690 AF (4%) was by the Soboba Band of Luiseño Indians. The majority of groundwater extraction occurred in the San Jacinto Upper Pressure Management Zone as shown in Table 6-4.

Table 6-4: 2014 Groundwater Extraction Monitoring in the Management Area

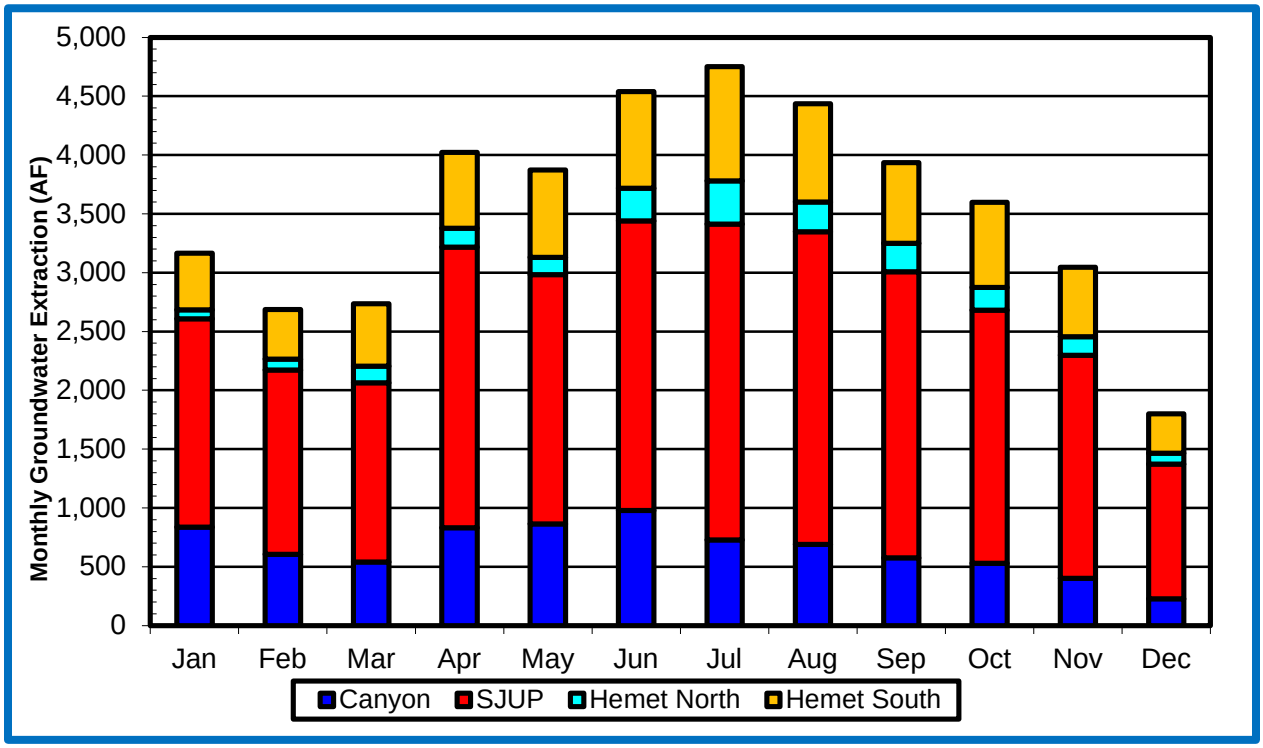
Management Zone	No. of Wells Metered	No. of Wells Estimated	Total Number of Wells	Groundwater Extraction Metered (AF)	Groundwater Extraction Estimated (AF)	Total Groundwater Extraction (AF)
Canyon	19	7	26	6,809	1,005	7,814
S.J. Upper Pressure	52	15	67	23,182	1,612	24,794
Hemet North (partial)	21	5	26	1,440	755	2,195
Hemet South	26	12	38	6,091	1,694	7,785
Total	118	39	157	37,522	5,066	42,588

As expected, extraction rates were highest during the summer months with fifty-nine percent (59%) of the year's extraction occurring during the six-month time period from May through October. Monthly groundwater extraction by groundwater management zone is shown in Figure 6-1.

California Water Code Sections 4999 et seq., with few exceptions, requires persons who extract groundwater from wells located in Riverside, San Bernardino, Los Angeles, and Ventura Counties in excess of 25 acre feet in any year to file an Annual Notice of Groundwater Extraction (Annual Notice). Failure to file an Annual Notice may be deemed non-use of water and may lead to a loss of water rights. If a well owner does not file an Annual Notice for five consecutive years, the well will be considered inactive and Annual Notices will no longer mailed to the well owner. Non-use of water over an extended period may lead to the loss of water rights.

Starting with the Annual Notices filed in 2006 recording 2005 groundwater extraction, the State Water Resources Control Board transferred, under the auspices of Water Code Section 5009, authority for the Annual Notices of Groundwater Extraction to certain local water agencies. On June 23, 2006, the State designated EMWD as the agency to assume this function within its service area. As a consequence, EMWD gathers, checks, records, and disseminates water extraction information, and assists the water producers in seeing that their water use is accurately documented. This transfer to local control improved the accuracy of the data and, in EMWD's service area, resulted in an elimination of the annual fees previously paid by the well owners to the State.

Figure 6-1: 2014 Monthly Groundwater Extraction in the Management Area



In 2014, Annual Notices for calendar year 2013 were filed on 113 existing wells within the Management Area. There were also two (2) First Annual Notices filed for two wells that have not previously participated in the program. Therefore, EMWD processed a combined total of 115 Annual Notices resulting in a savings of $12,995 to the groundwater producers as opposed to filing with the State directly. Any well owner wishing to reactivate an inactive well recordation must notify EMWD in writing. Table 6-5 presents the results of the 2013 San Jacinto Watershed Groundwater Recordation Program.

Table 6-5: 2013 Groundwater Extraction Recordation Notices Filed in the Management Area

Management Zone	Annual Notices	First Notices	Groundwater Extraction (AF)
Canyon	19	0	11,070
SJ Upper Pressure	57	1	22,026
Hemet North (partial)	11	1	1,490
Hemet South	26	0	7,577
Totals	113	2	42,163

Chapter 9, Table 9-7 demonstrates an increase in the number of Annual Notices filed following EMWD assuming responsibility for the program. In addition, Chapter 9, Table 9-8 presents the amount of groundwater extraction recorded per management zone during

2004 through 2013 in acre feet, and demonstrates the increase in the amount of groundwater extraction recorded following EMWD assuming responsibility for the program.

The amount of groundwater extracted per the Annual Notices does not account for the full volume of water believed to have been extracted from the basin due to the fact that some well owners do not file Annual Notices, or file inaccurate amounts on the Annual Notices.

6.1.d Inactive Well Capping/Sealing Program

Inactive, unused wells are a potential source of groundwater contamination. Open casings are especially vulnerable to contamination from surface flows or vandalism - such as the dumping of oil or other waste products. Large open casings, 16 to 18 inches in diameter, also present a hazard to small children and animals. It is not known how many open casings or unused wells exist within the Management Area.

As part of this monitoring program, an inactive well or open casing will be capped/sealed at no charge to the well owner in an effort to protect the public and groundwater supplies. This is done by welding a bolted or locking cap onto the well casing. These wells may still be used for water level and, in some cases, water quality monitoring. Priority is given to those wells that are potentially dangerous open holes (16-18" casings) or those located in areas where flooding resulting from precipitation might carry manure, fertilizers, or other contaminants into the well.

During 2014, there were no new inactive wells capped/sealed as shown in Table 6-6. Chapter 9, Table 9-9 shows the number of wells, by groundwater management zone, which have been capped/sealed to date in the Management Area. The table includes a listing of 42 wells capped/sealed by EMWD since the 2004 implementation of the Hemet/San Jacinto Inactive Well Capping/Sealing Program. Chapter 10, Figure 10-10 presents the locations of these wells.

Table 6-6: 2014 Inactive Wells Capped/Sealed in the Management Area

Management Zone	Number of Wells
Canyon	0
S.J. Upper Pressure	0
Hemet North (partial)	0
Hemet South	0
Totals	0

6.2 Imported Water Monitoring

Within the EMWD system, treated water from the Metropolitan Water District of Southern California (MWD) water can reach the Management Area via the Homeland bypass and the Simpson Pump Station, which results in blends of imported water and groundwater from wells west of the Management Area due to the complexity of EMWD's distribution system. State Project Water (SPW) enters the system at the Mills Filtration Plant (MWD turnout EM-12). Colorado River Water (CRW) can enter the system through either the Perris Water Filtration Plant (EM-4) or from Lake Skinner via the Auld Road pumping plant (EM-17).

Untreated water (raw water) from MWD can reach the Management Area through two distinct systems. One system can bring untreated SPW into the Management Area at the Warren Road Pump Station (EM-14), and is maintained for the purpose of groundwater recharge in the San Jacinto area and raw water feed to EMWD's Hemet Water Filtration Plant. This line also serves some agricultural customers within both EMWD's and LHMWD's service areas. The second system can bring untreated CRW into the Management Area at the Brownlands Pumping Plant (EM-1), and is maintained for the purpose of groundwater augmentation for the dairies along the Ramona Expressway as part of the North San Jacinto Water Supply Initiative.

All imported water from MWD into the EMWD system, including EM-1, EM-4, EM-12, EM-14, and EM-17, that flows into the Management Area is metered and monitored.

6.2.a Hemet Water Filtration Plant

The Hemet Water Filtration Plant (HWFP) has to be operated at a constant rate. Therefore, treated HWFP water may leave the Management Area. Watermaster requires the amount of imported water treated by the HWFP leaving the Management Area to be less than the amount produced by the plant. During 2014, the HWFP treated 6,634 AF of water of which 755 AF was exported outside of the Management Area.

6.2.b Imported Water Recharge

The "Physical Solution" as defined in the Stipulated Judgment and Complaint (Judgment), Case Number RIC 1207274, entered with the Superior Court of the State of California for the County of Riverside, identifies groundwater recharge as the preferred method of accomplishing Soboba Settlement Agreement requirements. The Integrated Recharge and Recovery Program (IRRP) is defined as the system that receives untreated SPW from Lake Silverwood and Lake Perris through the existing EMWD Warren Road Pump Station (EM-14) and consists of 35 acres of basins or ponds for recharging SPW; three extraction wells; three monitoring wells; modification to two existing pump stations; and pipelines within, and adjacent to, the San Jacinto River.

In 2014, there was 3,754 AF of in-lieu recharge by EMWD through an agreement with MWD as shown in Table 6-7. Total historical imported water recharge is displayed in Chapter 10, Figure 10-12.

Table 6-7: 2014 In-lieu Raw Water Recharge in the Management Area

Facility	Imported Raw Water Recharge (AF)
In-lieu Recharge	**3,754**

6.2.c North San Jacinto Water Supply Initiative

EMWD constructed a system to provide untreated CRW purchased from MWD to six dairy property owners in the Management Area via the Brownlands Pump Station (EM-1). In turn, the property owners have agreed to reduce their groundwater extraction by substituting the imported raw water for groundwater extraction.

During 2014, the North San Jacinto Water Supply Initiative operated serving 365 AF of untreated CRW to the dairies, with 212 AF of that amount served to six dairies within the Management Area as shown in Table 6-8.

Table 6-8: 2014 North San Jacinto Water Supply Initiative

Imported Raw Water Usage in the Management Area

Management Zone	Imported Raw Water Use (AF)
Canyon	0
S.J. Upper Pressure	0
Hemet North (partial)	212
Hemet South	0
Totals	212

6.3 Recycled Water Monitoring

Most of the recycled water used in the Management Area comes from the San Jacinto Valley Regional Water Reclamation Facility (SJV RWRF); however, the area also receives recycled water from the Winchester Ponds (Temecula Valley RWRF) and, occasionally, from the Perris Valley RWRF (PV RWRF).

6.3.a Recycled Water Usage

During 2014, recycled water usage in the Management Area totaled 12,196 AF, as shown in Table 6-9. A majority of the recycled water usage in the Management Area occurred in the San Jacinto Upper Pressure groundwater management zone. Historical recycled water usage for each groundwater management zone for 2005 through 2014 can be found in Chapter 9, Table 9-10.

Table 6-9: 2014 Recycled Water Usage in the Management Area

Management Zone	Recycled Water Use (AF)
Canyon	0
S.J. Upper Pressure	7,175
Hemet North (partial)	2,545
Hemet South	2,476
Totals	12,196

6.3.b Recycled Water In-lieu Program

This project supplies recycled water from the SJV RWRF for agricultural irrigation in-lieu of pumping groundwater. The project can deliver up to 8,540 AFY of recycled water to Rancho Casa Loma and the Scott Brothers Dairy. During 2014, 4,237 AF and 2,440 AF of recycled water was delivered to Rancho Casa Loma and Scott Brothers Dairy respectively, for a total of 6,677 AF of recycled water in-lieu of groundwater as shown in Table 6-10.

Table 6-10: 2014 Recycled Water In-lieu Usage in the Management Area

Agency	2014 Total Recycled Water Deliveries (AF)	2014 Recycled Water Deliveries Subsidized by Watermaster (AF)
Scott Brothers Dairy	2,440	1,496
Rancho Casa Loma	4,237	2,633
Totals	6,677	4,129

6.3.c Recycled Water Incidental Recharge

Incidental recharge of recycled water occurs at the Alessandro Storage Ponds and the MWD San Jacinto Reservoir. Incidental recharge amounts for each facility during 2014 is presented in Table 6-11. Historical data from 2005 through 2014 for ponds in the Management Area are shown in Chapter 9, Table 9-11. Both the Alessandro Ponds and the MWD San Jacinto Reservoir are located in the San Jacinto Upper Pressure groundwater management zone.

Table 6-11: 2014 Recycled Water Incidental Recharge in the Management Area

Facility	Incidental Recharge (AF)
Alessandro Ponds	76
MWD San Jacinto Reservoir	36

6.4 Surface Water Monitoring

The San Jacinto Valley is drained by the San Jacinto River, which rises in and drains the western slopes of the San Jacinto Mountains. Waterways tributary to the river include the North and South Forks, Strawberry Creek, Indian Creek, Poppet Creek, and Bautista Creek. The San Jacinto River and its tributaries are ephemeral, that is, they flow only when enough precipitation occurs to produce runoff and much of this flow infiltrates to groundwater. When storms are unusually intense and prolonged, the ground saturates and the remaining precipitation runs off into streams. The river recharges the groundwater basin in the area southeast of the City of San Jacinto. The river then flows northwest past the Lakeview Mountains before turning southwest to flow across the Perris Valley toward Lake Elsinore. The San Jacinto River ultimately flows into Lake Elsinore via Railroad Canyon and Canyon Lake. Lake Elsinore, when full, overflows into Temescal Wash, which joins the Santa Ana River near Prado Dam.

6.4.a River/Stream Flows

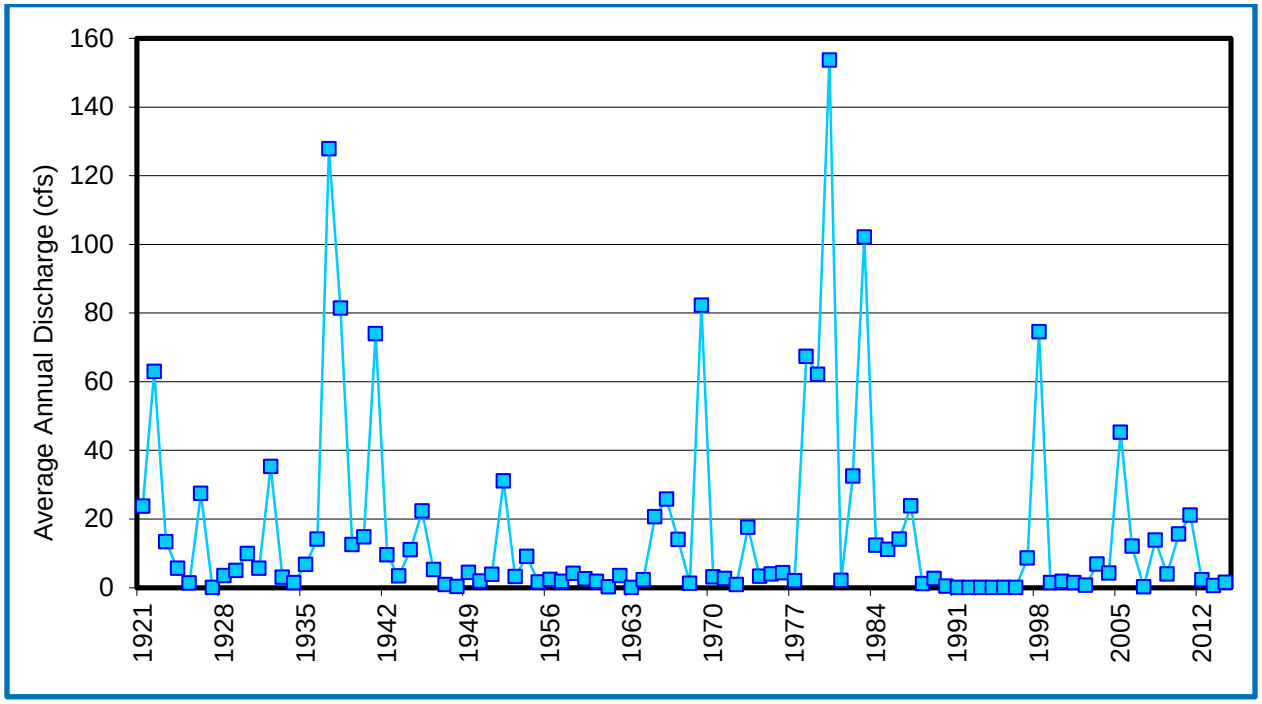
The U.S. Geological Survey (USGS) monitors and maintains a real-time gauge on the San Jacinto River at the Cranston Ranger Station and has done so since 1921. This gauge is located at 33°44'17" Latitude and 116°49'59" Longitude (NAD27) at an elevation of 1,920 feet above sea level. The drainage area above the gauge is 142 square miles

In 2014, this station recorded a total flow of 1,074 AF with a peak flow of 124 cfs on March 1, 2014. Figure 6-2 demonstrates the great variability in annual flows in the San Jacinto

River (based on the mean-daily data) and emphasizes the uncertainty of sufficient flows for diversion in any given year.

Monitoring of surface flows is an important factor in determining the water balance and in estimating the amount of groundwater recharge being added to storage. Tributaries to the river should also be monitored.

Figure 6-2: Historical Average Annual Flow of the San Jacinto River



6.4.b San Jacinto River Diversions

LHMWD holds pre-1914 rights for the diversion and storage of surface water from the San Jacinto River and its tributaries. Such pre-1914 rights, and the applicable rights and obligations that apply to the nature of pre-1914 rights, are in regard to Lake Hemet, Strawberry Creek, and the North and South Forks of the San Jacinto River. LHMWD's storage of surface water takes place in the San Jacinto Upper Pressure groundwater management zone at Riverside County Flood Control and Conservation District's Bautista Ponds. During 2014, LHMWD diverted 686 AF of surface water; 300 AF at Lake Hemet, 0 AF at South Fork, 308 AF at North Fork, and 78 AF at Strawberry Creek as shown in Table 6-12. Of the 686 AF of water that was diverted, 557 AF was used for direct use or sale, while 129 AF was put into storage.

EMWD's diversion and storage of San Jacinto River surface water takes place in the Canyon groundwater management zone at EMWD's Grant Avenue Ponds in the Valle Vista area. EMWD's diverted water is stored in the groundwater aquifer in accordance to License No. 10667, and the Judgment requirements. During 2014, EMWD diverted 211 AF of surface water into storage at the Grant Avenue Ponds.

Historical river diversions in the Management Area from 2004 through 2014 can be found in Chapter 9, Table 9-12.

Table 6-12: 2014 San Jacinto River Diversions

Agency	Diversion Points	Acre Feet
LHMWD	Lake Hemet	300
	South Fork	0
	North Fork	308
	Strawberry Creek	78
EMWD	Grant Avenue	211
	Total	897

6.5 Precipitation

Topography generally controls the relative amount of precipitation from one location to the next within the Management Area. The majority of rain falls in the winter months. On the valley floor, 12 to 13 inches are average, but near the peak of Mt. San Jacinto, the average is around 40 inches.

Two sites for measuring precipitation are used for this report; one in San Jacinto and one in Hemet. The San Jacinto station is operated by the California Division of Forestry (CDF) and data are available from 1910 to the present. The CDF data are compiled and provided to EMWD by the Riverside County Flood Control and Conservation District (RCFC). The location of the Hemet measuring station has changed over time. Data from 1911 through 2002 were collected at the LHMWD office. Starting with 2003, Hemet rainfall data was collected at the RCFC Station No. 318 located at the Hemet Channel. Starting with 2014, Hemet rainfall data is being collected at the RCFC Station No. 180 located at Ryan Airport and provided to EMWD by RCFC. Annual rainfall in the Hemet/San Jacinto area can be quite variable.

During 2014, the Hemet station recorded 9.78 inches of rain and the San Jacinto station recorded 10.30 inches as shown in Table 6-13. Historical rainfall in the Management Area from 2004 through 2014 can be found in Chapter 9, Table 9-13.

6.6 Well Permits

Riverside County Ordinance No. 682.3 regulates the construction, reconstruction, abandonment, and destruction of community water supply wells, individual domestic wells, and agricultural wells. Under the auspices of the Department of Environmental Health, the County is responsible for issuing well drilling permits. A valid permit along with the payment of all applicable fees is required before anyone digs, drills, bores, drives, or reconstructs a well that is, or was, a water well, a cathodic protection well, or a monitoring well. Standards for the construction or reconstruction of wells are the standards recommended in the *California Department of Water Resources Bulletin No. 74-81, Chapter II*, and *Bulletin No. 74-90, as amended by the State*.

Table 6-13: 2014 Rainfall and Rainfall Extremes in the Management Area

Location	Rainfall (inches)			
	San Jacinto		Hemet	
Historic High	28.63	1961	26.60	1978
Historic Low	4.98	1969	3.64	2002
Long-term Average	12.58		11.72	
Location	Rainfall (inches)			
	San Jacinto		Hemet	
2014	10.30		9.78	

The Riverside County Department of Environmental Health maintains a database detailing permits issued for wells drilled or abandoned in the county area. In the Management Area, 10 permits were issued in 2014 and they are summarized in Table 6-14.

As shown in the table, two (2) permits for domestic wells were issued. This category includes two types of wells:

(1) small individual domestic wells, primarily located in basin interface areas and non-water bearing zones, fractured bedrock areas, or where municipal water service is not available; and
(2) community or municipal domestic wells.

The seven (7) permits issued for agricultural wells within the Management Area are individual domestic wells on small agricultural properties. Since these wells are for individual domestic drinking water uses, they are not considered significant to the program because it is anticipated that they will produce less than 25 acre feet per year.

There were no permits issued for monitoring wells within the Management Area.

Table 6-14: 2014 Well Permits Issued in the Management Area

Management Zone	Domes. Wells	Ag. Wells	Monitoring Wells	Cathodic Protection Wells	Aband. Wells	Total Permits
Canyon	0	0	0	0	0	0
S.J. Upper Pressure	1	1	0	0	0	2
Hemet North (partial)	0	0	0	0	0	0
Hemet South	1	6	0	0	1	8
Totals	2	7	0	0	1	10

No permits were issued for a cathodic protection wells and one (1) abandonment permit was issued. The County makes every effort to observe well destruction. If that is not possible, they require a concrete ticket and destruction log from the owner.

It should be noted that the figures indicate the number of permits issued, they do not necessarily reflect the actual number of wells drilled or abandoned. However, diligent effort is made to research each well and determine its status. It is possible that some wells may have been drilled or abandoned in early 2014 under permits issued in 2013.

Hemet-San Jacinto Watermaster

7 2014 Financial Considerations

The first Hemet-San Jacinto Watermaster (Watermaster) Board meeting was conducted on April 22, 2013. Starting the Watermaster activities in the middle of the 2013 calendar year requires calculation of pro-rated Adjusted Base Production Right (ABPR) for determining the Carry-Over Credits (CoC). The 2014 Administrative Assessments were calculated and invoiced based on the total production by each public agency at a rate of $50 per acre-foot. Each public agency only pays for the portion of their ABPR that was produced, and Watermaster records their unused ABPR as part of their CoC for future production.

On December 4, 2013, Watermaster Board approved 2014 Budget which included Monitoring, Recycled In-lieu, and operational costs.

7.1 2014 Watermaster Budget

The Watermaster Board approved 2014 Budget at its December 4, 2013 meeting. Different elements of the 2014 budget are shown in Table 7-1.

Table 7-1: 2014 Watermaster Budget

Description		Amounts
In-Lieu Program Agreement		**$ 160,000**
Soboba Gravel Pit Project		**$ 140,000**
De-watering Effort	$ 35,000	
De-silting Effort	$ 105,000	
EMWD/Watermaster Support Agreement		**$ 131,000**
Monitoring Program Support	$ 131,000	
Organization Operation and Management		**$ 297,000**
Financial Support Services	$ 18,000	
Legal Counsel Contract	$ 33,000	
Advisor Contract	$ 166,000	
Executive Assistant Contract	$ 50,000	
Insurance, Office Supplies and Other Direct Costs	$ 15,000	
Education and Training	$ 15,000	
Additional Projects/Activities		**$ 140,000**
Database/Mapping Application Development	$ 20,000	
Groundwater Model Development	$ 120,000	
Total Budget		**$ 868,000**

The drought continued during 2014, and there was minimum river flows in the river requiring no cleanup of the Soboba Gravel Pit. In addition, Monitoring Program Support was updated with more refined estimates. Therefore, the 2014 budget was revised to $745,965 as a result of these changes. The revised budget elements are shown in Table 7-2.

Table 7-2: 2014 Updated Watermaster Budget

Description		Amounts
In-Lieu Program Agreement		**$ 160,000**
EMWD/Watermaster Support Agreement		**$ 148,965**
Monitoring Program Support	$ 148,965	
Organization Operation and Management		**$ 297,000**
Financial Support Services	$ 18,000	
Legal Counsel Contract	$ 33,000	
Advisor Contract	$ 166,000	
Executive Assistant Contract	$ 50,000	
Insurance, Office Supplies and Other Direct Costs	$ 15,000	
Education and Training	$ 15,000	
Additional Projects/Activities		**$ 140,000**
Database/Mapping Application Development	$ 20,000	
Groundwater Model Development	$ 120,000	
Total Budget		**$ 745,965**

As of publication of this annual report, not all invoices related to the 2014 activities have been received, but the total expenditures related to 2014 budgeted items is expected to be less than $670,000. A copy of the 2014 Financial Audit conducted by Hosaka, Rotherham and Company is included as an appendix in Chapter 11, Section 11.6.

7.2 Carry-Over Credits

The Judgment defines Carry-over Credits (CoC) as "A Public Agency or Class B Participant credit against the Replenishment Assessment in a Fiscal Year, based on the Agency's adjusted or Base Production Right or share of Imported Water not produced in the prior calendar years". Watermaster is required to calculate CoC each year. In addition, Watermaster shall calculate previously recharged water (10,694 AF as of December 31, 2013) and unused Adjusted Base Production Rights (ABPR). Watermaster is considering the previously recharged water by EMWD and LHMWD and unused ABPR as part of the CoC accounts with special requirements as defined by the Judgment.

The Class B Participants in the Management Area shall pay Replenishments Assessments on groundwater production amounts in excess of their Base Production Rights (BPR), subject to any CoC adjustments. In addition, Class A Participants that decide to join in as Class B Participants at a later date are required to pay for Replenishment Assessment if their groundwater production during the years that they participated as a Class A Participant exceeded their BPR.

The next two sections show the balance for each Public Agency's CoC and over (or under) production by Class A and B participants.

7.2.a Public Agencies and Cities

To overcome the overdraft within the Management Area, the agencies and cities within the Management Area that produce groundwater above their Adjusted Base Production Rights shall replenish groundwater under an approved Watermaster program, pay Replenishments Assessment on production amounts in excess of their Adjusted Base Production Rights, or use credits in their CoC to offset their excess production.Table 7-3 documents the starting balances for the agencies' and cities' CoC accounts as of December 31, 2013. The groundwater production by Soboba Tribe from the golf course wells was included in the 2013 Annual Report as part of Tribe's production under Soboba Settlement Agreement. After further review, it was determined that such productions should not impact the public agencies' CoC. Table 7-3 shows corrections made to the unused Soboba Tribe imported water usage as a result of this oversight.

Table 7-3: Public Agencies Carry-Over Credits as of December 31, 2013

Agency	Pre 2012 Recharge Rights (AF)	Total Unused Soboba Tribe Imported Water (AF)	Total Unused Adjusted BPR (AF)	Totals as of Dec 31, 2013 (AF)	Unused Soboba Tribe Imported Water Corrections (AF)
City of Hemet	0	2,976	1,322	4,298	97
City of San Jacinto	0	1,898	758	2,656	62
EMWD	10,694	3,752	0	14,446	167
LHMWD	0	4,836	0	4,836	169
Totals	10,694	13,462	2,080	26,236	495

During 2014, EMWD delivered significant amount of water from the Integrated Regional Recharge and Recover Program (IRRP) wells. These productions are accounted as the Public Agency's unused Soboba Tribe imported water or pre 2012 recharged water and are not subject to any Administrative Assessments. Table 7-4 documents the agencies' and cities' 2014 groundwater productions.

Due to drought conditions in California, MWD was not able to deliver SPW to EMWD for direct recharge during 2014. However, MWD was able to deliver Colorado River water at EM-14. Recognizing that total dissolved solids (TDS) levels in Colorado River water exceed water quality objectives for the San Jacinto Upper Pressure basin, MWD agreed to temporarily provide Soboba Tribe Imported Water (STIW) at an amount equal to the reduction in EMWD's groundwater production. The proposed in-lieu delivery operation was agreed between MWD and EMWD on June 5, 2014. A copy of this agreement letter is included as part of Watermaster Board meeting minutes of June 23, 2014 (Section 11.1.c).

Table 7-4: 2014 Public Agencies Groundwater Productions

Agency	Adjusted BPR for 2014 (AF)	Actual 2014 Productions (AF)	IRRP Well Productions (AF)	2014 Excess Production Above Adjusted BPR (AF)	2014 Unused Adjusted BPR (AF)
City of Hemet	5,920	4,376	101		1,544
City of San Jacinto	3,805	2,824	0		980
EMWD	10,103	8,106	3,669	0	1,997
LHMWD	10,205	11,610	999	1,404	0
Totals	30,033	26,916	4,769	1,404	4,521

Soboba Settlement Agreement requires any Soboba Tribe groundwater production above 1,500 AF be deducted from STIW and the balance of the unused STIW be credited to the public agencies in the Management Area that purchased the STIW. During 2014, Soboba Tribe reported 1,689 AF of groundwater production, of which 525 AF was from Soboba's Golf Course well, which is not located on the Reservation and not included as part of the Soboba Settlement Agreement. Therefore, Soboba Tribe's production subject to Settlement Agreement was 1,165 AF which allowed the entire STIW be credited to the public agencies. Table 7-5 shows status of the Soboba Tribe Imported Water conditions during 2014, including a total of 40 AF of pre-delivered STIW during 2012 and 2013.

Table 7-5: Soboba Tribe Imported Water Status During 2014

Agency	MWD Imported Water (AF)	Soboba Tribe Usage Above 1,500 AF	Future MWD Deliveries to Cover 2014 Obligations (AF)	Total 2014 Unused Soboba Tribe Imported Water (AF)
City of Hemet	744	0	726	744
City of San Jacinto	474	0	463	474
EMWD	1,278	0	1,249	1,278
LHMWD	1,297	0	1,268	1,297
Totals	3,794	0	3,706	3,794

Watermaster is required to calculate CoC each year considering any remaining pre-2012 recharge rights, unused Soboba Tribe Imported Water, and unused Adjusted Base Production Rights according to the Judgment. Table 7-6 shows the public agencies' Carry-Over Credits as of December 31, 2014.

Table 7-6: Public Agencies Carry-Over Credits as of December 31, 2014

Agency	Pre-2012 Recharge Rights (AF)	Unused Soboba Tribe Import Water (AF)	Total Unused Adjusted Base Production Rights (AF)	Carry-over Credits as of December 31, 2014 (AF)	Future MWD Delivery Obligations (AF)
City of Hemet	0	3,716	2,866	6,582	726
City of San Jacinto	0	2,434	1,738	4,172	463
EMWD	8,694	3,528	1,997	14,219	1,249
LHMWD	0	3,900	0	3,900	1,268
Totals	8,694	13,578	6,601	28,873	3,706

7.2.b Class A and B Participants

Table 7-7 documents the 2014 CoC and Replenishment Assessment requirements for the Class A and B Participants. Any Replenishment Assessments are deferred until after 2015 (Resolution No. 8). Private pumpers can offset their excess production with underproduction in future years. It is anticipated for the Class A and B Participants to accumulate significant CoC during wet years, and use that credit to offset their excess production during drought years. Replenishment Assessments are not yet set by the Watermaster and will be discussed and better defined by the Watermaster Board in 2016.

Table 7-7: Class A & B Participants Carry-Over Credits as of December 31, 2014

	Participant Name	2014 Production (AF)	Allocation Set By Judgment (AF)	Production Below Allocations as of December 2013 (AF)	Production Above Allocations as of December 2013 (AF)	Production Below Allocations as of December 2014 (AF)	Production Above Allocations as of December 2014 (AF)
Class A Participants	Bahan	715.9	1,398	695.3		1,377.4	
	DeVries	84.3	116	35.0		66.7	
	Gless	761.6	2,093	981.5		2,313.0	
	Olsen	98.5	156	59.6		117.1	
	Oostdam	49.4	259	138.3		347.9	
	Record	0.3	193	147.2		339.9	
	Sybrandy	518.5	1,454	952.7		1,888.2	
	Ramsey	0.0	596	596.0		1,192.0	
Class B Participants	Boersma	144.4	195	1.1		51.7	
	Boruchin	0.0	266	266.0		532.0	
	Curci	0.0	260	260.0		520.0	
	Lauda	712.7	3,530	71.5		255.8	
	Goodman	0.0	151	151.0		302.0	
	Phillips	232.1	212		51.6		71.6
	Michan	0.0	166	166.0		332.0	
	Pastor	0.0	265	196.0		461.0	
	Scott	128.0	1,755		97.0	34.5	
	Van Dam	161.0	670 *	121.7		630.7	
	Warren	130.2	442	258.9		570.8	

*** Van Dam Family Trust Base Production Rights was increased from 531 AF to 670 AF per Resolution No. 7 adopted on June 23, 2014**

Hemet-San Jacinto Watermaster

8 Corrections and Errata

8.1 2013 Annual Report Chapter 4

After publishing the 2013 Annual Report, it was observed that Table 4-1 incorrectly showed that the City of Hemet purchased 644 AF of imported water treated by EMWD. The correct value should have been 44 AF. The corrected table is shown below.

Table 8-1: 2013 Water Supply Estimates
All values in Acre Feet

2013		EMWD	LHMWD	City of Hemet	City of San Jacinto	Private Property Owners	Soboba Tribe	Totals
Ground-water	Canyon	4,107	4,511	0	0	1,216	1,069	10,903
	SJUP	9,275	7,860	674	2,964	6,319	605	27,697
	Hemet North	0	0	0	0	2,409	0	2,409
	Hemet South	445	566	3,865	0	3,812	0	8,688
Groundwater From IRRP Wells		0	0	0	0	0	0	0
Total Groundwater		13,827	12,937	4,539	2,964	13,756	1,674	49,697
Surface Water - SJ River		---	1,036	---	---	---	---	1,036
Imported Water Treated by EMWD		527	295	44	---	---	---	866
Imported Raw Water		892	2,663	---	---	---	---	3,555
Recycled Water		---	---	---	---	6,616	---	6,616
In-Lieu Recycled Water		---	---	---	---	6,152	---	6,152
Totals		15,246	16,931	4,583	2,964	26,524	1,674	67,922

8.2 2013 Annual Report Chapter 7

After publishing the 2013 Annual Report, it was observed that Table 7-7 showed the groundwater production by Soboba Tribe from the golf course wells was included in the 2013 Annual Report as part of Tribe's production under Soboba Settlement Agreement. After further review, it was determined that such productions should not impact the public agencies' Carry-over Credits. The corrected table is shown below.

Table 7-7: 2013 Public Agencies Carry-Over Credits Ending Balances

Agency	Pre-2012 Recharge Rights (AF)	Total Unused Soboba Tribe Import Water (AF)	Total Unused Adjusted Base Production Rights (AF)	Carry-over Credit Account Balances (AF)
City of Hemet	0	3,073	1,322	4,395
City of San Jacinto	0	1,960	758	2,718
EMWD	10,694	3,919	0	14,613
LHMWD	0	5,005	0	5,005
Totals	10,694	13,957	2,080	26,731

Hemet-San Jacinto Watermaster

9 Tables of Monitoring Program Summaries and Trends

Table 9-1: Historical Number of Wells Measured for the Groundwater Level Monitoring Program in the Management Area

Management Zone		Canyon		S.J. Upper Pressure		Hemet North (partial)		Hemet South		Totals	
Responsibility	**Year**	**Spr.**	**Fall**	**Spr.**	**Fall**	**Spr.**	**Fall**	**Spr.**	**Fall**	**Spr.**	**Fall**
Wells Measured by EMWD	2005	11	11	81	75	19	21	30	32	141	139
	2006	12	9	73	75	21	22	34	39	140	145
	2007	13	13	80	86	21	24	38	43	152	166
	2008	13	13	84	82	21	22	35	33	153	150
	2009	14	16	84	75	21	21	31	35	150	147
	2010	13	12	67	73	21	21	41	37	142	143
	2011	13	13	85	86	23	24	42	42	163	165
	2012	13	13	82	77	17	18	54	54	166	162
	2013	10	8	12	56	12	21	39	45	73	130
	2014	**11**	**12**	**65**	**67**	**23**	**24**	**49**	**47**	**148**	**150**
Wells Measured by Other Agencies & Reported to EMWD	2005	12	9	14	14	0	0	16	17	42	40
	2006	11	12	12	13	0	0	16	17	39	42
	2007	14	12	13	14	0	0	16	15	43	41
	2008	7	3	14	16	0	0	16	17	37	42
	2009	7	7	16	15	0	0	17	17	40	39
	2010	11	11	11	12	0	0	17	16	39	39
	2011	11	11	11	12	0	0	17	16	39	39
	2012	9	11	16	16	0	0	15	14	40	41
	2013	11	11	17	18	0	0	13	13	41	42
	2014	**10**	**8**	**19**	**16**	**0**	**0**	**14**	**13**	**43**	**37**
Total Wells Measured	2005	23	20	95	89	19	21	46	49	183	179
	2006	23	21	85	88	21	22	50	56	179	187
	2007	27	25	93	100	21	24	54	58	195	207
	2008	20	22	98	98	21	22	51	50	190	192
	2009	21	23	100	90	21	21	48	52	190	186
	2010	24	23	78	85	21	21	58	53	181	182
	2011	24	24	96	98	23	24	59	58	202	204
	2012	22	24	98	93	17	18	69	68	206	203
	2013	21	19	29	74	12	21	52	58	114	172
	2014	**21**	**20**	**84**	**83**	**23**	**24**	**63**	**60**	**191**	**187**

Note: The above figures represent the number of wells actually sampled or measured rather than the number of wells participating in the program. Not all participating wells could be sampled or measured each year due to flooding, access, or other constraints.

Table 9-2: Historical Results of the Groundwater Level Monitoring Program in the Management Area

Maximum and Minimum Depth To Water (feet)										
Management Zone	**Canyon**		**S.J. Upper Pressure**		**Hemet North (partial)**		**Hemet South**		**Totals**	
Year	**Min**	**Max**	**Min**	**Max**	**Min**	**Max**	**Min**	**Max**	**Min**	**Max**
2005	8.4	389.6	12.1	504.8	164.8	299.6	14.2	369.5	8.4	504.8
2006	19.1	415.2	55.1	489.0	163.6	313.1	14.1	395.5	14.1	489.0
2007	39.6	412.7	54.3	509.2	163.1	329.7	5.9	378.4	5.9	509.2
2008	30.2	380.8	69.2	596.0	163.1	298.5	5.4	375.2	5.4	596.0
2009	48.3	473.5	67.8	548.1	163.1	283.2	1.1	384.0	1.1	548.1
2010	20.8	361.3	61.1	650.0	163.2	267.7	1.0	416.0	1.0	650.0
2011	44.5	407.6	61.8	570.0	163.3	301.2	1.1	353.1	1.1	570.0
2012	62.8	385.6	57.4	652.0	162.5	268.8	1.1	432.2	1.1	652.0
2013	59.6	292.0	40.7	616.8	162.7	267.1	1.1	363.1	1.1	616.8
2014	**19.1**	**368.5**	**36.6**	**612.2**	**153.9**	**278.0**	**0.4**	**511.9**	**0.4**	**612.2**

Table 9-3: Historical Number of Wells Sampled for the Groundwater Quality Monitoring Program in the Management Area

Management Zone / Responsibility/Year		Canyon	S. J. Upper Pressure	Hemet North (partial)	Hemet South	Totals
Wells Sampled by EMWD	2005	12	42	21	14	89
	2006	16	47	21	17	101
	2007	16	51	19	18	104
	2008	15	60	25	17	117
	2009	14	45	19	20	98
	2010	15	47	16	18	96
	2011	15	35	16	22	88
	2012	11	26	16	28	81
	2013	14	30	22	20	86
	2014	**12**	**38**	**22**	**18**	**90**
Wells Sampled by Other Agencies and Delivered to EMWD	2005	6	12	0	8	26
	2006	6	11	0	7	24
	2007	6	13	0	9	28
	2008	6	13	0	8	27
	2009	6	13	0	7	26
	2010	6	13	0	6	25
	2011	6	12	0	7	25
	2012	7	14	1	7	29
	2013	6	13	0	7	26
	2014	**7**	**10**	**0**	**5**	**22**
Total Wells Sampled	2005	18	54	21	22	115
	2006	22	58	21	24	125
	2007	22	64	19	27	132
	2008	21	73	25	25	144
	2009	20	58	19	27	124
	2010	21	60	16	24	121
	2011	21	47	16	29	113
	2012	18	40	17	35	110
	2013	20	43	22	27	112
	2014	**19**	**48**	**22**	**23**	**112**

Table 9-4: Historical Results of the Groundwater Quality Monitoring Program in the Management Area

Management Zone	Year	No. of Wells	TDS (mg/L)		NO_3-N (mg/L)	
			High	Low	High	Low
Canyon	2005	18	1,330	190	10.0	< 0.1
	2006	22	1,360	180	14.0	< 0.1
	2007	22	1,500	180	13.0	< 0.1
	2008	21	1,480	140	11.0	< 0.1
	2009	20	1,360	120	13.0	< 0.1
	2010	15	1,400	180	11.0	< 0.1
	2011	21	1,400	150	15.0	< 0.1
	2012	18	1,400	170	7.3	< 0.1
	2013	20	1,500	160	14.0	< 0.2
	2014	**19**	**1,100**	**170**	**9.9**	**< 0.2**
S.J. Upper Pressure	2005	54	3,050	180	32.0	< 0.1
	2006	58	3,990	170	23.0	< 0.1
	2007	64	3,820	170	25.0	< 0.1
	2008	73	5,340	120	28.0	< 0.1
	2009	58	5,160	160	22.0	< 0.1
	2010	60	5,100	180	30.0	< 0.1
	2011	47	2,600	170	30.0	< 0.1
	2012	40	1,100	190	22.0	< 0.1
	2013	43	1,100	170	35.0	< 0.2
	2014	**48**	**1,900**	**160**	**32.0**	**< 0.2**
Hemet North (partial)	2005	21	1,000	360	6.1	< 0.1
	2006	21	940	370	6.3	< 0.1
	2007	19	1,015	340	4.7	< 0.1
	2008	25	1,060	400	4.2	< 0.1
	2009	19	1,040	340	13.0	< 0.1
	2010	16	1.100	400	13.0	< 0.1
	2011	16	990	350	14.0	< 0.1
	2012	17	1,100	420	7.6	< 0.1
	2013	22	1,200	320	9.4	< 0.2
	2014	**22**	**1,100**	**300**	**9.0**	**< 0.2**
Hemet South	2005	22	1,390	230	31.0	0.6
	2006	24	1,400	240	30.0	0.6
	2007	27	1,330	210	50.0	0.4
	2008	25	1,280	230	30.0	< 0.1
	2009	27	1,430	210	48.0	0.4
	2010	24	1,400	250	50.0	1.2
	2011	29	1,700	220	51.0	< 0.1
	2012	35	2,100	220	38.0	0.2
	2013	27	1,500	230	39.0	< 0.2
	2014	**23**	**1,500**	**190**	**35.0**	**0.43**

It should be noted that the same wells were not necessarily sampled each year, which may cause fluctuations in high and low values. It should also be noted that water quality and the character of groundwater are determined by a number of factors including: mineral content of sediments; recharge and drainage patterns; historic land use practices; and screening intervals and depths of wells sampled, to name a few.

Table 9-5: Historical Number of Wells Measured for the Groundwater Extraction Monitoring Program in the Management Area

Year	Method of Determining Groundwater Extraction			
	Number of Meters Read by EMWD	Number of Meters Read by Other Agencies & Reported to EMWD	Number of Wells with Extraction Estimated by EMWD	Total Wells
2005	96	38	40	174
2006	90	41	40	171
2007	98	46	26	170
2008	100	44	24	168
2009	111	34	23	168
2010	108	40	22	170
2011	106	34	30	170
2012	102	43	34	179
2013	93	41	38	172
2014	**75**	**43**	**39**	**157**

Table 9-6: Historical Results of the Groundwater Extraction Monitoring Program in the Management Area

Management Zone / Year	Groundwater Extraction (AF)				
	Canyon	S. J. Upper Pressure	Hemet North (partial)	Hemet South	Totals
2005	9,571	26,669	2,248	8,694	47,182
2006	12,043	31,312	2,401	8,774	54,530
2007	10,735	33,075	2,540	8,612	54,962
2008	9,148	29,092	2,575	8,406	49,221
2009	10,032	24,464	2,684	8,000	45,180
2010	8,129	23,855	2,289	6,949	41,222
2011	8,423	23,822	2,223	6,586	41,054
2012	8,539	24,046	2,114	6,888	41,587
2013	10,903	27,697	2,409	8,688	49,697
2014	**7,814**	**24,794**	**2,195**	**7,785**	**42,588**

Table 9-7: Historical Number of Wells Participating in the San Jacinto Watershed Groundwater Recordation Program in the Management Area

Year	Groundwater Recordations				
	Filed with the State		Filed with EMWD		Totals
	Annual Notices	First Notices	Annual Notices	First Notices	
2004	93	1	-	-	94
2005	-	-	95	1	96
2006	-	-	93	16	109
2007	-	-	103	10	113
2008	-	-	111	8	119
2009	-	-	115	2	117
2010	-	-	112	3	115
2011	-	-	121	3	124
2012	-	-	111	0	111
2013	**-**	**-**	**113**	**2**	**115**

Table 9-8: Historical Results of the San Jacinto Watershed Groundwater Recordation Program in the Management Area

Management Zone / Year	Groundwater Recordations (AF)				
	Canyon	S. J. Upper Pressure	Hemet North (partial)	Hemet South	Totals
2004	5,787	23,589	1,259	7,451	38,086
2005	9,471	23,759	1,125	7,282	41,637
2006	10,163	23,115	1,602	10,524	45,404
2007	8,664	27,892	1,041	8,679	46,276
2008	8,060	24,377	436	12,763	45,636
2009	8,374	23,473	1,523	7,132	40,502
2010	6,566	22,669	1,751	5,372	36,358
2011	7,137	24,571	1,376	5,398	38,482
2012	7,209	22,383	637	6,748	36,977
2013	**11,070**	**22,026**	**1,490**	**7,577**	**42,163**

Table 9-9: Historical Results of the Inactive Well Capping/Sealing Program in the Management Area

Management Zone / Year	Inactive Well Capping/Sealing Program				
	Canyon	S. J. Upper Pressure	Hemet North (partial)	Hemet South	Totals
2001	2	2	0	1	5
2002	2	11	2	6	21
2003	0	0	0	3	3
2004	0	7	3	0	10
2005	0	0	0	0	0
2006	0	2	0	0	2
2007	0	1	0	0	1
2008	0	0	0	0	0
2009	0	0	0	0	0
2010	0	0	0	0	0
2011	0	0	0	0	0
2012	0	0	0	0	0
2013	0	0	0	0	0
2014	**0**	**0**	**0**	**0**	**0**
Totals	**4**	**23**	**5**	**10**	**42**

Table 9-10: Historical Results of the Recycled Water Monitoring Program in the Management Area

Management Zone / Year	Recycled Water Usage (AF)				
	Canyon	S. J. Upper Pressure	Hemet North (partial)	Hemet South	Totals
2005	0	1,868	2,191	711	4,770
2006	0	1,670	1,409	1,038	4,117
2007	0	2,132	1,291	2,536	5,959
2008	0	4,718	1,357	2,679	8,754
2009	0	7,468	1,191	2,477	11,136
2010	0	5,390	1,846	1,896	9,132
2011	0	8,267	2,007	1,854	12,128
2012	0	9,683	2,056	1,797	13,536
2013	0	8,977	1,897	1,894	12,768
2014	**0**	**7,175**	**2,545**	**2,476**	**12,196**

Table 9-11: Historical Results of Incidental Recycled Water Recharge Monitoring in the Management Area

Facility / Year	Incidental Recycled Water Recharge (AF)		
	Alessandro Ponds	MWD San Jacinto Reservoir	San Jacinto Valley RWRF Ponds
2005	480	230	181
2006	778	847	53
2007	1,059	640	21
2008	1,426	427	38
2009	630	374	-
2010	87	227	-
2011	611	872	-
2012	802	565	-
2013	728	427	-
2014	**76**	**36**	**-**

Table 9-12: Historical Results of River Diversion Monitoring in the Management Area

Agency / Location	LHMWD Diversions (AF)				EMWD Diversions (AF)	Total Diversions (AF)
	Lake Hemet	South Fork	North Fork	Strawberry Creek	Grant Ave.	
2005	4,042				5,741	9,783
2006	8,088				2,718	10,806
2007	1,873	767	386	237	0	3,263
2008	2,115	1,611	1,411	215	4,278	9,630
2009	1,837	38	1,152	162	1,772	4,961
2010	987	30	2,406	858	4,423	8,704
2011	2,773	0	3,120	383	4,165	10,441
2012	3,943	86	1,130	206	0	5,365
2013	0	183	650	203	0	1,036
2014	**300**	**0**	**308**	**78**	**211**	**897**

Table 9-13: Historical Results of Rainfall Monitoring in the Management Area

Location	Rainfall (inches)			
	San Jacinto		Hemet	
Historic High	28.63	1961	26.60	1978
Historic Low	4.98	1969	3.64	2002
Long-term Average	12.58		11.72	

Location	Rainfall (inches)	
	San Jacinto	Hemet
2005	17.41	14.56
2006	8.97	8.44
2007	6.61	5.12
2008	11.43	9.75
2009	7.44	5.48
2010	19.52	15.90
2011	9.56	7.41
2012	7.51	5.91
2013	5.58	5.47
2014	**10.30**	**9.78**

Hemet-San Jacinto Watermaster

10 Figures and Maps

CALIFORNIA

N

W

E

S

EMWD

Management Plan Area

RIVERSIDE COUNTY

Legend

Santa Ana/Santa Margarita Watershed Boundary

Hemet/San Jacinto Water Management Plan Area

EMWD Boundary

0 0.75 1.5 3 Miles

N

EASTERN MUNICIPAL WATER DISTRICT SINCE 1950

U.S. HWY 60

I-10

HWY 79

HWY 243

San Jacinto Lower Pressure

San Jacinto Upper Pressure

Lakeview

Hemet North

City of San Jacinto

Canyon

HWY 74

HWY 74

City of Hemet

Hemet South

HWY 79

Perris South

CNTY

Menifee

HWY 79

Figure 10-1: Location Map of the Management Plan Area

EMWD Boundary

Highways

Streets

Hemet/San Jacinto Water Management Plan Area

N

0 0.5 1 2 3 4 Miles

Lakeview/Hemet North
TDS 520 mg/L
NO3-N 1.8 mg/L

San Jacinto
Upper Pressure
TDS 320 mg/L
NO3-N 1.4 mg/L

San Jacinto Canyon
TDS 230 mg/L
NO3-N 2.5 mg/L

Hemet South
TDS 730 mg/L
NO3-N 4.1 mg/L

Diamond Valley Lake

Figure 10-2: Groundwater Management Zone Boundaries and Current Basin Plan Water Quality Objectives

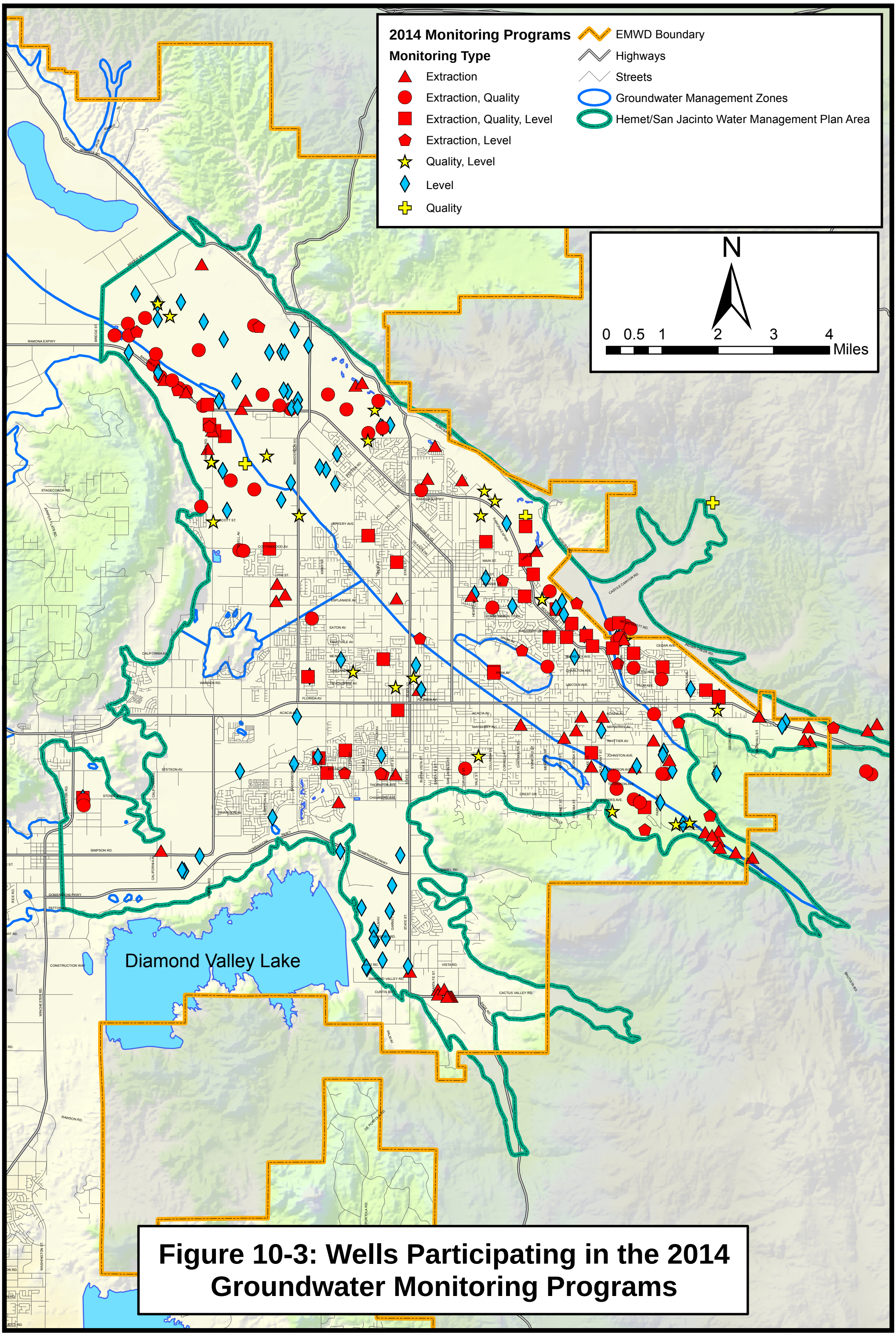


Figure 10-3: Wells Participating in the 2014 Groundwater Monitoring Programs

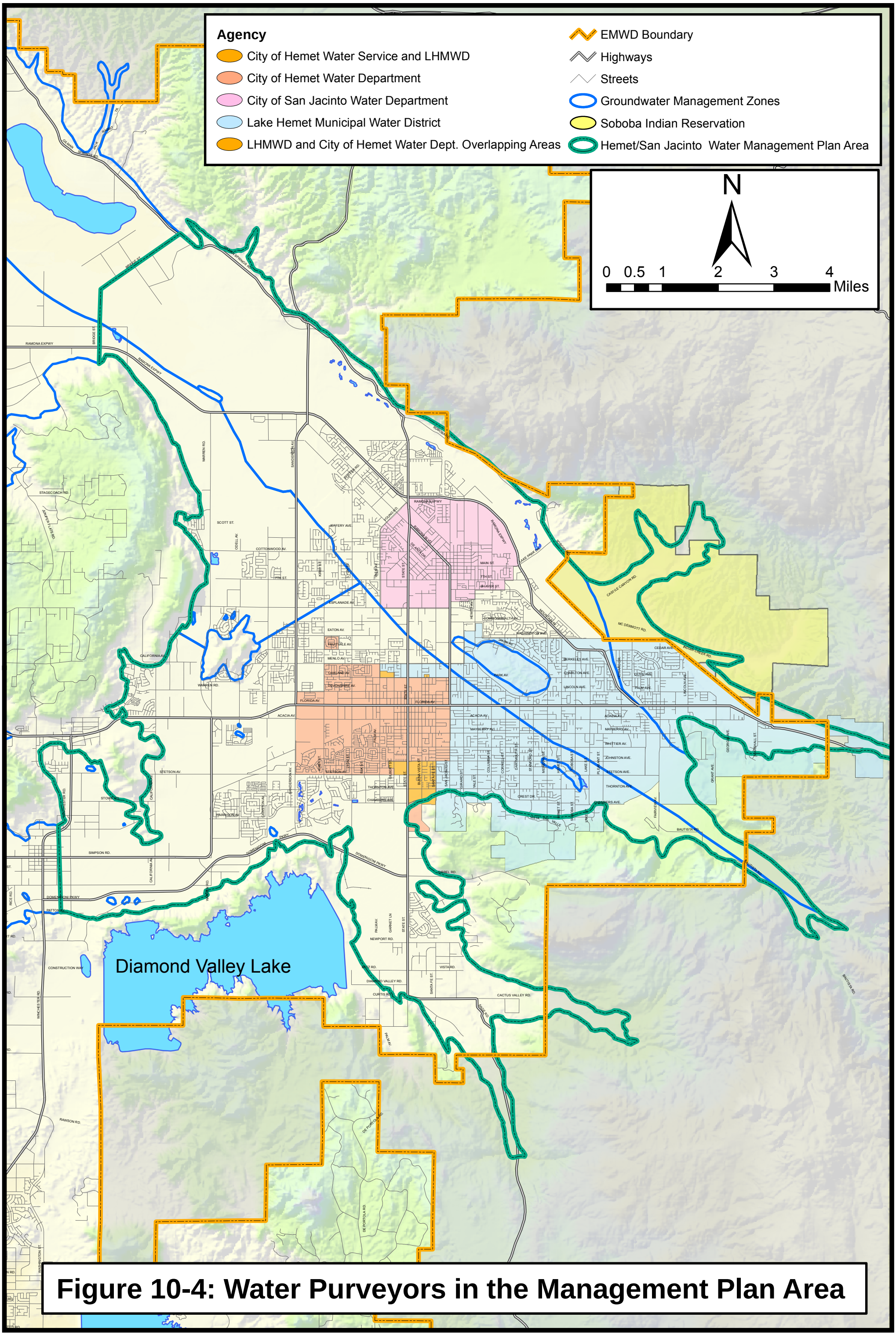


Figure 10-4: Water Purveyors in the Management Plan Area

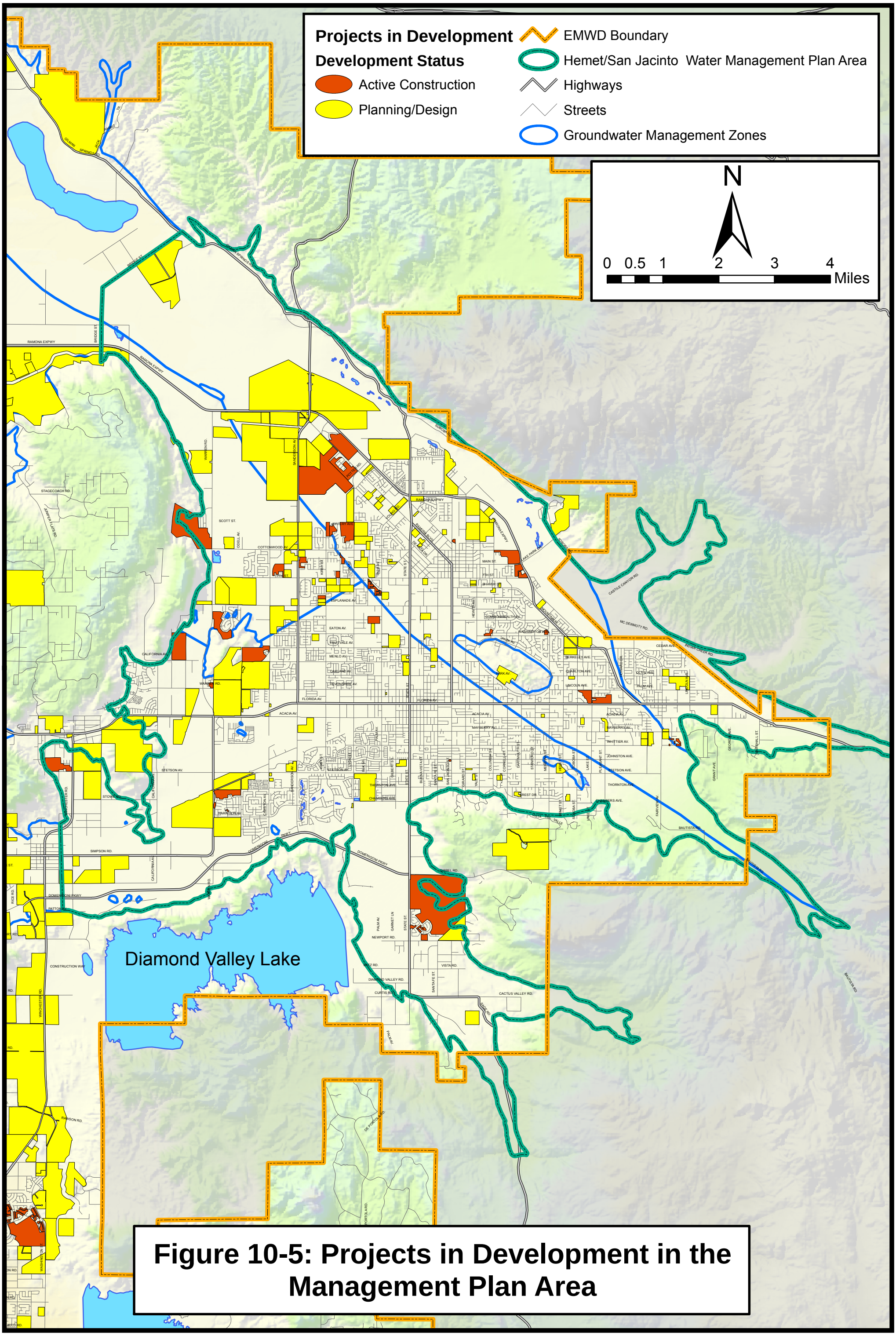


Figure 10-5: Projects in Development in the Management Plan Area

Spring 2014 Companion Well Level Site & Change
EMWD Boundary
Hemet/San Jacinto Water Management Plan Area
Highways
Streets
Groundwater Management Zone
Fault Line (Source USGS)
2011 Saturated Extent

N

0 0.5 1 2 3 4 Miles

Diamond Valley Lake

Figure 10-6: 2013-2014 Spring Groundwater Elevation Change

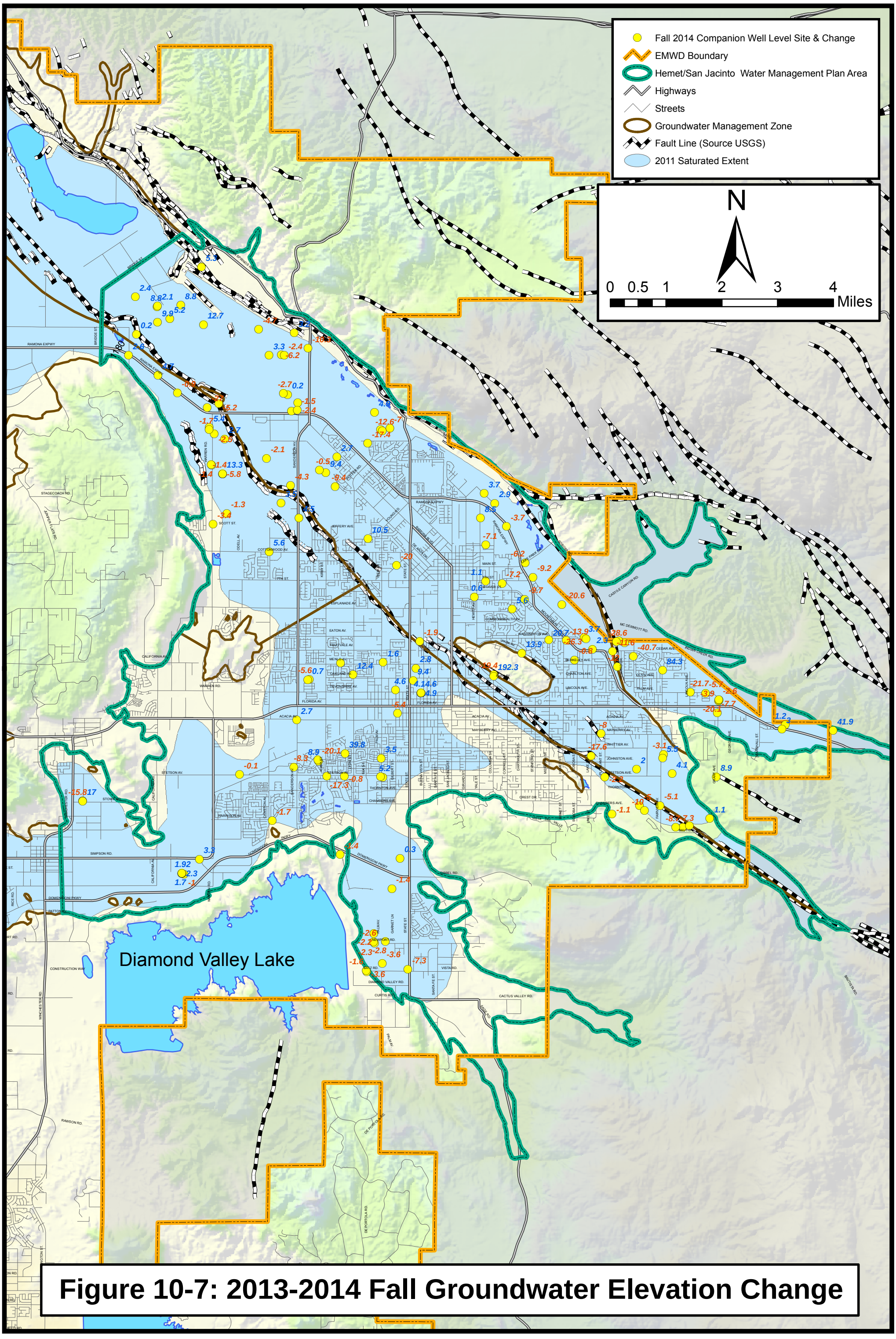


Figure 10-7: 2013-2014 Fall Groundwater Elevation Change

Water Quality Stiff Diagrams

TDS (mg/L)

- 0 - 500
- 500 - 750
- 750 - 1,000
- 1,000 - 1,500
- 1,500 - 3,000
- > 3,000

- EMWD Boundary
- Highways
- Streets
- Groundwater Management Zones
- Lakes
- Hemet/San Jacinto Water Management Plan Area

N

0 0.5 1 2 3 4 Miles

Diamond Valley Lake

Figure 10-8: 2014 Water Quality Stiff Diagrams with Cation-Anion Characteristics and TDS Concentrations

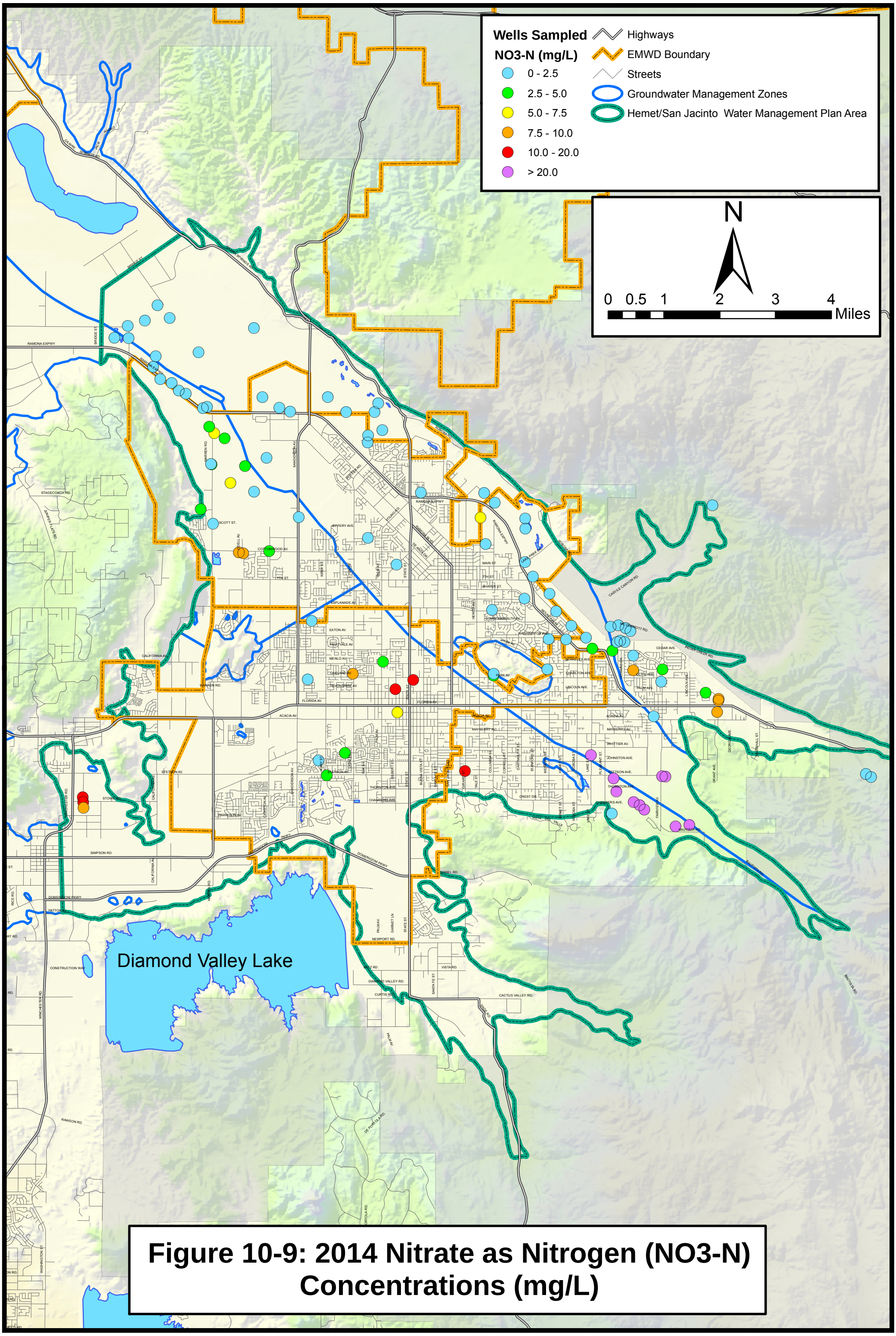


Figure 10-9: 2014 Nitrate as Nitrogen (NO3-N) Concentrations (mg/L)

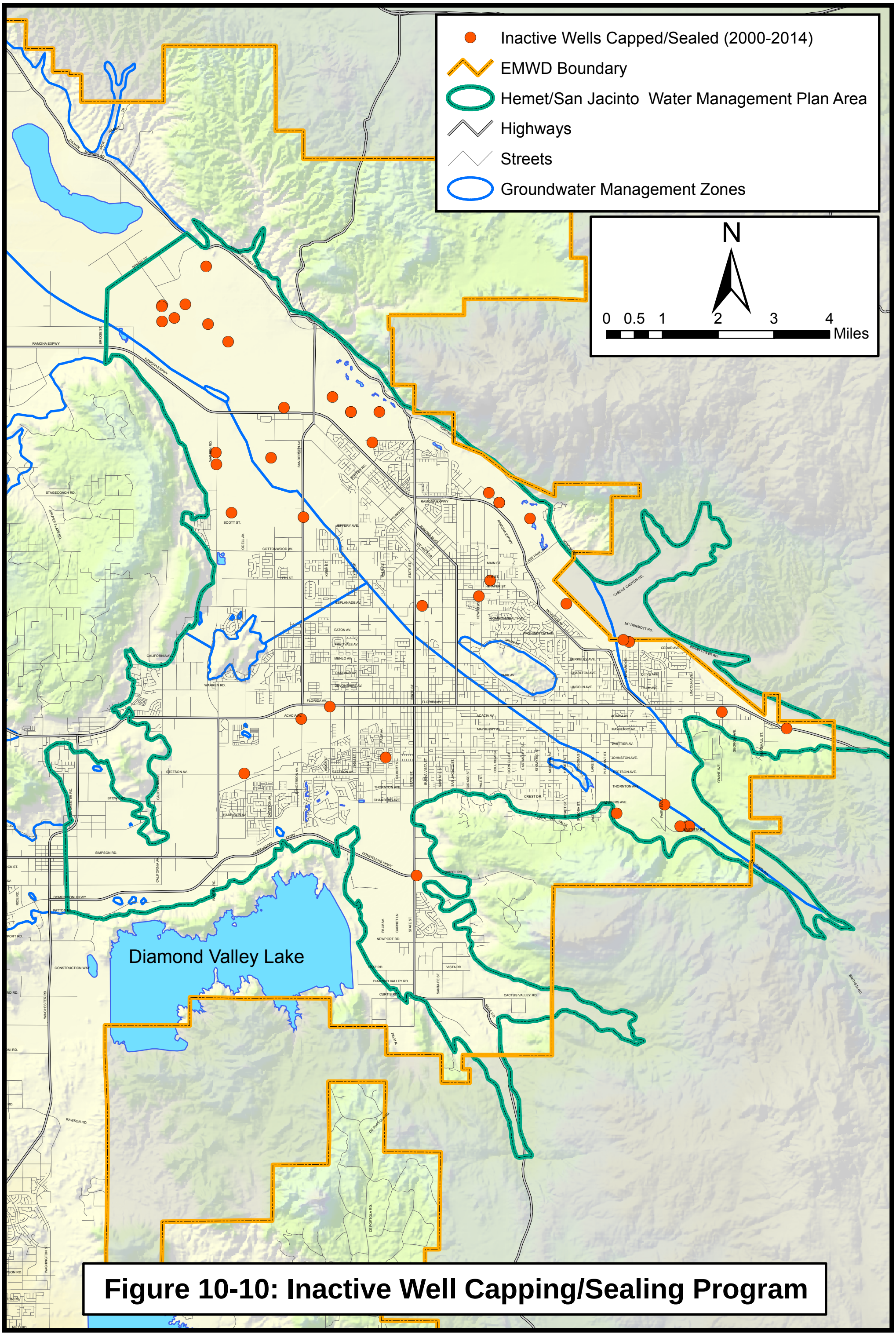

Inactive Wells Capped/Sealed (2000-2014)
EMWD Boundary
Hemet/San Jacinto Water Management Plan Area
Highways
Streets
Groundwater Management Zones
N
0 0.5 1 2 3 4
Miles
Diamond Valley Lake
RAMONA EXPWY
STAGECOACH RD.
SCOTT ST.
JEFFERY AVE.
COTTONWOOD AV.
7TH ST.
ESPLANADE AV.
EATON AV.
FRUITVALE AV.
MENLO AV.
OAKLAND AV.
DEVONSHIRE AV.
CALIFORNIA AV.
WARREN RD.
FLORIDA AV.
ACACIA AV.
STETSON AV.
STOWE RD.
HARRISON AV.
THORNTON AVE.
CHAMBERS AVE.
SIMPSON RD.
DOMENIGONI PKWY
PATTON AV.
CONSTRUCTION WAY
NEWPORT RD.
ORTZ RD.
DIAMOND VALLEY RD.
CURTIS RD.
DIBBEL RD.
VISTA RD.
CACTUS VALLEY RD.
SAGE RD.
RAWSON RD.
DE PORTOLA RD.
MAIN ST.
FIRST
SHAVER ST.
COMMONWEALTH AV.
WASHINGTON AVE.
PARK AV.
MAYBERRY AV.
WHITTIER AV.
JOHNSTON AVE.
CREST DR.
VISTA DEL VALLE
MC DERMOTT RD.
CASTILE CANYON RD.
INDIAN CREEK RD.
CEDAR AVE.
BERKELEY AVE.
CHARLTON AVE.
LINCOLN AVE.
PALM AVE.
OLIVE AVE.
BAUTISTA RD.
SOBOBA RD.
LAKE PARK DR.
YOUNG RD.
RAMONA BLVD.
DE ANZA DR.
SANDERSON AV.
WARREN RD.
BRIDGE ST.
SAN JACINTO ST.
STATE ST.
PALM AV.
GARNET LN
SANTA FE ST.
Figure 10-10: Inactive Well Capping/Sealing Program

Figure 10-11: Historical Groundwater Extraction, Imported Water Usage, Recycled Water Usage, Surface Water Usage, and Rainfall in the Management Area

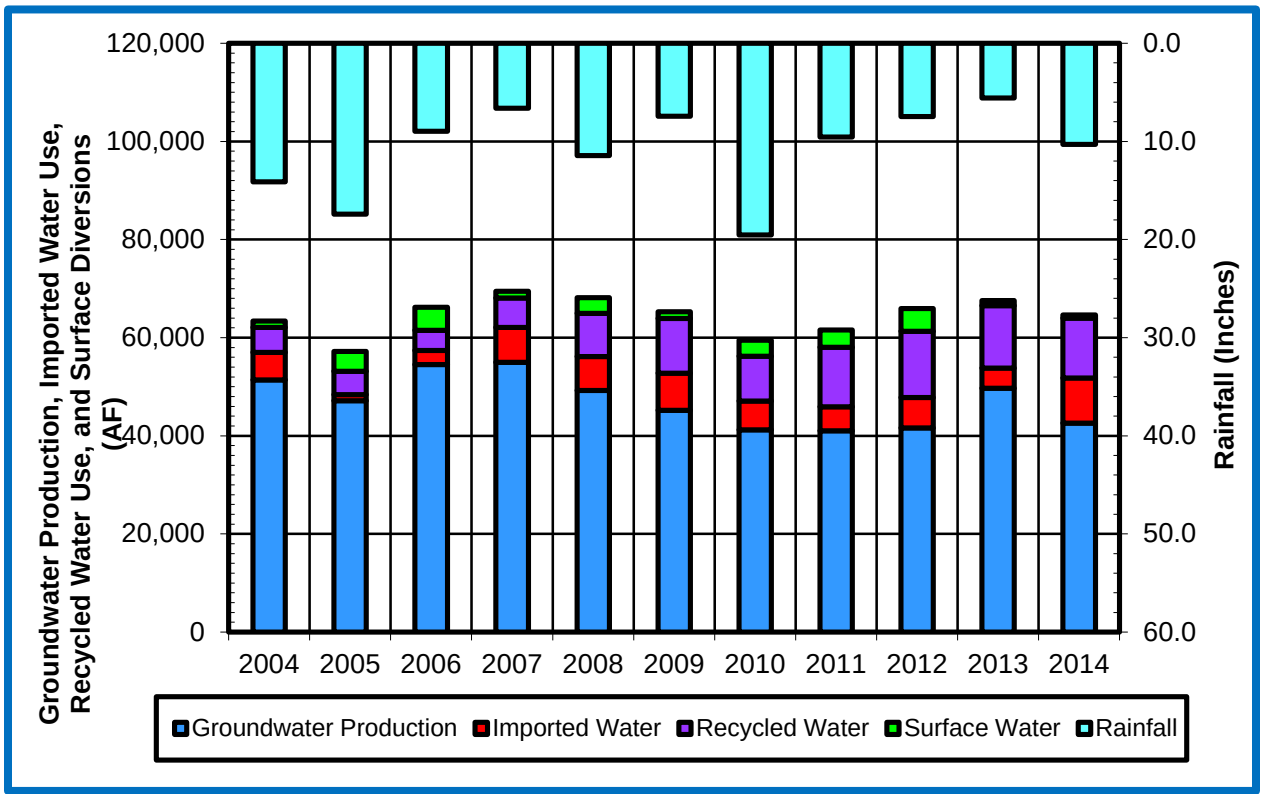
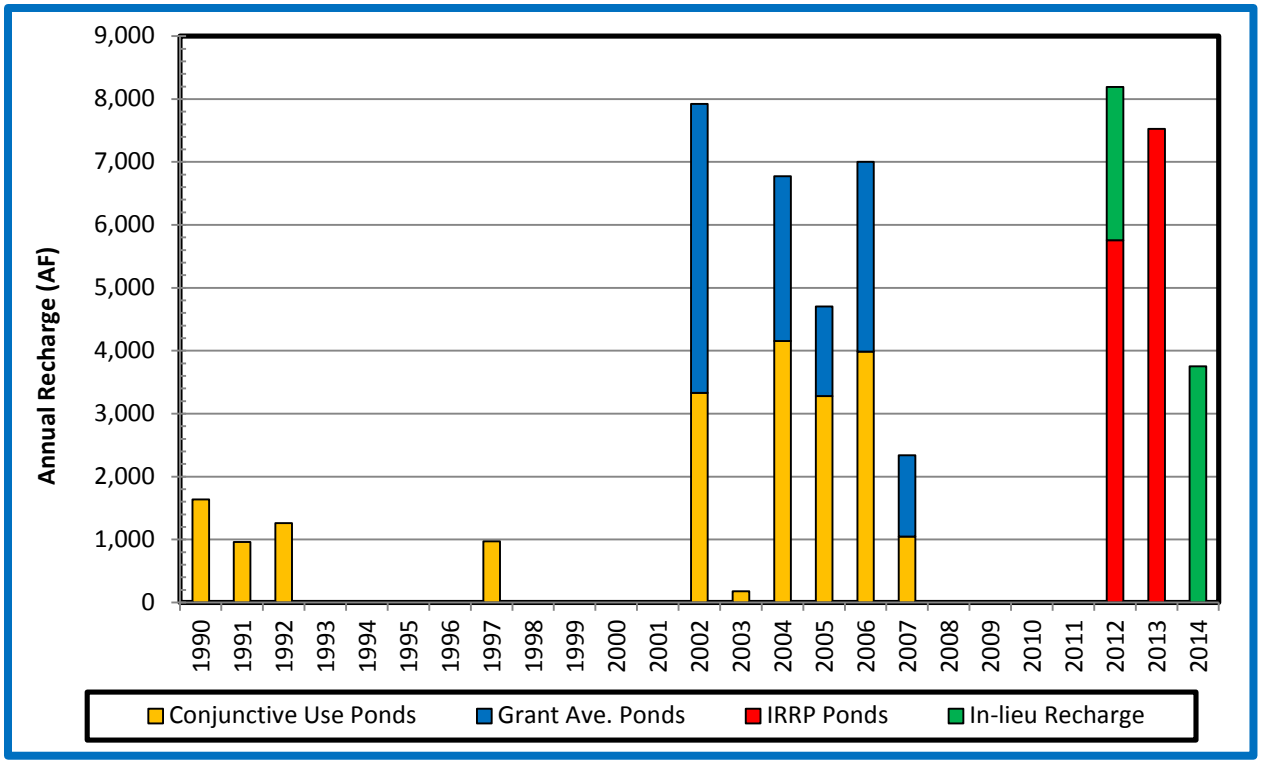


Figure 10-12: Historical Imported Water Recharge in the Management Area



Hemet-San Jacinto Watermaster

11 Appendices

11.1 Watermaster Board Meeting Minutes

11.2 Technical Advisory Committee Meeting Notes

11.3 Agreements

11.4 Resolutions

11.5 Task Orders

11.6 Independent Auditor's Report

11.7 References

11 Appendices

11.1 Watermaster Board Meeting Minutes

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11.7 References

AGENDA

HEMET – SAN JACINTO WATERMASTER
BOARD OF DIRECTORS

February 24, 2014
4:00 pm
2270 Trumble Road, Perris, CA 92750

CALL TO ORDER

PLEDGE OF ALLEGIANCE

ROLL CALL

I. PUBLIC COMMENTS

Any person may address the Board on any subject within the Watermaster's jurisdiction which is not on the agenda. However, any non-agenda matter that requires action will be referred to staff for a report and action at a subsequent Board meeting. Any person may also address the Board on any agenda matter at the time that matter is discussed, prior to Board action.

II. ADDITIONS/DELETIONS TO THE AGENDA

III. REPORTS

The following agenda items are reports. They are placed on the agenda to provide information to the Board and public. There is no action called for in these items.

A. Board Member Comments/Questions/Reports

B. Advisor Report

C. Treasurer Report

IV. CONSENT CALENDAR

A. Approval of Minutes – December 4, 2013 Regular Board Meeting.
Recommendation: Adopt a motion to approve item A on the Consent Calendar.

Consent Calendar items are expected to be routine and non-controversial and are to be acted upon by the Board at one time without discussion. If any Board member, staff member, or interested person requests that an item be removed from the Consent Calendar, it will be removed from the Consent Calendar for separate action.

V. ACTION ITEMS

The following items call for discussion and possible action by the Board. These items are placed on the Agenda so that the Board may discuss and possibly take action on the items if the Board desires.

A. 2013 Carry-Over Credits- Presentation and summary of carry-over credits as of December 31, 2013.
Recommendation: Receive and File.

B. 2014 Database Management Project Agreement with Spatial Wave Inc. – Presentation to summarize scope-of-work required to increase Watermaster database capabilities.
Recommendation: Adopt a motion to Approve and Authorize the Advisor to sign an Agreement with Spatial Wave Inc. for setup and maintenance of a groundwater database management system including contingencies for an amount not-to-exceed $15,900.00 in 2014; and for annual maintenance of the system for an amount not-to-exceed $6,000.00 per year.

VI. INFORMATIONAL ITEMS/CORRESPONDENCE –

A. Drought Status – Presentation by EMWD

B. Insurance Agreement with Edgewood Partners Insurance Center – Advisor report on new insurance agreement for general liability, public officials liability, and excess liability coverage for an amount not-to-exceed $3,200 per year.

C. Bookkeeping Agreement with Bell Bookkeeping Services – Advisor report on new agreement with Bell Bookkeeping Services for an amount not-to-exceed 6,000 per year.

D. Education and Training Budget – Overview of the 2014 Education and Training Budget item.

E. Water Budget Based Tiered Rate Implementation at Valencia Water Company (VWC) – Presentation by Mr. Matthew Dickens (Valencia Water Company) and Dr. Masoud Hoseyni (DCSE Inc.).

VII. CLOSED SESSION

A. RE: General Counsel Agreement, discussion regarding terms of the agreement.
California Government Code Section 54957.1 (a) (5)

B. RE: Advisor Agreement, discussion regarding terms of the agreement.
California Government Code Section 54957.1 (a) (5)

C. RE: Administrative Assistant Hiring Options, discussion regarding options for providing administrative support services.
California Government Code Section 54957.1 (a) (5)

VIII. ADJOURNMENT

Next Regular Board of Directors Meeting
April 28, 2014 at 4:00 pm. at:
Eastern Municipal Water District Board Room
2270 Trumble Road, Perris, CA 92750

Upon request, this agenda will be made available in appropriate alternative formats to persons with disabilities, as required by Section 202 of the Americans With Disabilities Act of 1990. Any person with a disability who requires a modification or accommodation in order to participate in a meeting should direct such a request to the Watermaster Board Secretary at 951-928-3777, Ext. 4221, least 48 hours before the meeting, if possible.

Pursuant to Government Code Section 54957.5, any writing that (a) is a public record; (b) relates to an agenda item for an open session of a regular meeting of the Watermaster Board of Directors; and (c) is distributed less than 72 hours prior to that meeting, will be made available for public inspection at the time the writing is distributed to the Board of Directors. Any such writing will be available for public inspection at Watermaster's principal office located at 2270 Trumble Road, Perris, CA 92750. In addition, such writing will also be posted on Watermaster's website.

Watermaster Advisor Report
February 24, 2014

EMWD Related Coordination/Activities:

- On-going coordination with EMWD for Watermaster related tasks.
- Several meetings with EMWD staff and executive management to discuss different activities between Watermaster and EMWD for 2014.
- EMWD staff began preparation of the Watermaster Annual Report. It was discovered that significant amount of spring 2013 groundwater levels may not have been measured and/or collected. EMWD Executive Management has taken corrective action regarding this issue; however the 2013 Annual Report will only include limited groundwater level data for the San Jacinto Upper Pressure subbasin to the north of Main Street. This data gap is not expected to cause any hindrance for the long-term evaluation of the management area.
- On February 19, 2014, Governor Brown and legislative leaders announced a $687 million plan to provide immediate help to drought-stricken communities. The plan goes to the Legislature. Also, on January 31, 2013, Department of Water Resources (DWR) declared a 0% allocation for the State Water Project (SWP) system. By comparison, 2013 which was considered the driest year since 1850 allocation had an allocation of 35%, and 2012 allocation was 65%. MWD will not deliver SWP Water to EMWD for recharge during 2014. EMWD will provide an update on drought conditions under item VI.A.

Budget/Accounting Related Activities:

- The third (final) set of invoices for the 2013 Administrative Assessments will be mailed in early March. All previous invoices have already been paid by all participants.
- With Assistance from EMWD staff and Bell Bookkeeping Services an RFP for Watermaster's Annual Financial Audit was prepared. Three firms were invited, and two proposals were received. The firm of Nigro & Nigro has been selected to perform the work. This work is currently estimated at $4,200 and will be paid through EMWD's Task Order Number 3. This Task Order will be terminated after completion of the 2013 Financial Audit.
- The Treasurer Report is provided under Item III-C.

Board & TAC Coordination/Activities:

- Technical Advisory Committee (TAC) had one meeting on February 10, 2014. Major discussion items were:
    - Verification of 2013 production data;
    - Data collection issues; and
    - Date Management Project options.

Special Projects:

- Five meters are replaces as part of the monitoring program managed by EMWD.
- Psomas, EMWD Consultant, has submitted their Cone Penetrometer Test (CPT) project report. Project findings will be presented to TAC and Watermaster Board at the next meeting.
- EMWD has completed construction of the monitoring wells.
- EMWD invited eight consulting firms to respond to the Groundwater Modeling Project RFP. Four firms submitted their proposals, and selection process is underway. EMWD is expected to make the final selection before the end of March.

Municipal/Private Pumpers Coordination/Activity:

- All agencies participated in the review and validation of the 2013 groundwater production data. This data will be used to calculate the final amount billed on the Administrative Assessment invoices. The 2013 carry-over credits, to be presented under item V.A, are also calculated based on this data.
- The carry-over credits for Class A and B participants are calculated for the first time and are based on production data collected by EMWD. This information is presented under item V.A.
- Mr. Glen Van Dam (Class B participant) request for inclusion of additional acreage and revision of his Base Production Rights has been discussed with TAC and information has been provided to the Legal Counsel for legal advice in this issue.

Outreach/Grant Activity:

- Mr. Karl Johnson, Attorney for Soboba Tribe, has indicated that Soboba Council would like to meet with the Watermaster Ad-hoc Committee in mid to late April.
- Attended California Statewide Groundwater Elevation Monitoring Program (CASGEM) meeting conducted by DWR. Over 395 basins/subbasins represented by 124 agencies participate in this program. EMWD is the agency monitoring the San Jacinto watershed. No public supply wells are included in this monitoring effort. State is looking at providing some grant funding to the regions participating in this program.
- Attended Santa Margarita River Watermaster meeting on January 21, 2014.

Miscellaneous Activity:

- Legal Counsel and Advisor Selection Committees have discussed the legal counsel and advisor's contracts and will discuss these items at the closed session.
- Interviewed several candidates for the Executive Assistant position and will provide more information at the closed session.

- After several months of discussions with different insurance brokers, an insurance agreement with Edgewood Partners Insurance Center was developed (Item VI.B).
- An agreement with Bell Bookkeeping Services has been developed in an effort to start managing the Watermaster's accounting activities after the 2013 financial audit.
- EMWD is pursuing its local groundwater recharge project by acquiring a recharge property within the Hemet-San Jacinto Management Area.
- As part of the EMWD, LHMWD, and Soboba Tribe joint effort (Canyon Basin Operation Plan), 1990-2012 period will be used to determine the planning yield of the Canyon subbasin. EMWD, LHMWD, and Soboba Tribe are expected to develop trigger groundwater levels for the Canyon subbasin as part of this effort.
- LHMWD, Riverside County Flood Control, and Conservation District are jointly pursuing the environmental process for their Bautista Pond project.
- The water level at Lake Hemet is less than 50% of capacity and LHMWD has not been able to use the lake as a source of supply. As a result, LHMWD is looking at purchasing significant amount of water from EMWD in 2014.
- The City of Hemet is nearing completion on the rehabilitation of its Well No. 4 and Well No. 7. The City is continuing its evaluation of fluoride issues at Well No. 13 for the most practical and cost effective ways to use this well.
- The City of San Jacinto plans to hold a public hearing to discuss water rates that include cost recovery for related issues on March 4, 2014, at 6:30pm.

Hemet-San Jacinto
Watermaster
c/o EMWD • 2270 Trumble Road, Perris, CA 92570 • Telephone: (951) 928-3777 ext. 4338

Watermaster Board

Chair
Frank D. Gorman

Vice-Chair
Linda Krupa

Secretary-Treasurer
Philip E. Paule

Board Members
Mark Bartel
Bruce Scott

Board Alternates
Rick Hoffman
Scott Miller
Steven A. Pastor
Randy A. Record
Larry Smith

Advisor
Behrooz Mortazavi

Legal Counsel
Andrew Turner

To: Hemet-San Jacinto Watermaster Board of Directors

From: Board Treasurer

Date: February 24, 2014

The Board Treasurer has reviewed and approved the following account information:

Total Cash and Investments as of November 15, 2013		***$496,251.67***
Revenues for November 15, 2013 – January 31, 2014:		
LHWMD – 11-22-2013	$214,345.00	
Total Revenues	$214,345.00	
Payments for November 15, 2013 – January 31, 2014:		
Redwine and Sherrill – 11-20 & 12-09	$ 3,778.00	
Behrooz Mortazavi – 11-11 & 12-09	$ 38,132.35	
Lagerlof, Senecal – 12-19-2013	$ 3,390.00	
EMWD –11-11, 11-26 & 12-09	$ 30,252.78	
Soboba –11-26 & 12-19	$ 24,586.86	
Total Payments	$100,139.99	
Cash Flow for November 15, 2013 – January 31, 2014		***$114,205.01***
Other Income/Expense for November 15, 2013 – January 31, 2014:		
Savings Interest	$135.11	
Other Expense/Fees	$ 0.00	
Total Cash and Investments as of January 31, 2014		***$610,591.79***
Pending Receivables:		
	$0.00	
Total Pending Receivables		***$ 0.00***
Pending Payments:		
EMWD – 1-03, 1-06 & 1-27	$161,840.55	
Behrooz Mortazavi – 1-09-2014	$ 11,559.65	
Lagerlof and Senecal – 1-14-2014	$ 4,435.00	
Total Pending Payments		***$177,835.20***

2013 Budget Items	Allocations	Commitments (As of Jan. 31, 2014)
In-Lieu Program Agreement	$152,000	$ 158,849.37
Office Supplies and Other Dir. Cost (10% of EMWD/WM Agreement)	$16,850	$ 1.00
Legal Counsel Contract	$41,600	$ 37,069.00
Advisor Contract	$88,000	$ 74,966.40
~~Gravel Pit De-Silting~~ (See Board Approved Items for revised allocation)	~~$40,000~~	
Education and Training	$15,000	
EMWD/Watermaster Support Agreement:		
Administrative Assistance (EMWD Task Order No. 1)	$26,500	$ 17,797.17
~~Monitoring Program Support~~ (See Board Approved Items for revised allocation)	~~$112,000~~	
Financial Assistance (EMWD Task Order No. 3)	$30,000	$ 6,096.95
Additional/Revised Board Approved Items:		
Monitoring Program Support (EMWD Task Order No. 2)	$35,936	
Gravel Pit De-Silting (EMWD Task Order No. 4)	$54,000	$ 47,935.86
Cone Penetrometer Testing Project (EMWD Task Order No. 5)	$45,278	
TOTALS	**$505,164**	**$ 342,715.75**

Minutes
Hemet-San Jacinto Watermaster Board of Directors Meeting
Eastern Municipal Water District
December 4, 2013

The Watermaster Board of Directors met in Regular Session in the Board Room at EMWD Headquarters, 2270 Trumble Road, Perris, California, on Wednesday, December 4, 2013, at 4:06 p.m. The meeting was called to order by Chairman Gorman.

Pledge of Allegiance

The Pledge of Allegiance to the Flag of the United States was led by Chairman Gorman.

Board Members Present:	Frank Gorman, Chair Linda Krupa, Vice-Chair Mark Bartel Bruce Scott Rick Hoffman (Alternate)
Board Members Absent:	Phil Paule, Secretary Treasurer
Watermaster Staff Present:	Behrooz Mortazavi, Advisor Andrew Turner, Legal Counsel (Lagerlof, Senecal, Gosney, & Kruse) Thomas Bunn, Legal Counsel (Lagerlof, Senecal, Gosney, & Kruse)
EMWD Staff Present:	Ravi Ravishanker, Deputy General Manager; Charlie Bachmann, Assistant General Manager of Planning, Engineering and Construction; Brian Powell, Director of Planning; Irma Rodriguez, Administrative Assistant II
City of Hemet Staff Present:	Kris Jensen, Public Works Director
City of San Jacinto Staff Present:	Mike Emberton, Assistant City Manager
Lake Hemet Staff Present:	Tom Wagoner, General Manager
Soboba Tribe Staff Present:	Frank Coate
Others Present:	Dr. Kenneth Baerenklau, UC Riverside

I. PUBLIC COMMENT – *Speakers are requested to limit comments to 3 minutes.*

None

II. ADDITIONS/DELETIONS TO AGENDA

None

III. REPORTS

A. Board Member Comments/ Questions/ Reports

Chairman Gorman welcomed Legal Counsel Representatives, Mr. Andrew Turner and Mr. Thomas Bunn from Lagerlof, Senecal, Gosney & Krause. Mr. Turner stated his firm has over 60 years of experience within the water business and expressed his content to serve the Watermaster. Mr. Bunn stated he is looking forward in working together with the Watermaster towards required achievements.

B. Advisor Report

Mr. Mortazavi provided a summary of his written report. The second set of Administrative Assessment invoices were mailed to the agencies in mid-October and payments from all parties have been received; two meetings were held by TAC since the last Board meeting; TAC has reviewed several options for the 2014 budget and the recommended budget will be presented to the Board later at this meeting. TAC has also reviewed past Operation and Maintenance cost for Soboba Water recharge, and extraction costs provided by EMWD. All agencies have signed Phase I Agreement. Private Pumper, Mr. Glen Van Dam, is requesting more allocation which was not included in Stipulated Judgment. DWR has awarded approximately $34,500 funding for Ms. Dale Schafer's contract that will be ending in June 2014.

(See Attachment No. 1)

C. Treasurer Report

Mr. Mortazavi provided this report in Secretary/Treasurer Paule's absence. This report reflects activity from September 5, 2013 through November 15, 2013. Page one provides a description of all the revenues, payments, cash flow as well as pending receivables and payments. The second page shows the itemized commitments per 2013 budget allocations as of the closing date of the report, November 15, 2013.

Chairman Gorman questioned the balance of the Gravel Pit De-Silting, $31,371.72. Mr. Mortazavi stated another invoice is expected in the amount of approximately $16,000 and the total amount spent will be under the approved budget.

(See Attachment No. 2)

IV. CONSENT CALENDAR

Accept Motion and Second for Approval of Minute Order for Items IV.A. and IV.B.

A. Approval of Minutes – Sept 23, 2013 Regular Board Meeting

Motion: Krupa	Noes:
Seconded: Bartel	Abstain:
Ayes: Gorman, Scott	Absent: Paule

B. Approval of Minutes – October 25, 2013 Special Board Meeting

Motion: Krupa	Noes:
Seconded: Bartel	Abstain:
Ayes: Gorman, Scott	Absent: Paule

V. ACTION ITEMS

A. 2014 Annual Budget – 2014 Budget presentation and schedule for Administrative and Replenishment Assessments Invoicing

Mr. Mortazavi provided a presentation on the 2014 Budget explaining the purpose and use of different assessments: (1) Administrative Assessment which covers Administrative and Advisor's Activities; Billing Assessments; Plan implementation administration; and Project planning and reporting. (2) Replenishment Assessment funds used to acquire supplemental water to recharge the Management Area.

The goals of the 2014 budget would be to meet the Judgment requirements in the most cost effective manner in working with contractors and consultants, reducing the impact on EMWD resources, and decreasing the dependence on EMWD for financial and administrative support.

There are two proposed studies for 2014: 1) develop a groundwater model, which is a great tool for determining the safe-yield. The Stipulated Judgment is well defined for the first 5-6 years, and having a model would be best within the first 5 years of the operation of the organization. EMWD is moving towards developing a model, and Mr. Mortazavi recommends collaborating with their efforts. 2) increase the Watermaster data management capabilities, and reduce its current lengthy access process. This requires developing a limited mapping and data management capabilities.

Assumptions are the Carry-Over accounts which will be utilized to offset any excess production in 2014 and no Replenishment Assessment will be collected.

The proposed budget requires the Monitoring Program support to continue through EMWD but with a variation, transferring the data entry and reviewing responsibilities to the Watermaster. Groundwater model is a major part of this coming year's activity and needs to be coordinated with EMWD. The 2014 budget will also eliminate the financial and administrative support services provided by EMWD, therefore, having Watermaster directly take responsibility for these functions.

The Base Production Rights were determined by the Stipulated Judgment, since Watermaster was created in April 2013, the allocations needed to be split into two sections, May to December 2012 and January to April 2012. The actual 2012 productions data were used to calculate the production rights percentages for May to December 2013 and January to April 2014. The Stipulated Judgment doesn't require base production rights to be reduced by 10% until the end of the first 12 months. For 2014 there will be a 10% reduction only from May to December of 2014. The $50 AF Administrative Assessment is the only source of revenue for the Watermaster. TAC has given its recommendation to proceed with the information provided. Reasoning for providing in depth details are for Mr. Turner and Mr. Bunn who are the Legal Counsel, and also for some of the Board Members who had requested detail information.

Based on best production estimates for 2013, City of Hemet and San Jacinto will have additional water added to their Carry-Over account. EMWD and LHMWD will be required to purchase additional water or use their Carry-Over account to offset their excess production.

Estimated Administrative Assessment for 2014 is approximately $1.3M, funding available for the Board to use for 2014 budget. There will not be any replenishment

assessments for 2014, and it is anticipated for the agencies to use their Carry-Over accounts to offset any excess groundwater production.
EMWD submitted a proposal for diverse activities which includes: In-Lieu Program, Groundwater Model Development (being completed for the entire Watershed), Administrative Support and Soboba Gravel Pit Project, totaling $753,000.
The proposed 2014 Budget includes: In-Lieu Program Agreement; revised EMWD/Watermaster Support Service for Monitoring program (requires Watermaster to take responsibility for data entry and review); Soboba Gravel Pit Project, only if Soboba Tribe will be willing to provide 50% of the cost; Organization Operation and Management by eliminating previous Task Orders through EMWD for Financial and Administrative support. The 2014 proposed budget includes hiring a part-time Executive Assistant working directly for the Watermaster details of which need to be discussed with Legal Counsel, Mr. Turner, before it is finalized. Currently EMWD staff is providing this service; EMWD proposed $50,000 providing 670 hours of support. The 2014 budget proposal is to attain 1,000 hours of administrative support for the same cost. The increased support time is needed for monitoring program data entry and also eliminating the financial support services by EMWD. The budget also includes an Education fund for Board Members to receive training or attend conferences. Database/mapping application and Groundwater Model Development are additional Projects/Activities included in the proposed budget. Anticipated revenue collected would be $1.3M and the proposed 2014 budget would be approximately $870,000.

Chairman Gorman questioned if Mr. Mortazavi is comfortable having the Administrative Assistant under his contract, since the Board does not want to have any employees; or if the position of the Administrative Assistant would be a contract through Mr. Mortazavi and insurances would be provided directly by the Administrative Assistant.

Mr. Mortazavi responded he doesn't feel comfortable having a third party in his contract. He would need further advice of the Legal Counsel; however, he would accommodate if there are no other choices acceptable to the Watermaster. Options may be to go through Temp Agencies where they would provide the services, but that option may not be a long-term option.

Chairman Gorman commented if approved, when the effective date would occur, January 1, 2014. Mr. Mortazavi stated due to the Rules and Regulations budgets need to be initiated in November and take effect January first of the following year. Mr. Turner stated there is no prevention from adopting a budget and then later changing it.

Chairman Gorman asked if the Board had any questions of the activities or projects presented from Mr. Mortazavi and TAC. Mr. Scott inquired if the database being developed would be accessible by the public, and if the Watermaster should consider having a website. Mr. Mortazavi responded the monitoring program has four major activities: (1) field work; (2) data analysis; (3) data entry and management; (4) drafting/generating annual reports for the court. In essence, he is recommending the Watermaster to taking the responsibility of one of these activities and rely on EMWD for the remaining activities related to the monitoring program. Chairman Gorman stated all the information would be accessible to the Advisor, if any Board Member requests the information, it would be provided by the Advisor. Chairman Gorman stated at this time a website is not necessary, but in the near future working towards one may be required, in the event the public inquires about Watermaster financial expenditures. Mr. Scott commented, the annual report has not yet been provided to the public, when completed,

where will it be posted? Mr. Bunn stated if there is a website, the agenda needs to be posted, but there is no legal requirement for the Watermaster to have a website. Although, this is the manner in which the public attain their information and there are other Watermaster's who do have their own website. Chairman Gorman suggested including a budget for the website in 2015 and stated LHMWD will need to consider having verbiage on their website commenting on their role with the Watermaster.

Chairman Gorman asked if Ms. Dale Schafer services will be required after her contract with DWR is depleted. Mr. Mortazavi stated if required, that cost would need to be included in the $50,000 item which is part of the 2014 Budget. This amount would include services for creating minutes, data entry, and financial administrative. Ms. Schafer's contract was about $50,000 per year for the TAC facilitation alone. The proposed budget may not be able to accommodate Ms. Schafer's services. Mr. Scott stated, the services provided by Ms. Schafer will decrease as time progresses and the budget for her services may decrease. Ms. Schafer was complimented on her valuable role providing objectivity during the Watermaster formation process. Mr. Mortazavi agreed and stated not only will the meetings occurrences decrease but also the items discussed will be more of a technical and not a legal nature.

Vice-Chair Krupa commented if the budget can be amended as needed. Mr. Turner confirmed it can be amended as needed. Mr. Mortazavi can come back in June 2014 with any revisions to the budget as needed.

Chairman Gorman commented he is very pleased with the proposed budget provided by Mr. Mortazavi, and asked him to come back to the Board if revisions are required at a later date.

Mr. Mortazavi is proposing to collect 2014 Administrative Assessment funds in the fiscal year of 2014/15. First invoices will be mailed out in July 2014 in order to allow entities to budget for these expenses; the final invoices will be in March of 2015 when the actual 2014 Production Data has been received.

(See attachment No. 3)

Motion to approve the proposed 2014 Watermaster Budget and authorize Advisor to initiate the proposed activities

Motion: Bartel	Noes:
Seconded: Scott	Abstain:
Ayes: Gorman, Krupa	Absent: Paule

VI. INFORMATIONAL ITEMS/CORRESPONDENCE

A. <u>Block Rate Water Budgets and Water Use Efficiency</u> – Dr. Kenneth Baerenklau

Dr. Baerenklau provided a presentation on Block Rate Water Budgets and Water Use Efficiency based on the previous study for EMWD when water budgets were implemented. There is a very strong conservation potential using water budgets, Irvine Ranch was an early adopter, estimating a 61% decrease in outdoor watering since implementation in the early 1990s. There may also be other reasons for this reduced consumption: economy; climate; personal preferences; technology reducing water use;

and changes with household stock (homes built with water conserving devices). Water Budgets are attractive to Water Districts because such rate structures accommodate concerns about equity and fairness. Also, there is renewed interest by California Utilities to use water budget rate structures, largely because of the 20/20 Plan conservation requirement. The EMWD goal was a twofold purpose, to promote conservation and maintain budget neutrality. Ten years of data from accounts with continuous use was collected from EMWD (6 years of flat rate and 4 years of blocked rate). EMWD case shows 18% reduction as a result of block rate water budget implementation.

(See Attachment No. 4)

Cone Penetrometer Testing Project (CPT) – Status Report

Mr. Mortazavi provided a status report for the CPT project. The tension and friction measurements in the soil were made at 18 locations. The information collected for each location was for depths of 80 to 100 feet. Once measurements are attained it is recorded by a computer which determines the type of soil at different depths. The field data shows silt layers in shallower depths on northern side of ponds and deeper depths on the southern side. Work was completed in mid-November 2013; Mr. Mortazavi will provide a complete report at a later meeting.

(See Attachment No. 5)

Chairman Gorman would like to thank the Board and all the staff members for the hard work completed this year and wished everyone a Happy Holiday this season.

VII. CLOSED SESSION

None

VIII. ADJOURNMENT

There being no further business to come before the Board; Chairman Gorman adjourned the meeting at 5:40 p.m., to be reconvened on Monday, February 24, 2014 at 4:00 pm. (Adjourned Regular Meeting).

Watermaster Advisor Report
December 4, 2013

EMWD Related Coordination/Activities:

- On-going coordination with EMWD for Watermaster related tasks.
- Facilities Use Agreement with EMWD is fully executed.
- The Cone Penetrometer Test (CPT) project effort is in progress.
- Have had several meetings with EMWD staff to discuss and finalize potential projects and activities between Watermaster and EMWD for 2014.

Budget/Accounting Related Activities:

- The second set of invoices for the estimated 50% of the 2013 Administrative Assessment were mailed in mid-October, and payments have been received from all parties.
- Several options for the 2014 Budget were evaluated by the Technical Advisory Committee (TAC), and the recommended budget is ready for Board action (Item V-A).
- A savings account with the Bank of Hemet has been established.
- A revised Treasurer Report is provided (Item III-C). Please provide feedback if you prefer a different format.

Board & TAC Coordination/Activities:

- Technical Advisory Committee (TAC) had two meetings on October 14, 2013, and November 13, 2013. Main items discussed were:
    - Review of different options for the 2014 budget
    - Review of past Operation and Maintenance (O&M) cost for Soboba Water recharge. EMWD has calculated the O&M cost for the previously recharged water to be $72.66 per Acre-foot (AF).
    - Review of Integrated Recharge and Recovery Program (IRRP) production cost. EMWD has calculated the well production and delivery cost from these wells to be between $142 and $155 per AF.

Special Projects:

- Fieldwork for the CPT was completed on November 18, 2013. A status report will be provided today under item VI-B. The draft report will be completed this month and the project findings will be presented to TAC in early 2014.
- Monitoring wells for the IRRP have been drilled and are substantially complete. This project is managed by EMWD and funded by Phase I Agreement.
- EMWD has awarded the IRRP 5-year Habitat Maintenance and Monitoring Contract ($308,500) to Dudek Engineering. This project is managed by EMWD and funded by Phase I Agreement.

Municipal/Private Pumpers Coordination/Activities:

- All agencies have signed the Phase I Agreement Amendment.
- On-going communication with a Class B participating private pumper who is requesting inclusion of additional acreage and revision of his Base Production Rights. More information will be provided to the Board after discussions with the Legal Counsel and TAC.

Outreach/Grant Activities:

- DWR has approved the Watermaster application for $34,574 funding. This will cover Ms. Shafer's costs as the TAC facilitator until June 2014. Beginning July 2014, Watermaster needs to cover the cost of TAC meeting coordination and preparation of the meeting minutes. This additional responsibility is considered as part of the recommended 2014 Budget.
- Have been participating at the SAWPA's One Water One Watershed effort. Next round of Prop 84 funding is expected to start in summer of 2014.
- Participated in Department of Water Resources (DWR) Strategic Planning meeting (September 30, 2013) and provided comments on DWR's California Water Plan.
- Attended Santa Margarita River Watermaster meeting on October 15, 2013.

Miscellaneous Activities:

- On-going communication with different Insurance Brokers to receive quotation for the Watermaster Insurance needs.
- EMWD has identified several sites for local groundwater recharge within the Hemet-San Jacinto Management Area. EMWD is evaluating and pursuing acquisition of these sites for its groundwater banking project.
- EMWD, LHMWD and Soboba Tribe have been working on a joint effort to develop an operating plan for the Canyon Basin. EMWD hosted a pre-proposal meeting (October 29, 2013) with potential consultants. The project is expected to begin in January of 2014, and will develop a coordinated plan for the utilization of the Canyon Basin.
- LHMWD has drilled Well No. 16 (expected to be in operation by now).
- City of San Jacinto is evaluating its current water rate and the impact of the Soboba Water recharge cost on the City's water rate.
- City of Hemet is using a new Supervisory Control and Data Acquisition (SCADA) system.
- City of Hemet's Well No.13 has high fluoride levels.

Hemet-San Jacinto
Watermaster
c/o EMWD • 2270 Trumble Road, Perris, CA 92570 • Telephone: (951) 928-3777 ext. 4338

Watermaster Board

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Larry Smith

Advisor
Behrooz Mortazavi

Legal Counsel
Andrew Turner

To: Hemet-San Jacinto Watermaster Board of Directors

From: Board Treasurer

Date: December 4, 2013

The Board Treasurer has reviewed and approved the following account information:

Total Cash and Investments as of September 05, 2013 $115,562.10

Revenues for September 5, 2013 – November 15, 2013:		
LHWMD – 09-17-2013	$107,173.00	
City of San Jacinto – 11-08-2013	$ 41,950.00	
City of Hemet – 10-31-2013	$ 69,025.00	
EMWD – 11-07-2013	$191,565.00	
Total Revenues	$409,713.00	
Payments for September 5, 2013 – November 15, 2013:		
Redwine and Sherrill – 9-24-2013	$ 3,484.00	
Behrooz Mortazavi – 9-24-2013	$11,547.50	
EMWD – 9-24-2013	$14,000.16	
Total Payments	$29,031.66	
Cash Flow for September 5, 2013 – November 15, 2013		***$380,681.34***
Other Income/Expense for September 5, 2013 - November 15, 2013:		
Savings Interest	$ 8.23	
Other Expense/Fees	$ 0.00	
Total Cash and Investments as of November 15, 2013		***$496,251.67***
Pending Receivables:		
LHMWD – 10-01-2013	$214,345.00	
Total Pending Receivables		***$214,345.00***
Pending Payments:		
Soboba – 10-31-2013	$ 8,022.72	
EMWD – 10-25-2013	$28,240.28	
Behrooz Mortazavi – 10-25-2013	$13,527.40	
Redwine and Sherrill – 10-30-2013	$ 3,606.50	
Total Pending Payments		***$53,396.90***

2013 Budget Items	Allocations	Commitments (As of Nov. 15, 2013)
In-Lieu Program Agreement	$152,000	
Office Supplies and Other Direct Cost (10% of EMWD/WM Agreement)	$16,850	$ 1.00
Legal Counsel Contract	$41,600	$ 29,072.50
Advisor Contract	$88,000	$ 38,801.80
~~Gravel Pit De-Silting~~ (See Board Approved Items for revised allocation)	~~$40,000~~	
Education and Training	$15,000	
EMWD/Watermaster Support Agreement:		
Administrative Assistance (EMWD Task Order No. 1)	$26,500	$ 13,541.49
~~Monitoring Program Support~~ (See Board Approved Items for revised allocation)	~~$112,000~~	
Financial Assistance (EMWD Task Order No. 3)	$30,000	$ 5,348.95
Additional/Revised Board Approved Items:		
Monitoring Program Support (EMWD Task Order No. 2)	$35,936	
Gravel Pit De-Silting (EMWD Task Order No. 4)	$54,000	$ 31,371.72
Cone Penetrometer Testing Project (EMWD Task Order No. 5)	$45,278	
TOTALS	**$505,164**	**$ 118,137.46**

2014 Budget

Watermaster Board Meeting
December 4, 2013

Purpose and Use of Assessments

Administrative Assessment:

- Administrative and Advisor's activities;
- Billing and assessment collection;
- Plan implementation administration; and
- Project planning and reporting.

Any Excess funds not used for the above expenditures can be used to purchase and recharge the groundwater.

Replenishment Assessment:

- Used to acquire supplemental water to recharge the Management Area.

Administrative Assessment Objectives

- Conduct monitoring and reporting to assist in the evaluation of the operational safe yield in the Management Area.
- Oversee the legal requirements/obligations.
- Provide a clearinghouse for the carry-over and replenishment accounts.
- Provide a forum for the parties involved in the Judgment.
- Conduct planning projects that would help in the evaluation of operational safe yield in the Management Area.

2014 Budget Goals

- Meet the Judgment mandates/requirements at the most cost effective manner.
  - Operation via contractors and consultants (not employees).
  - Use resources provided by EMWD and reduce impact(s) on EMWD resources by decreasing dependence on EMWD for Financial Administration and Administrative Support Services.
- Develop a groundwater model to assist in evaluating the operational safe yield of the groundwater basins within the Management Area.
- Increase the Watermaster data management capabilities.

2014 Budget Assumptions

- Carry-over accounts are used to offset any excess production in 2014 and no Replenishment Assessment will be collected.
- Administrative Assessment Revenues are estimated based on November 2012 – October 2013 productions.
- The In-lieu Agreement budget estimated based on 2013 cost.
- Coordinated efforts with EMWD:
  - Soboba Gravel Pit De-silting project. Budget set at twice the 2013 effort.
  - Monitoring Program Support, with reduced data entry and review effort.
  - The Groundwater Model Development effort.
  - Eliminate Financial Administration and Administrative Support Services.
- Watermaster will develop limited data mapping/evaluation capabilities.

Base Production Rights Calculations

	EMWD	LHMWD	City of Hemet	City of San Jacinto
Base Production Rights (AFY) Stipulated Judgment	10,869	11,063	6,320	4,031
2012 May-Dec /Total 2012 Productions	70.5%	77.5%	74.8%	75.1%
2012 Jan-April/Total 2012 Productions	29.5%	22.5%	25.2%	24.9%
Calculated Production Rights for May - Dec 2013 (AFY)	7,659	8,572	4,653	2,952
Annual Production Rights with 10% reduction (AFY)	9,782	9,957	5,688	3,628
Calculated Production Rights for January - April 2014 (AFY)	3,210	2,491	1,667	1,079
Calculated Production Rights for May – Dec 2014 (AFY) (w/ 10% reduction)	6,893	7,714	4,253	2,726
Total Production Rights for 2014 (AFY)	10,103	10,205	5,920	3,805

AFY= Acre-feet per Year

Estimated Replenishment for 2013

Agency	Modified BPR for May-Dec 2013 (AFY)	Est. Actual May-Dec 2013 Production (AF) Estimated as of Nov 1, 2013	Estimated 2013 Production Above/Below Adjusted BPR
City of Hemet	4,653	3,382	(1,271)
City of San Jacinto	2,952	2,171	(781)
EMWD	7,659	11,079	3419.977
LHMWD	8,572	9,546	974.052
Totals	**23,836**	**26,179**	**2,342.289**

AF = Acre-feet
Assmt. = Assessment
Est. = Estimated
AFY = Acre-feet per year
BPR = Base Production Rights
Prod. = Production

- The Cities of Hemet and San Jacinto can produce 900 AFY without any Admin. Assessment payment.

Estimated Administrative Assessments 2014

Agency	2014 Adjusted BPR (AFY)	Projected 2014 Production (AF) *	Est. Prod. Subject to Admin. Assmt. (AF) **	2014 Budget Admin. Assmt. ($)
City of Hemet	5,920	4,591	3,691	$184,550
City of San Jacinto	3,805	2,941	2,041	$102,030
EMWD	10,103	13,882	10,103	$505,139
LHMWD	10,205	12,603	10,205	$510,273
Totals	**30,033**	**34,017**	**26,040**	**$1,301,992**

AF = Acre-feet
Assmt. = Assessment
Est. = Estimated
AFY = Acre-feet per year
BPR = Base Production Rights
Prod. = Production

- 2014 Projections based on Jan-Oct 2013 actual productions and Nov-Dec 2012 productions.

** The Cities of Hemet and San Jacinto can produce 900 AFY without any Admin. Assessment payment.

Estimated Administrative Assessments by Agency - FY 2014-2015

Agency	Estimated Admin. Assmt. For 2014	Replenishment Assessment For 2013	Totals
City of Hemet	$184,550	$0	$184,550
City of San Jacinto	$102,030	$0	$102,030
EMWD	$505,139	$0	$505,139
LHMWD	$510,273	$0	$510,273
Totals	**$1,301,992**	**$0**	**$1,301,992**

Admin. = Administrative
Assmt. = Assessment

Proposed Estimates from EMWD

Budget Items	EMWD (Estimates)
In-Lieu Program Agreement	$ 160,000
Groundwater Model Development for Hemet - San Jacinto Management Area	$ 120,000
EMWD/Watermaster Support Services	
Admin. Support Services (Includes TAC Meeting Support after June 2014)	$ 50,000
Monitoring Program Support	$ 143,000
Soboba Gravel Pit Project	
Dewatering	$ 70,000
De-silting	$ 210,000
TOTALS	**$ 753,000**

Proposed 2014 Budget

Budget Items	Proposed Budget
In-Lieu Program Agreement	$160,000
EMWD/Watermaster Support Services	
Monitoring Program Support	$131,000
Soboba Gravel Pit Project	
Dewatering	$35,000
De-silting	$105,000
Organization Operation & Management	
Financial Support Services	$18,000
Legal Counsel Contract	$33,000
Advisor Contract	$166,000
Part-Time Executive Assistant Contract (Includes TAC Meeting Support and Data Entry)	$50,000
Insurance; Office Supplies & Other Direct Costs	$15,000
Education and Training	$15,000
Additional Projects/Activities	
Database/Mapping Application Development	$20,000
Groundwater Model Development	$120,000
Total - 2014 Proposed Budget	**$ 868,000**

Payment Schedule

- $ 325,500 (25% of total) Administrative Assessment will be invoiced by July 15, 2014.
- Another $651,000 (50% of total) payment will be invoiced by October 1, 2014.
- The remaining balance plus any over/under payment for 2014 assessments will be reconciled and invoiced by March 1, 2015.

Recommendation

- Approve the proposed 2014 Watermaster Budget.
- Authorize Watermaster Advisor to:
  - Initiate the proposed activities/projects.
  - Invoice participating agencies in accordance with the proposed schedule.

Block Rate Water Budgets and Water Use Efficiency

UC Riverside Water Science & Policy Center

Ken Baerenklau
Kurt Schwabe
Ariel Dinar

1/13

Introduction to water budgets

- Increasing block rate price structure
- Accounts for household characteristics
- Accounts for environmental conditions

→ Water prices vary across households and through time

2/13

UC RIVERSIDE University of California Water Science and Policy Center

Reasons to care about water budgets

- Potentially strong conservation incentive
  - Irvine Ranch : 61% decrease in per-acre outdoor watering since early 1990s
  - Confounding factors: economy, climate, preferences, technologies, housing stock
- Able to accommodate equity concerns
  - Prices remain low for "essential" uses of water
- Flexible, price-based demand management tool
  - Reflects increasing marginal cost of water supply→ promotes efficient use
- Renewed interest by CA utilities, largely due to "20x2020 Plan"
  - 2008: 14 CA utilities
  - 2011: 23 CA utilities (all new in So Cal)

3/13

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EMWD Water Pricing Study

EMWD's water budget rate structure:

- *Indoor* water use: $w_1 = (HHS \times PPA) \times DF + IV$
- *Outdoor* water use: $w_2 = (ET \times CF \times IA + OV) \times DF$
- *Excessive* water use: $w_3 = \frac{1}{2}(w_1 + w_2)$
- *Wasteful* water use: in excess of w_3

"Water budget" = $w_1 + w_2$

Prices escalate by block (as does supply cost)

Goal was to maintain budget balance (fiscal neutrality)

Main study objective: quantify the effect of water budget pricing on demand.

4/13

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Data: Sources and Types

- 13,565 single family residential accounts (~11% of total residential)
- Continuous usage records from Jan. 2003 – Sept. 2012
- From EMWD
  - Pricing, usage, household size, irrigated area, conservation requests, microclimate zone, latitude/longitude
- From other sources:
  - ET: EMWD/Hydropoint, CIMIS
  - Income, education: U.S. Bureaus of Census and Labor Statistics

5/13

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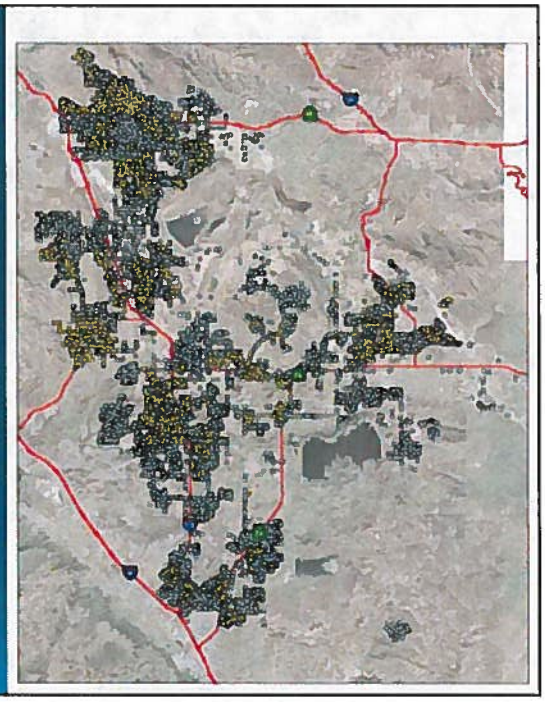
Spatial distribution of sample households

- Sample accounts
- All water service connections



6/13

Image credit: Kristian Barrett, EMWD

Data: Summary Statistics

Variable	2003	2004	2005	2006	2007	2008	2009		2010		2011	
Usage (CCF/month)	20.70	21.14	20.12	20.77	20.99	19.74	17.77		15.99		15.73	
ET (in/month)	4.67	4.87	4.59	4.73	4.87	4.81	4.70		4.55		4.85	
Nominal price ($/CCF)	1.43	1.46	1.53	1.62	1.69	1.85	1.93	1.27 2.33 4.17 7.63	2.10	1.43 2.61 4.68 8.56	2.05	1.44 2.64 4.73 8.65
Real price (2010$/CCF)	1.66	1.66	1.68	1.72	1.77	1.86	1.98	1.30 2.37 4.25 7.78	2.10	1.43 2.61 4.68 8.56	1.98	1.39 2.54 4.55 8.33
Budget (2010$/month)	316.26	317.45	318.05	319.20	320.78	316.70	311.07		309.96		309.44	

ET = evapotranspiration, CCF=hundred cubic feet

7/13

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Estimating the demand effect

- Identify major factors influencing household water demand
- Estimate a statistical model that accounts for these factors using data from January 2003 – December 2008
- Use the model to predict demand from April 2009 – Sept 2012
- Difference between actual and predicted demand is the water budget-induced demand effect

8/13

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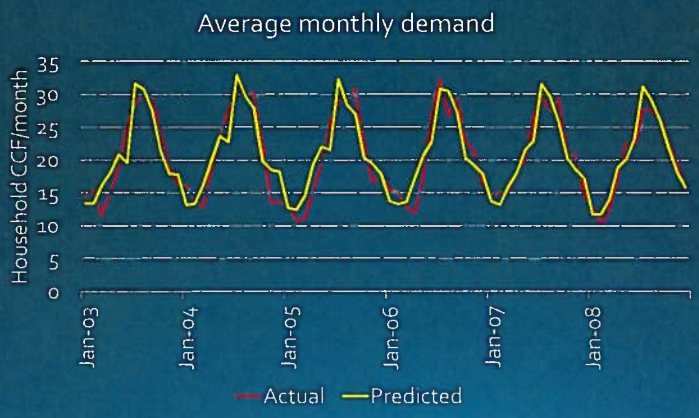
Assessing the fit of the model



9/13

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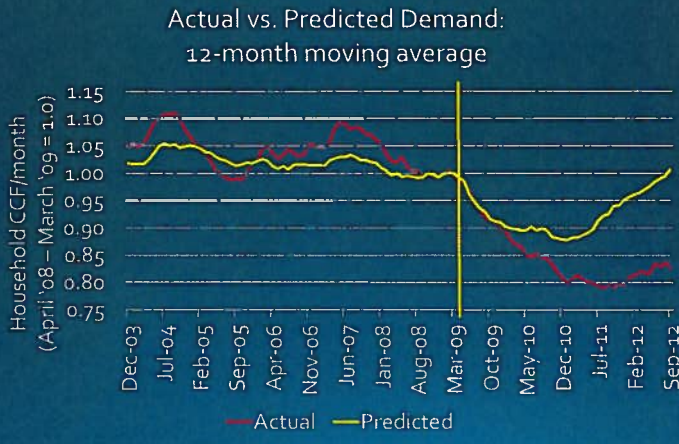
Visualizing the demand effect



10/13

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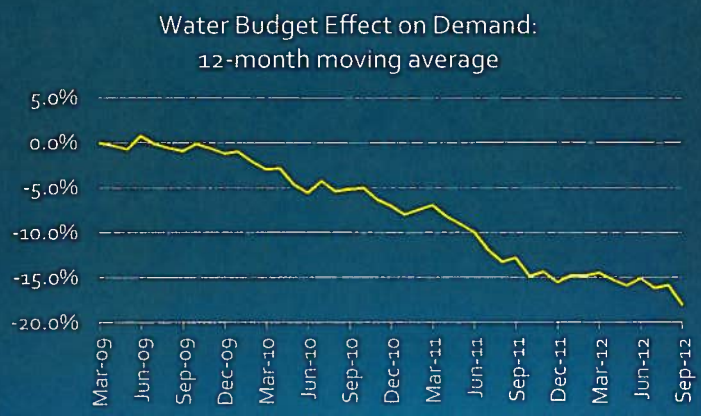
Quantifying the demand effect



11/13

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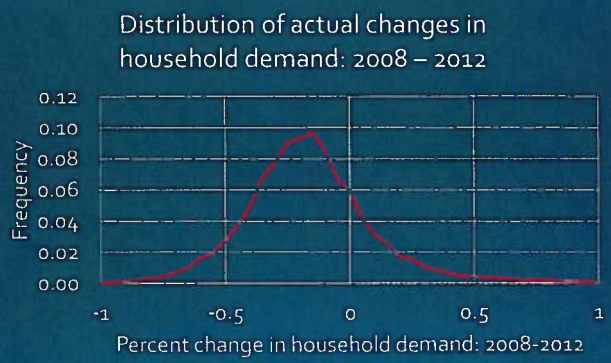
Any worrisome effects of water budgets?



Six percent of households reduced demand by more than 50%...

- Large, negative household income shocks
- High rate of neighborhood foreclosures

12/13

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Conclusions

- After 3 years, water budgets appear to have decreased demand by ~18%.
- Average prices rose less than 4% under water budgeting, but would have had to rise ~48% under flat rate pricing to achieve the same demand effect.
  → *Significant conservation potential while also addressing equity concerns.*

- Budget balance (fiscal neutrality) appears to have been achieved.

- Actual demand remains low even when predicted demand increases.
  → *Evidence of a price-induced "ratcheting effect": higher prices create new habits that become permanent.*

- Six percent of households reduced demand by more than 50% from 2008-12.
  → *Unlikely this was in response to the water budget rate structure.*

13/13

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Cone Penetrometer Testing Project

Field Work
Status Report

Watermaster Board Meeting
December 4, 2013

Field Work Findings

- Data collected from eighteen sampling points.
- All data locations were between 80 and 100 feet deep.
- Silt layers are underlying most of the IRRP pond area.
- Silt layers are shallower beneath the northern ponds compared to the southern ponds.

Carry-Over Credits as of December 2013

Hemet - San Jacinto Watermaster Board Meeting

February 24, 2014

Presentation Items

- The In-lieu program recharge quantities and 2013 project costs.
- Carry-over credits for Class A & B participants.
- Carry-over credits for participating agencies/cities.

In-lieu Program Recharge Quantities and Project Cost

In-Lieu Program Participants	Pre 2013 Rec. Wtr. Deliveries (AF)	2013 Total Rec. Wtr. Deliveries (AF)	2013 Deliveries In-lieu of GW Prod. (AF)	Est. 2013 Budget for In-lieu Program	Actual 2013 Cost for In-lieu Program
Scott Brothers Dairy	7,319	2,513	1,686	$58,700	$67,097
Rancho Casa Loma	13,293	3,639	2,299	$93,300	$91,752
Totals	20,612	6,152	3,985	$ 152,000	$ 158,849

AF = Acre-feet
GW = Groundwater
Prod. = Production
Rec. = Recycled
Wtr. = Water

Class A & B Participants

Carry-Over Credits

(All Values in AF)

	Participant	May-Dec 2013 Production	Allocation Set by Judgment	2012 May-Dec Percent Production	2013 May-Dec Allocations	Production Below Allocations	Production Above Allocations
Class A Participants	Bahan	702.7	1,398	100%	1,398	695	
	DeVries	45.0	116	69%	80	35	
	Gless	696.1	2,093	80%	1,678	982	
	Olsen	84.2	156	92%	144	60	
	Oostdam	54.8	259	75%	193	138	
	Record	0.2	193	76%	147	147	
	Sybrandy	450.8	1,454	97%	1,403	953	
	Ramsey	0.0	596	100%	596	596	
Class B Participants	Boersma	130.7	195	68%	132	1	
	Boruchin	0.0	266	100%	266	266	
	Curci	0.0	260	100%	260	260	
	Lauda	733.5	3,530	88%	3,104	2,370	
	Goodman	0.0	151	100%	151	151	
	Phillips	195.9	212	68%	144		52
	Michan	0.0	166	100%	166	166	
	Pastor	69.0	265	100%	265	196	
	Scott	97.0	1,755	71%	1,246	1,149	
	Van Dam	122.8	531	46%	245	122	
	Warren	100.7	442	81%	360	259	

Agency Carry-Over Accounts
Starting Balances - December 2012
(All Values in AF)

Agency	Pre 2012 Recharge Rights	2012 Unused SbT Imported Water *	Totals as of December 2012
City of Hemet	--	1,533.90	1,533.90
City of San Jacinto	--	978.25	978.25
EMWD	12,694	2,637.36	15,331.36
LHMWD	950	2,676.49	3,626.49
Totals	**13,644**	**7,826.00**	**21,470.00**

SbT. = Soboba Tribe

* = Soboba Tribe reported 1,852 AF of production in 2012 (352 AF above 1,500 AF)

Revised 2012 Unused Soboba Water
(All Values in AF)

Agency	2012 Total Imported Water	2012 Unused SbT Imported Water *	Revised 2012 Unused SbT Imported Water **
City of Hemet	1,602.89	1,533.90	1,540.17
City of San Jacinto	1,022.25	978.25	982.25
EMWD	2,755.99	2,637.36	2,648.15
LHMWD	2,796.88	2,676.49	2,687.44
Totals	**8,178.00**	**7,826.00**	**7,858.00**

* Soboba reported 1852 AF of production for 2012 in early 2013 (i.e 352 AF above the 1,500 AF production)

** Soboba revised its 2012 production to 1820 AF (i.e 320 AF above the 1,500 AF production)

2013 Unused Soboba Water
(All Values in AF)

Agency	2013 Total Imported Water	2013 Imported Water Used by SbT *	2013 Unused SbT Imported Water
City of Hemet	1,470.00	94.30	1,375.72
City of San Jacinto	937.50	60.10	877.38
EMWD	2,527.50	162.10	2,365.40
LHMWD	2,565.00	164.50	2,400.50
Totals	7,500.00	481.00	7,019.00

* Soboba Tribe reported 1,981 AF of production in 2013 (i.e. 481 AF above 1,500 AF)

2012 & 2013 Unused Soboba Water
(All Values in AF)

Agency	Revised 2012 Unused SbT Imported Water	2013 Unused SbT Imported Water	Total Unused SbT Imported Water as of December 2013
City of Hemet	1,540	1,376	2,916
City of San Jacinto	982	877	1,860
EMWD	2,648	2,365	5,014
LHMWD	2,687	2,400	5,088
Totals	7,858	7,019	14,877

2013 Groundwater Productions
(All Values in AF)

Agency	Modified BPR for May-Dec 2013	Actual May-Dec 2013 Productions	2013 Excess Productions Above Adjusted BPR	2013 Unused Adjusted BPR
City of Hemet	4,653	3,331		1,322
City of San Jacinto	2,952	2,194		758
EMWD	7,659	11,024	3364.822	0
LHMWD	8,572	9,879	1306.795	0
Totals	23,836	26,427	4,671.617	2,080.420

* Production values from EMWD Database

BPR = Base Production Rights

Status of Water Accounts
December 31, 2013
(All Values in AF)

Agency	Pre 2012 Recharge Rights	Unused SbT Imported Water	Unused Adjusted BPR	Excess Productions
City of Hemet	--	2,916	1,322	0
City of San Jacinto	--	1,860	758	0
EMWD	12,694	5,014	0	3,365
LHMWD	950	5,088	0	1,307
Totals	13,644	14,877	2,080	4,672

Agency Carry-Over Credits

December 31, 2013
(All Values in AF)

Agency	Pre 2012 Recharge Rights	Total Unused SbT Imported Water	Total Unused Adjusted BPR	Totals
City of Hemet		2,916	1,322	4,238
City of San Jacinto		1,860	758	2,618
EMWD	10,694	3,649	0	14,343
LHMWD	0	4,731	0	4,731
Totals	**10,694**	**13,155**	**2,080**	**25,930**

Recommendation

Receive and File the 2013 Carry-Over Credits Summary Data

EASTERN MUNICIPAL WATER DISTRICT
SINCE 1950

EASTERN MUNICIPAL WATER DISTRICT

Drought Status

Paul Jones II, P.E.
General Manager

Charlie Bachman,
Assistant General Manager Planning, Engineering & Construction

February 24, 2014

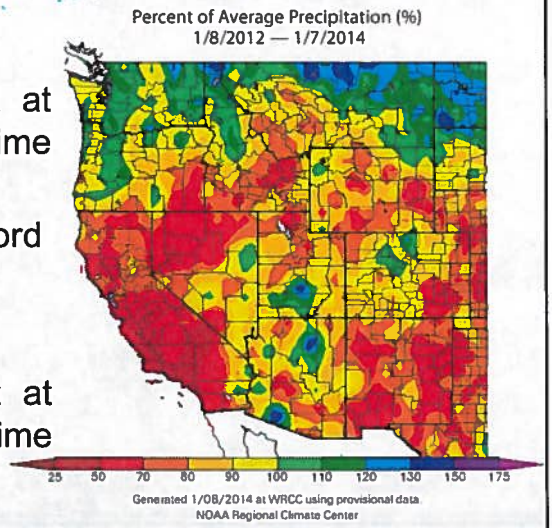
EASTERN MUNICIPAL WATER DISTRICT
SINCE 1950

EASTERN MUNICIPAL WATER DISTRICT

Water Supply Overview

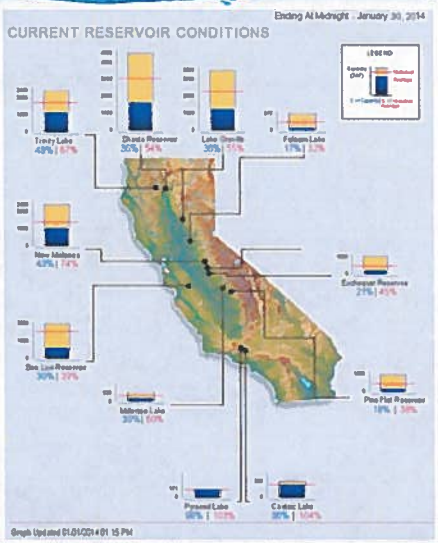
State of California

- First Snow Survey of 2014
  - Snowpack's statewide water content at about 20 percent of average for this time of year
  - Reading ties 2013 as the driest on record
- Second Snow Survey of 2014
  - Snowpack's statewide water content at only 12 percent of average for this time of year



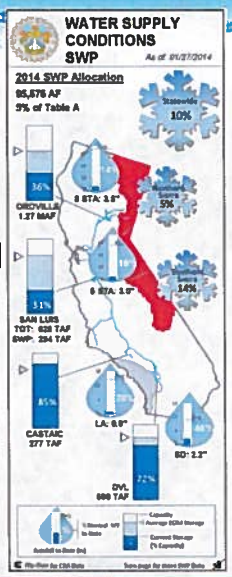
State of California (cont.)

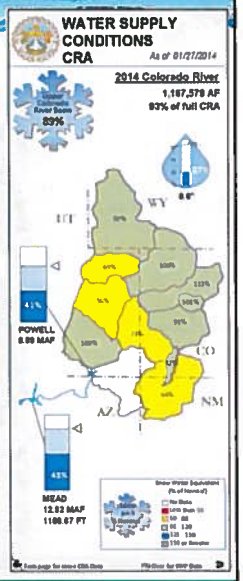
- SWP reservoirs low
  - Lake Oroville at 36 percent capacity
  - Shasta Lake at 36 percent capacity
  - San Luis Reservoir at 31 percent capacity
- DWR announced zero percent allocation of the slightly more than 4 million acre-feet of State Water Project (SWP) water requested for calendar year 2014
  - First time in history for zero allocation



Metropolitan Water District Water Supply

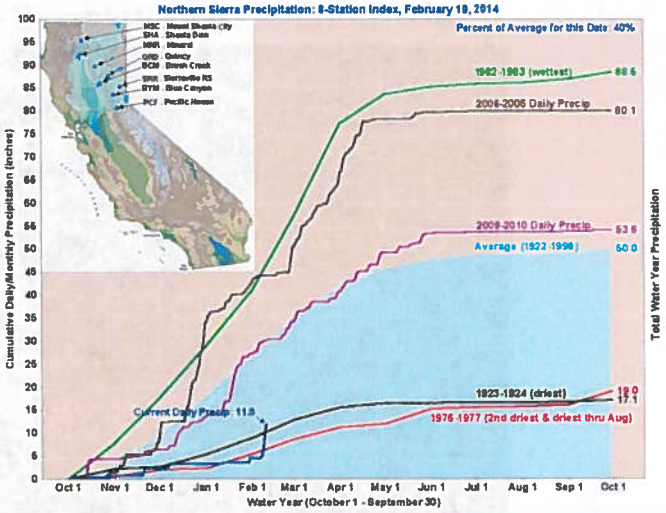
- State Water Project
  - Southern California reservoir levels high
- Colorado River Aqueduct
  - Current water year above average
  - Need to continue watching for potential shortage (2 yr supply if drought conditions)
- Storage
  - 358 TAF draw in 2013
  - 2013 ending storage balance is 2.37 MAF
- In MWD's service area
  - Dry conditions
  - High demand (1.97 MAF ~ vs. 1.7 budget)





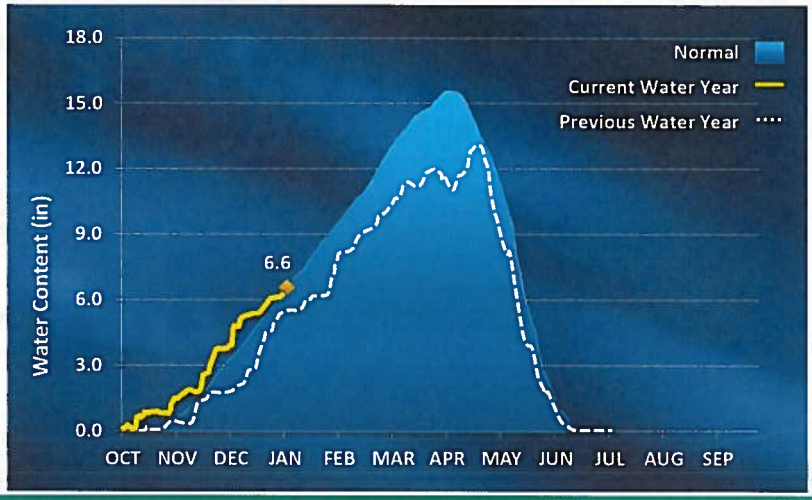
State Water Project

- Low precipitation
  - Percent of average as of February 10, 2014: 40%
- No significant precipitation forecast for this week



Colorado River Conditions

Upper Colorado Basin Snowpack



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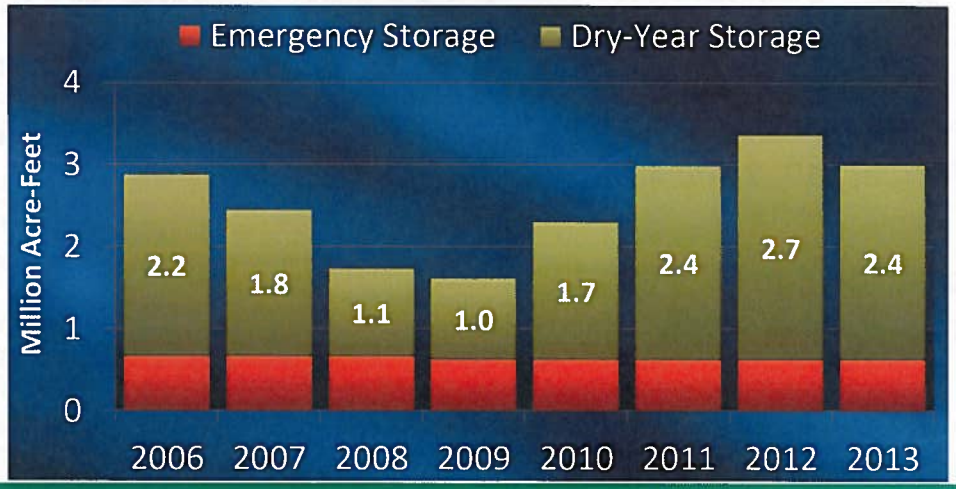
Storage Levels

MWD End of Year Storage Balance (2006-2013)



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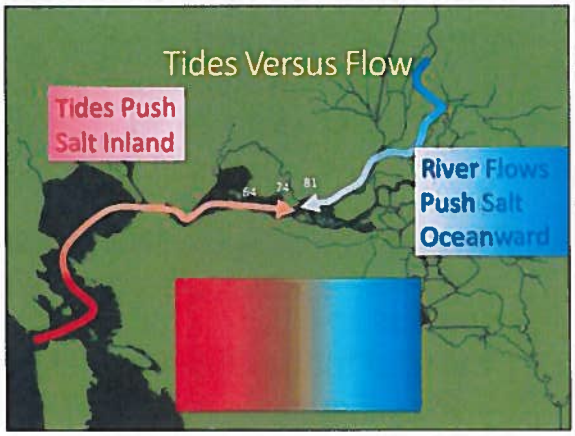
Metropolitan Water District Water Quality

- Water quality impacts
  - TDS
  - Taste and order
- Increased percentage of supply from CRA, higher TDS supply
- Increased salt water intrusion in Bay Delta
  - Current TDS 300ppm
  - Last drought, TDS increased to 700 ppm



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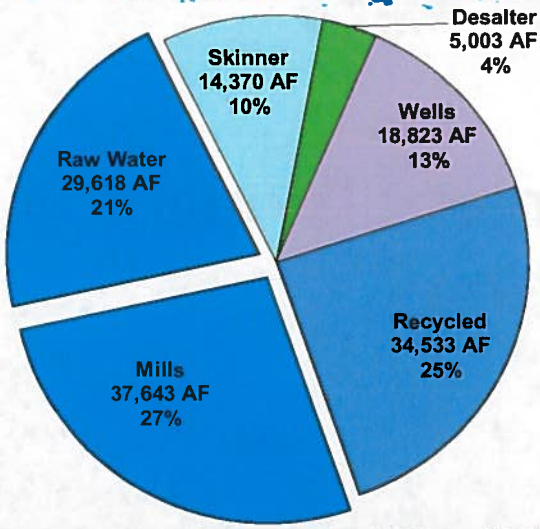
EMWD 2013 Water Supply Portfolio

36% of total supply is from SWP



Local
58,359 AF
42%

Imported
81,631 AF
58%

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EMWD Supply Issues

- Temporary curtailment of Soboba Settlement Agreement deliveries
  - Only CRA water available
    - Water quality does not met basin standards
    - Requires a new permit for surface discharge
    - Quagga mussels
- Skinner currently at 100 percent CRA water
  - Recycled water discharge will not meet the total dissolved solids limit
- Potential future impact to Hemet Water Filtration Plant
  - Permit requires modification to accept CRA water
- Recycled water demand high, supply limited

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EASTERN MUNICIPAL WATER DISTRICT
SINCE 1950

Current Drought Response Actions

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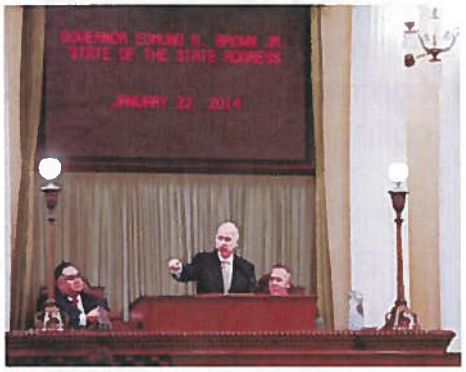
Statewide: Governor's Office

- Declared drought emergency January 17, 2014
- Calling for 20 percent voluntary reduction in use
- Released California's Final State Water Action Plan
- Created an Interagency Drought Task Force to meet weekly and review expected allocations, preparedness, and water conditions



Statewide: State Water Resources Control Board

- **California Department of Public Health letter dated January 24, 2014 to all water systems:**

  Alerts of current drought conditions, each agency should:

  – Evaluate water systems to ensure demands can be met
  – If deficits, then develop a contingency plan to mitigate problems
  – State has a 'Urban Drought Guidebook' (2008) to help develop plans
  – If the system is seriously deficient, then 'Declaration of Water Shortage Emergency' can be issued
  – Water Code lays out the actions to take when declaring an emergency

Statewide: Association of California Water Agencies

- **Statewide coordination**
  Working with members and others to coordinate messaging, produce tools to assist with communicating drought impacts/issues, and collaborate on activities.

  Current activities include:
  - Establishing external, statewide coordination group
  - Planning update briefings
  - Developing a "California Drought Update" for distribution
  - Developing a FAQ/Drought Overview for distribution

Statewide: Association of California Water Agencies

- **Information clearinghouse**
  Tracking and communicating impacts on local agencies and their actions in response.

  Current activities include:
  - Launched a special drought section on website
  - Developed an interactive map on website categorizing mandatory, voluntary, emergency/ shortage declarations, and agricultural impacts
  - Launched online survey of ACWA members
  - Performing extensive media response and outreach
  - Coordinating speakers bureau

Statewide: Other agencies

- **Mandatory Restrictions / Stage 1, 2, 3 or 5 Water Alert Declared**
  - City of Sacramento
  - City of Folsom
  - City of Santa Cruz
  - City of Arroyo Grande
  - City of Visalia
  - City of Modesto
  - City of Sierra Madre
  - City of Willits
  - City of Healdsburg
  - Cloverdale
  - Cambria Community Services District
  - Rancho Murrieta Community Services District
  - Rio Linda/Elverta Water District
  - Tuolumne Water District

Statewide: Other agencies (cont.)

- **Voluntary Measures Enacted**
  - **EMWD**
  - San Juan Water District
  - El Dorado Irrigation District
  - Marin Municipal Water District
  - Sacramento County Water Agency
  - City of Roseville
  - Alameda County Water District
  - Zone 7 Water Agency
  - Citrus Heights Water District
  - Fair Oaks Water District
  - **Upper San Gabriel Valley Municipal Water District**
  - City of West Sacramento
  - Elk Grove Water District
  - **City of Solvang**
  - Orange Vale Water Company
  - City of Paso Robles
  - Del Paso Manor Water District
  - City of Calistoga
  - Mid-Peninsula Water District
  - North Coast County Water District
  - **Olivenhain Municipal Water District**
  - Sacramento Suburban Water District
  - Santa Clara Valley Water District

Southern California agencies

Statewide: Other agencies (cont.)

- **Drought Emergency / Water Shortage Declared**
  - Mendocino County Board of Supervisors
  - Kern County Water Agency
  - Santa Barbara County Board of Supervisors
  - Brooktrails Township

Statewide: Other actions

- CalTrans putting drought messages on more than 700 stationary freeway light boards statewide
- Senator Feinstein introduced drought relief legislation

Metropolitan Water District of Southern California

- MWD Board actions:
  - Declaring formal "alert" that embraces the Governor's call to reduce use by 20 percent
  - Doubling conservation budget from $20 million to $40 million to provide more incentives
  - Exploring means to utilize MWD's resources to help address water supply challenges elsewhere in the state
- Requesting consistent agency response and messaging

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Other MWD Member Agencies

- Drought-related information is on websites for the following agencies:
  - EMWD
  - City of Anaheim
  - Central Basin
  - Foothill Municipal Water District
  - City of Glendale
  - Inland Empire Utilities Agency
  - Las Virgenes Municipal Water District
  - City of Pasadena
  - Municipal Water District of Orange County
  - San Diego County Water Authority
  - City of Santa Monica
  - Upper San Gabriel Valley Water District
  - Western Municipal Water District

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Other Western Riverside Local Agencies

- Western Municipal Water District
  - Website home page banner about dry conditions links to the Save Our Water website
- Rancho California Water District
  - Posted news item called "California Water Conditions" on website home page
- Elsinore Valley Municipal Water District
  - Posted news item called "Governor Declares Drought, Calls for Voluntary Water Use Reduction" on website home page

EMWD Wholesale Customers

- City of Hemet
  - Bill messaging and website post asking people to conserve and highlighting the bewaterwise website
- City of Perris
  - No response
- City of San Jacinto
  - Discussing internally
- Lake Hemet Municipal Water District
  - Discussing internally; planning water conservation stuffers into bill statements for the next few weeks/months
- Nuevo Water Company
  - Will match EMWD's drought messaging/actions

Cities in EMWD's Service Area

- City of Menifee
  - No response
- City of Moreno Valley
  - Working with EMWD staff to coordinate messaging for cable channel, electronic newsletter, and website.
- City of Murrieta
  - Using EMWD's website banner for their website's banner message regarding the drought; links to EMWD water wise tips web page
- City of Temecula
  - Drought messaging on social media

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Water Conservation Programs

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Regional Rebates

- Funded through MWD
  - Available to entire MWD service area
- Details and applications at socalwatersmart.com
- Some additional funding available for EMWD retail connection

Regional Rebates, (cont.)

- Residential:
  - High Efficiency Clothes Washers ($85)
  - High Efficiency Toilets ($50 - $100)
  - Rotating Nozzles ($4)
  - Weather Based Irrigation Controllers ($80 or $25 per station)
  - Rain Barrels ($75)
  - Soil Moisture Sensors ($80 or $25 per station)
  - Turf Removal ($1 per square foot)

Regional Rebates, (cont.)

- Commercial:
  - High Efficiency Toilets ($50 - $100)
  - Rotating Nozzles ($4 - $13)
  - Weather Based Irrigation Controllers ($80 or $25 per station)
  - Rain Barrels ($75)
  - Soil Moisture Sensors ($80 or $25 per station)
  - Ultra Low Water/Zero Water Urinal ($200)

  PH-Cooling Tower Controller ($1,750)
  - Cooling Tower Conductivity Controller($625)
  - Dry Vacuum Pump - per 0.5 HP ($125)
  - Connectionless Food Steamers - per compartment ($485)
  - Ice Making Machines ($1,000)
  - Laminar Flow Restrictors ($10)
  - In-Stem Flow Regulator ($1)
  - Turf Removal ($1 per square foot)

MWD Water Savings Incentives Program

- Open to commercial, industrial, agricultural, institutional and large landscape customers
- Incentives paid based on water saved
  - $0.60 per 1,000 gallons saved per year, up to 10 years
  - Limited to 50% of eligible costs
- Eligible projects include:
  - Replacement of less water-efficient devices
  - Installation of water savings industrial or commercial equipment
  - Improvements to irrigation systems
- Information at bewaterwise.com

MWD Public Agency Landscape Program

- Offers enhanced paid up-front incentives for public agencies to install water-efficient landscape devices
- Eligible projects include:
  - Weather-based or Central Computer Irrigation Controller ($40 per station)
  - Soil Moisture Sensor Systems ($40 per station)
  - Large Rotary Nozzles ($13 per set)
  - Rotating Nozzles for pop-up spray heads ($6 each)
- Public agencies can also receive no-cost landscape audit
- Information at socalwatersmart.com

MWD Fitness Center Program

- High devise usage

Offers enhanced incentives for:

- High efficiency toilets ($300)
- Ultra Low and Zero Water Use Urinals ($500)
- Available for a limited time
- Information at socalwatersmart.com

EASTERN MUNICIPAL WATER DISTRICT

Questions, Discussion & Requested Items for Workshop #2

EASTERN MUNICIPAL WATER DISTRICT

Contact Information

Charles J. Bachmann
Assistant General Manager
Planning, Engineering & Construction

(951) 928-3777 ext. 4461

Paul D. Jones II, P.E.
General Manager

(951) 928-3777 ext. 6130

Water Budget Based Tiered Rate Implementation at VWC

Masoud Hoseyni (DCSE)
Matthew S. Dickens (VWC)

February 24, 2014

Overview

- Introduction
- Water Budget – What, Why, and When?
- How We Did It
- WB & UB Integration
- Outreach Program
- Q/A

Valencia Water Company (VWC)

Valencia Water Company (VWC)

- Serves a population of 117,000 residents in the Santa Clarita Valley, including Valencia, Stevenson Ranch, and portions of Newhall, Saugus and Castaic.
- Approximately 30,000 service connections with 350 miles of mainline
- Water source 50% groundwater and 50% imported state water
- 41 employees
- Regulated by CPUC

DCSE

- More than 25 years of water resources decision support systems development for Water Industry

What, Why, and When?

- *What is "Water Budget"?*
- *Why implement "Water Budget"?*
- *When Utility may implement "Water Budget"?*

What is "Water Budget"?

"Volumetric Allotment of Water to Customers based on Customer Specific Characteristics & Conservative Resource Standards to Promote Water Use Efficiency" ***[Ref: "Water Budget & Rate Structure: Innovative Management Tools", Mayer et.al., AWWA Journal, May 2008]***

Water Budget-Based Use Classification

- Efficient: 0-40%
- Base: 41-100%
- Inefficient: 101-150%
- Excessive: 151-200%
- Wasteful: 201%+

Consumption as % of Water Budget

Why Implement "Water Budget"?

- Utilities successfully implemented water budget-based program have realized:
  - *Stable Revenue stream*
  - *Decrease in residential water use by 24%*
  - *Decrease in landscape water use by 49%*
  - *Increased customer satisfaction and acceptance for water conservation*
  - *Decreased infrastructure/capacity requirements*
  - *Revenue source for conservation programs funded by inefficient/wasteful users*
  - *Ready to respond to drought emergencies*

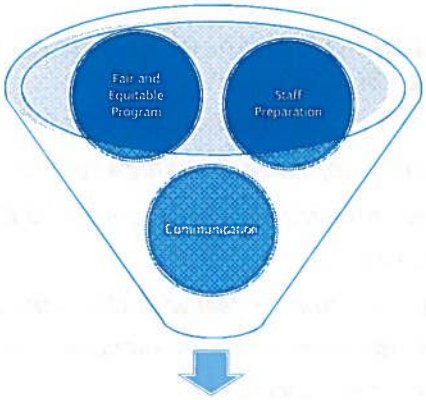
When Utility May Implement "Water Budget"?

- Water Budget implementation plan should meet the following requirements:
  - *Commitment, coordination and education at all levels*
  - *Customer acceptance that allocations are fair/equitable*
  - *Required infrastructure (e.g., advanced Customer Information System, GIS, ...)*
  - *Sufficient staffing to deal with the initial customer inquiries (request for information, challenging the allocated budgets, request for variance, ...)*
  - *Time program implementation during the off peak season*

How We Did It

- Did our homework:
  - Literature Review of WB at Other Agencies
  - Pilot Study to Identify Strategy & Methodology
  - Obtain CPUC Approval
  - Perform High Touch Outreach
- Application Development – Flexible & User Friendly
  - UB Integration
  - GIS Integration
- Shadow Billing for One Year
- Go Live in February 2011 (Residential)
- Go Live in January 2012 (Dedicated Irrigation)

Summary of Water SMART Allocation Program Philosophy



Program Acceptance

WB Implementation @ VWC

- 2008 – Water Budget Study & Pilot Study
- 2009/2010 – Water Budget Application Development
  - UB Integration
  - GIS Integration
- 2011/2012 – Water Budget Implementation
  - Residential (SF & MF) – 2011
  - Dedicated Irrigation Meter (DIM) – 2012
- 2014 – Apartments, Commercial & Industrial

WB Calculation

- ***WB Allocation = Indoor Use + Outdoor Use***
  - *Indoor Use*
    - *Single Family Home*
    - *Multifamily Homes*
    - *Commercial, Industrial & Institutional*
  - *Outdoor – Irrigation/Landscape*

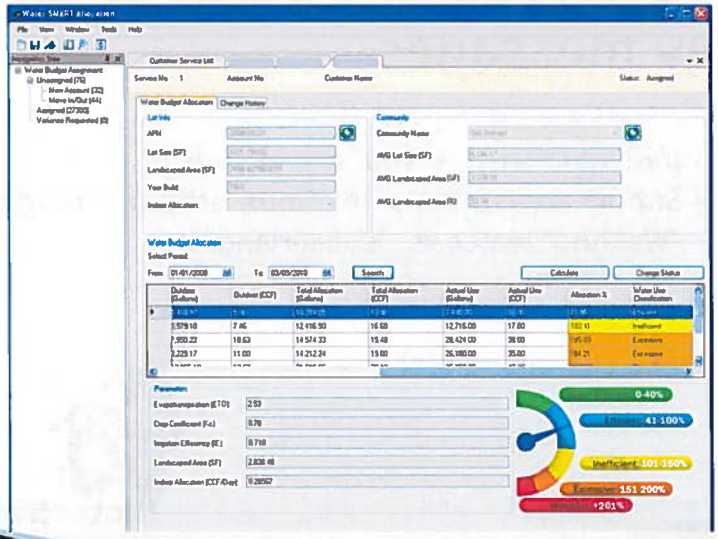
WB and UB Integration

- *WB Needs Meter Read Data from UB*
  - *Start date*
  - *End Date*
  - *Consumption*
  - *Customer Class (e.g., Residential, Irrigation, Commercial)*
- *UB Needs WB Allocations for Each Meter Read*
  - *WB Allocations*
  - *WB Based Tiers for each Meter Read*
  - *Stand-Alone Application Integrated with UB?*

WB in UB, or Coexist?

- Where WB allocation is performed?
  - WB Calculations in UB
  - External WB Calculations
- Does UB Support Selected WB Calculation Methods?
  - Indoor (Fixed, Per Capita, etc.)
  - Outdoor (Dynamic ET, Fixed Avg. ET, etc.)
  - Flexibility to Use Different Methods
  - GIS Integration
- Do You Need a Customized Solution?
- Water Budget Upgrade & Support ($ & Time)?

WB Data Management Application



Outreach Program

Goals: *Customer acceptance as "fair and equitable"*
(Less than 5% variance requests)

Solution:

"High Touch"
Outreach Plan
in collaboration with
Customer Service

Focus groups = strategy and key messages

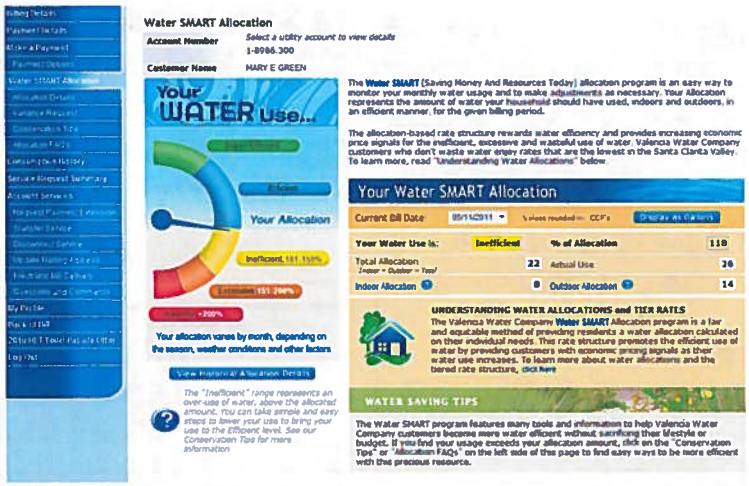
- Individualize it – "you" are in control
- Simple adjustments gets into "efficient" range
- "Wasting" water vs. "conserving" it.

Make customers feel.....

WaterSMART

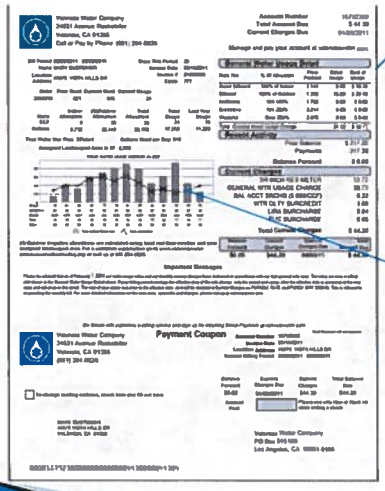
Phase 1
Direct Mailer #1 Front

Phase 2 Updates
Customer Specific WebAccounts



Phase 2 Updates
Customer Specific WebAccounts

Phase 2
Updated Bill with Tiered Rates



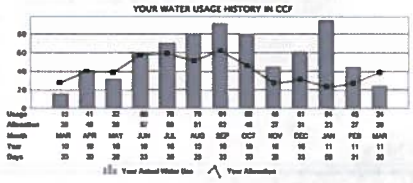
General Water Usage Detail

Rate Tier	% Of Allocation	Price Per/Unit	Billed Usage	Cost of Usage
Super Efficient	100% of Indoor	1.144	9.00	$ 10.30
Efficient	100% of Outdoor	1.362	15.00	$ 20.43
Inefficient	101-150%	1.703	0.00	$ 0.00
Excessive	151-200%	2.214	0.00	$ 0.00
Wasteful	Over 200%	2.878	0.00	$ 0.00
Total General Water Usage Charge			24.00	$ 30.73

Units	Indoor Allocation	(1)Outdoor Allocation	Total Allocation	Total Usage	Last Year Usage
CCF	9	30	39	24	15
Gallons	6,732	22,440	29,172	17,952	11,220

Your Water Use Was: Efficient Gallons Used per Day: 619

Assigned Landscaped Area in SF 8,533

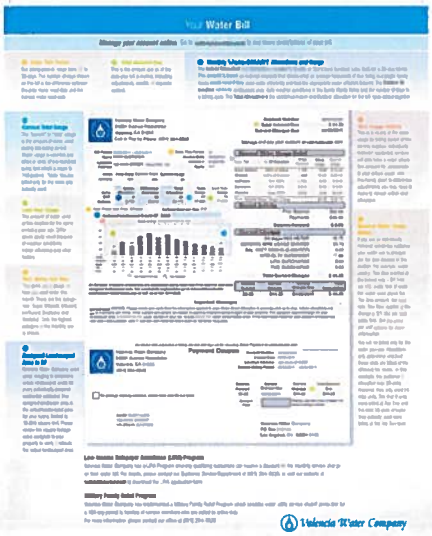


Continued Communication Efforts
Bill Insert – Front Side

2011
Annual Bill
Calculation
Mailer

Continued Communication Effort Bill Insert – Back Side

2011
Annual Bill
Calculation
Mailer

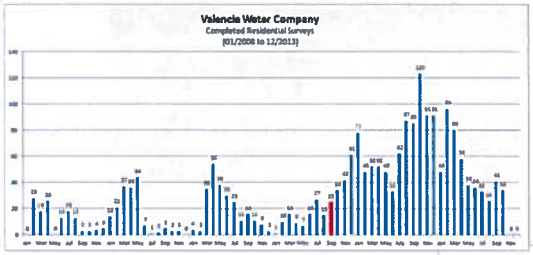


Water SMART Stats–2013

	2013
WS Inquiry Calls	406
WS Rate Complaints	0
WS Tier Names Compl	1
Indoor Variance	60
Outdoor Variance	15
CPUC Complaints	1
WS Full Water Audit	490

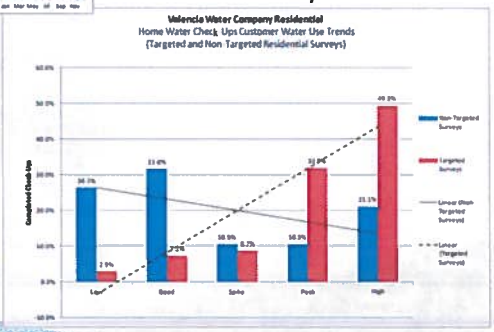
2010 had total of **30** total Water Smart Calls
2011 had total of **312** total Water Smart Calls
2012 had total of total **452** Water Smart Calls

Water Smart Stats 2013 – Residential Water Conservation Programs

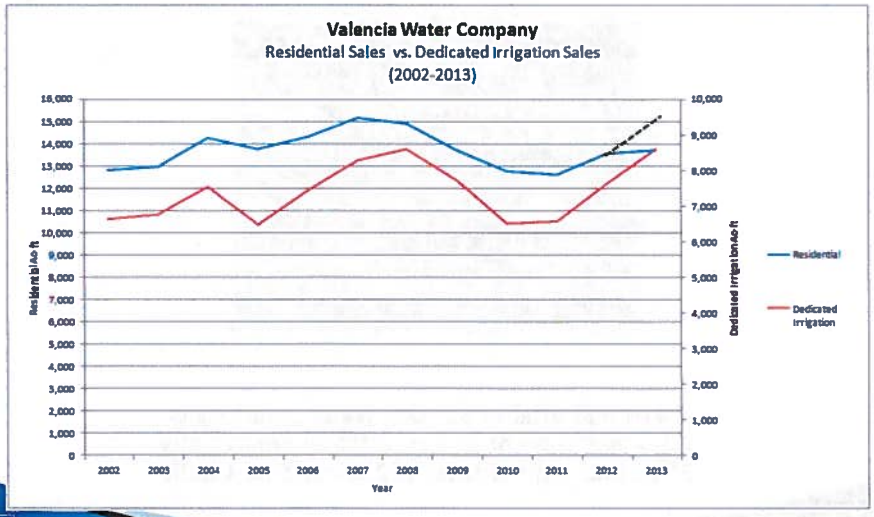


Increased Customer Participation Rates

Increased Cost-Effective Probability



Water Smart Stats 2013 – Reduction in Water Use



Water Smart Stats 2013 – Reduction in Water Use

Year	ET	Precipitation	Residential Meters	Consumption
2007	71.91"	8.7"	25,131	15,177
2012	68.34"	13.64"	26,080	13,561
2013	70.8"	6.28"	26,294	13,696

Customer Growth (2007 to 2013) = 4.5% Increase
Residential Consumption (2007 v. 2013) = 9.75% Decrease

Estimated Reduction in Water Use (2007 v. 2013) = 12-14%

Questions

- Matthew S. Dickens
- Valencia Water Company
- (661)295-6543
- mdickens@valenciawater.com

- Masoud Hoseyni
- DCSE, Inc.
- (949) 465-3407
- mhoseyni@dcse.com

Water SMART Allocation Program

AGENDA

HEMET – SAN JACINTO WATERMASTER
BOARD OF DIRECTORS

April 28, 2014
4:00 pm
2270 Trumble Road, Perris, CA 92750

CALL TO ORDER

PLEDGE OF ALLEGIANCE

ROLL CALL

I. PUBLIC COMMENTS

Any person may address the Board on any subject within the Watermaster's jurisdiction which is not on the agenda. However, any non-agenda matter that requires action will be referred to staff for a report and action at a subsequent Board meeting. Any person may also address the Board on any agenda matter at the time that matter is discussed, prior to Board action.

II. ADDITIONS/DELETIONS TO THE AGENDA

III. REPORTS

The following agenda items are reports. They are placed on the agenda to provide information to the Board and public. There is no action called for in these items.

A. Board Member Comments/Questions/Reports

B. Advisor Report

C. Treasurer Report

IV. CONSENT CALENDAR

A. Approval of Minutes – February 24, 2014 Regular Board Meeting.
Recommendation: Adopt a motion to approve item A on the Consent Calendar.

Consent Calendar items are expected to be routine and on-controversial and are to be acted upon by the Board at one time without discussion. If any Boar member, staff member, or interested person requests that an item be removed from the Consent Calendar, it will be removed from the Consent Calendar for separate action.

V. ACTION ITEMS

The following items call for discussion and possible action by the Board. These items are placed on the Agenda so that the Board may discuss and possibly take action on the items if the Board desires.

A. Approve 2014 Water Resources Monitoring Program Support Services Task Order with EMWD – Oral summary of the proposed Task Order.
Recommendation: Adopt a motion to Approve EMWD Water Resources Monitoring Support Services Task Order Number 6 for an amount not-to-exceed $131,000.

B. Approve 2014 Groundwater Management Tool Model Calibration Update Cost Sharing Agreement with EMWD – Presentation to summarize the groundwater simulation model development project and terms of the proposed cost sharing agreement.
Recommendation: Adopt a motion to Approve Groundwater Simulation Model Development Cost Sharing Agreement with EMWD for $120,000.

C. 2013 Revised Carry-over Credit Accounts – Presentation to update and correct previously presented Carry-over Credit Accounts as of December 31, 2013.
Recommendation: Receive and File Revised Carry-over Credit Accounts.

D. 2013 Annual Report – Presentation to summarize 2013 Annual Report and related activities.
Recommendation: Receive and File 2013 Annual Report with the Court.

VI. INFORMATIONAL ITEMS/CORRESPONDENCE –

A. Review of Cone Penetrometer Test (CPT) project results and findings – Presentation to summarize project results and findings.

B. 2014/2015 Replenishment Assessment Overview – Discussion on how to set Replenishment Assessment rate for extractions above Adjusted Base Production Rights in 2013.

VII. CLOSED SESSION

VIII. ADJOURNMENT

Next Regular Board of Directors Meeting
June 23, 2014 at 4:00 pm. at:
Eastern Municipal Water District Board Room
2270 Trumble Road, Perris, CA 92750

Upon request, this agenda will be made available in ap priate alternative formats to persons with disabilities, as required by Section 202 of the Americans With Disabilities Act of 1990. Any person with a disability who requires a

modification or accommodation in order to participate in a meeting should direct such a request to the Watermaster Executive Assistant at 714-707-4787, at least 48 hours before the meeting, if possible.

Pursuant to Government Code Section 54957.5, any writing that (a) is a public record; (b) relates to an agenda item for an open session of a regular meeting of the Watermaster Board of Directors; and (c) is distributed less than 72 hours prior to that meeting, will be made available for public inspection at the time the writing is distributed to the Board of Directors. Any such writing will be available for public inspection at Watermaster's office located at 2270 Trumble Road, Perris, CA 92750.

Watermaster Advisor Report
April 28, 2014

EMWD Related Coordination/Activities:

- On-going coordination with EMWD for Watermaster related tasks.
- Several meetings with EMWD staff to discuss MWD delivery issues, development of 2014 Water Resources Monitoring Support Task Order, and the Groundwater Model Development Cost Sharing Agreement. Task Order 6 and the Cost Sharing Agreement are included under items V.A. and V.B., respectively.
- EMWD staff has completed drafting the 2013 Annual Report. This report documents all Watermaster related activities in 2013 and is annually submitted to the court. Technical Advisory Committee was given opportunity to comment on the draft report, and their comments are included in the final report. A summary of this report is presented under item V.D.
- On April 18, 2014, California Department of Water Resources (DWR) increased allocation of the State Water Project (SWP) system to its contractors from 0% to 5%. By comparison, 2013 had an allocation of 35%, and 2012 allocation was 65%.

Budget/Accounting Related Activities:

- The third (final) set of invoices for the 2013 Administrative Assessments were mailed in early March. EMWD and the Cities of Hemet and San Jacinto have already paid their invoices.
- Watermaster's Annual Financial Audit is in process by the accounting firm of Nigro & Nigro. Their findings and recommendations will be presented at the next Board meeting. By completion of this work, the F Support work is now completely transferred from EMWD to the Watermaster.
- The Treasurer Report is provided under Item III-C.

Board & TAC Coordination/Activities:

- Technical Advisory Committee (TAC) had one meeting on April 14, 2014. Major discussion items were:
    - Review of Draft 2013 Annual Report;
    - Revision of the Carry-over credits;
    - Possibility of receiving recharge water from MWD via EMWD in-lieu delivery activities;
    - Review of completed Cone Penetrometer Test (CPT) project findings;
    - City of San Jacinto's interest in decentralized water recharge concept; and
    - Review of Groundwater model project status.

Special Projects:

- Selection of RMC Water & Environment engineering firm start of the Groundwater model development project.
- Start of the 2014 Database Management project with Spatial Wave.
- Psomas, EMWD Consultant, completed the CPT project. Project findings will be presented under item VI.A.

Municipal/Private Pumpers Coordination/Activity:

- All agencies have been consulted on the Draft 2013 Annual Report and have had an opportunity to comment on it.
- The carry-over credits for the Agencies, Class A and B participants are revised due to updates received from the Soboba Tribe and Legal Counsel, respectively. This information will be presented under item V.C.
- Mr. Glen Van Dam (Class B participant) who requested inclusion of additional acreage and revision of his Base Production Rights at February 24, 2014 Board meeting has not yet submitted his request in writing. No action has been taken on this issue since the last Board meeting.

Outreach/Grant Activity:

- The Soboba Ad-hoc Committee, Vice Chair Krupa and Mr. Scott, met with the Soboba Tribal Council on April 15, 2014. Watermaster activities during 2013 and the proposed projects for 2014 were reviewed with the at this meeting. A copy of the presentation provided to the Tribal Council is attached.
- The Expedited Drought Relief Act will be implemented as part of the Prop 84 grant funding. Proposal Solicitation Package (PSP) for this funding has been released by DWR. DWR is interested in funding projects that:

    - Provide immediate regional drought preparedness
    - Increase local water supply reliability
    - Assist in implementing conservation programs
    - Reduce water quality conflicts or ecosystem conflicts created by the drought

  Santa Ana Watershed Project Authority (SAWPA) which is in charge of distribution of Prop 84 funds has indicated they want local and regional agencies within the Santa Ana Watershed to focus on demand reduction and water use efficiency projects. This is an opportunity for the agencies within the Hemet-San Jacinto area to apply for grant funding for such projects. The Cities, LHMWD, and EMWD need to work with SAWPA directly if interested to pursue this round of Prop 84 grant funding. SAWPA has scheduled a workshop on May 13, 2014 at 2 pm.

Miscellaneous Activity:

- The sublease of office space from Elan Associates in Corona is complete and all Watermaster documents are transferred to this new location. The majority of Watermaster work is currently done from Corona.
- EMWD Staff have been very helpful in transitioning the administrative support work to the Watermaster, and Watermaster's administrative assistance is now provided by Ms. Michelle Mayorga from the Water Resources Engineers office in Corona.
- MWD has adopted its two year budget and rates. Their 2015 and 2016 projected rates for the Soboba Settlement water are $459 per acre-foot (AF) and $468/AF, respectively. Note that this rate does not include th recharge cost by EMWD (approximately $80/AF).
- EMWD, LHMWD, and Soboba Tribe joint Canyon Basin Operation Plan effort is on schedule. The Parties are developing trigger groundwater levels and identifying the key wells that they want to use as part of this effort.
- EMWD has been working with MWD to reduce demand on SWP system. EMWD is looking at taking Colorado River Water (CRW) at the Hemet Water Filtration Plant (HWFP) as part of this cooperative effort.
- EMWD's Well 28, located along Mountain Avenue in the City of San Jacinto has recently collapsed. EMWD has hired a consultant to prepare preliminary design documents for a new well (well 38) at the same location.
- LHMWD well 16 is complete and the electric meter is installed, LHMWD is also working with Riverside County Flood Control and Conservation District (RCFC) on their joint Little Lake storm water and stream water recharge project. This project is expected to have its bid opening in Spring of 2014.
- LHMWD and EMWD are working to connect well 92 to the raw water pipeline. Well 92 is one of the IRRP wells.
- The City of Hemet has completed their Well No. 16 rehabilitation work. The City is also trying to get a temporary connection with EMWD at Menlo Street.
- City of San Jacinto water rate surcharge will go in effect on May 1, 2014. City customers will see this change on their June bills.

Hemet/San Jacinto Watermaster Information

Ad-hoc Committee Meeting with Soboba Tribal Council

April 15, 2014

2013 Annual Demands
(By Management Zone/Source of Supply – AFY)

2013		EMWD	LHMWD	City of Hemet	City of San Jacinto	Private Property Owners	Soboba Tribe	Totals
Ground-water Management Zones	Canyon	4,107	4,511	0	0	1,216	1,069	10,903
	SJ Upper Pressure	9,275	7,860	674	2,964	6,319	605	27,697
	Hemet North	0	0	0	0	2,409	0	2,409
	Hemet South	445	566	3,865	0	3,812	0	8,688
Groundwater from IRRP Wells		0	0	0	0	0	0	0
Total Groundwater		13,827	12,937	4,539	2,964	13,756	1,674	49,697
Surface Water - SJ River		---	1,036	---	---	---	---	1,036
Imported Water Treated by EMWD		527	295	644	---	---	---	1,466
Imported Raw Water		892	2,663	---	---	---	---	3,555
Recycled Water		---	---	---	---	6,616	---	6,616
In-Lieu Recycled Water		---	---	---	---	6,152	---	6,152
Totals		15,246	16,931	5,183	2,964	26,524	1,674	68,522

2013 Budget/Activities

Description	Revised Budget	
In-Lieu Program Agreement		$ 152,000
EMWD/Watermaster Support Agreement		$ 92,436
Administrative Support	$ 26,500	
Financial Assistance	$ 30,000	
Monitoring Program Support	$ 35,936	
Office Supplies and Other Direct Cost		$ 16,850
Legal Counsel Contract		$ 41,600
Advisor Contract		$ 88,000
Gravel Pit De-silting		$ 54,000
Education and Training		$ 15,000
Cone Penetrometer Testing Project		$ 45,278
Total Budget		**$ 505,164**

2013 Unused Soboba Water
&
Carry-over Credits
(as of December 31, 2013)

Agency	2013 Imported Water	2013 Imported Water Used by SbT	2013 Unused SbT Imported Water
City of Hemet	1,470	34	1,436
City of San Jacinto	938	22	916
EMWD	2,528	59	2,469
LHMWD	2,565	60	2,505
Totals	**7,500**	**174**	**7,326**

SbT = Soboba Tribe

Agency	Pre 2012 Recharge Rights	Total Unused SbT Imported Water	Total Unused Adjusted BPR	Totals
City of Hemet		2,976	1,322	4,298
City of San Jacinto		1,898	758	2,656
EMWD	10,694	3,752	0	14,446
LHMWD	0	4,836	0	4,836
Totals	**10,694**	**13,462**	**2,080**	**26,237**

Class A & B Participants Carry-Over Credits

(All Values in AF)

	Participant	May-Dec 2013 Production	Allocation Set by Judgment	2013 Modified May-Dec Allocations	Production Below Allocations	Production Above Allocations
Class A Participants	Bahan	702.7	1,398	1,398	695	
	DeVries	45.0	116	80	35	
	Gless	696.1	2,093	1,678	982	
	Olsen	84.2	156	144	60	
	Oostdam	54.8	259	193	138	
	Record	0.2	193	147	147	
	Sybrandy	450.8	1,454	1,403	953	
	Ramsey	0.0	596	596	596	
Class B Participants	Boersma	130.7	195	132	1	
	Boruchin	0.0	266	266	266	
	Curci	0.0	260	260	260	
	Lauda	733.5	3,530	3,104	72	
	Goodman	0.0	151	151	151	
	Phillips	195.9	212	144		52
	Michan	0.0	166	166	166	
	Pastor	69.0	265	265	196	
	Scott	97.0	1,755	1,246		97
	Van Dam	122.8	531	245	122	
	Warren	100.7	442	360	259	

2013 Watermaster Related Meetings

Consultants, Attorneys, and Managers Committee Meetings:

- January 14, 2013
- February 11, 2013
- March 11, 2013
- April 8, 2013

Technical Advisory Committee Meetings:

- May 13, 2013
- June 17, 2013
- July 8, 2013
- August 12, 2013
- September 9, 2013
- October 14, 2013
- November 13, 2013

Watermaster Board Meetings:

- April 22, 2013
- May 29, 2013
- July 29, 2013
- September 23, 2013
- October 25, 2013 (Closed Session Only)
- December 4, 2013

2014 Proposed Budget/Activities

Budget Items	Proposed Budget
In-Lieu Program Agreement	$160,000
EMWD/Watermaster Support Services	
Monitoring Program Support	$131,000
Soboba Gravel Pit Project	
Dewatering	$35,000
De-silting	$105,000
Organization Operation & Management	
Financial Support Services	$18,000
Legal Counsel Contract	$33,000
Advisor Contract	$166,000
Part-Time Executive Assistant Contract (Includes TAC Meeting Support and Data Entry)	$50,000
Insurance; Office Supplies & Other Direct Costs	$15,000
Education and Training	$15,000
Additional Projects/Activities	
Database/Mapping Application Development	$20,000
Groundwater Model Development	$120,000
Total - 2014 Proposed Budget	**$ 868,000**

Questions?

Hemet-San Jacinto
Watermaster
c/o EMWD • 2270 Trumble Road, Perris, CA 92570 • Telephone: (951) 928-3777 ext. 4338

Watermaster Board

Chair
Frank D. Gorman

Vice-Chair
Linda Krupa

Secretary-Treasurer
Philip E. Paule

Board Members
Mark Bartel
Bruce Scott

Board Alternates
Rick Hoffman
Scott Miller
Steven A. Pastor
Randy A. Record
Larry Smith

Advisor
Behrooz Mortazavi

Legal Counsel
Andrew Turner

To: Hemet-San Jacinto Watermaster Board of Directors

From: Board Treasurer

Date: April 28, 2014

The Board Treasurer has reviewed and approved the following account information:

Total Cash and Investments as of January 31, 2014		***$610,591.79***
Revenues for January 31 – March 31, 2014:		
Total Revenues	$ 0	
Payments for January 31 – March 31, 2014:		
Lagerlof, Senecal, Gosney & Kruse 2/18/14	$ 4,435.00	
Water Resources Engineers 2/13/14 & 3/6/14	$ 24,312.38	
EMWD – 2/12/14 & 2/27/14	$ 162,053.55	
Total Payments	$ 190,800.93	
Cash Flow for January 31 – March 31, 2014		***$190,800.93***
Other Income/Expense for January 31 – March 31, 2014:		
Savings Interest	$ 103.34	
Other Expense/Fees	$ 0.00	
Total Cash and Investments as of March 31, 2014		***$419,894.20***
Pending Receivables:		
City of Hemet – 3/6/2014	$ 18,012.00	
City of San Jacinto - 3/6/14	$ 1,775.00	
EMWD – 3/6/2014	$ 95,602.00	
LHMWD – 3/6/2014	$107,082.00	
Total Pending Receivables		***$222,471.00***
Pending Payments:		
LSG & K (Legal Cousel) 3/13/14	$ 8,022.72	
EMWD – 3/3/14	$ 3,070.50	
Water Resources Engineers 3/2/14	$11,810.48	
Total Pending Payments		***$22,903.70***

2013 Budget Items	Allocations	Commitments (As of March 31, 2014)
In-Lieu Program Agreement	$152,000	$ 158,849.37
Office Supplies and Other Dir. Cost (10% of EMWD/WM Agrmt.)	$16,850	$ 1.00
Legal Counsel Contract	$41,600	$ 37,069.00
Advisor Contract	$88,000	$ 74,966.40
~~Gravel Pit De-Silting~~ (See Board Approved Items for revised allocation)	~~$40,000~~	
Education and Training	$15,000	
EMWD/Watermaster Support Agreement:		
Administrative Assistance (EMWD Task Order No. 1)	$26,500	$ 17,797.17
~~Monitoring Program Support~~ (See Board Approved Items for revised allocation)	~~$112,000~~	
Financial Assistance (EMWD Task Order No. 3)	$30,000	$ 6,469.45
Additional/Revised Board Approved Items:		
Monitoring Program Support (EMWD Task Order No. 2)	$35,936	
Gravel Pit De-Silting (EMWD Task Order No. 4)	$54,000	$ 47,935.86
Cone Penetrometer Testing Project (EMWD Task Order No. 5)	$45,278	
TOTALS	**$505,164**	**$ 343,088.25**

2014 Budget Items	Allocations	Commitments (As of March 31, 2014)
In-Lieu Program Agreement	$160,000	
EMWD/Watermaster Support Services		
Monitoring Program Support	$131,000	
Soboba Gravel Pit Project		
Dewatering	$35,000	
De-silting	$105,000	
Organization Operation & Management		
Financial Support Services	$18,000	
Legal Counsel Contract	$33,000	$2,835
Advisor Contract	$166,000	$37,294
Part-Time Executive Assistant Contract	$50,000	$6,278
Insurance; Office Supplies & Other Direct Costs	$15,000	
Education and Training	$15,000	
Additional Projects/Activities		
Database/Mapping Application Development	$20,000	
Groundwater Model Development	$120,000	
Total - 2014 Proposed Budget	**$868,000**	**$46,407**

Minutes
Hemet-San Jacinto Watermaster Board of Directors Meeting
Eastern Municipal Water District
February 24, 2014

The Watermaster Board of Directors met in Regular Session in the Board Room at EMWD Headquarters, 2270 Trumble Road, Perris, California, on Monday, February 24 2014, at 4:08 p.m. The meeting was called to order by Chairman Gorman.

Pledge of Allegiance

The Pledge of Allegiance to the Flag of the United States was led by Chairman Gorman.

Board Members Present:	Frank Gorman, Chair Linda Krupa, Vice-Chair Phil Paule, Secretary Treasurer Mark Bartel Bruce Scott
Board Alternate (s) Present:	Rick Hoffman
Watermaster Staff Present:	Behrooz Mortazavi, Advisor Thomas Bunn, Legal Counsel (Lagerlof, Senecal, Gosney, & Kruse)
EMWD Staff Present:	Charlie Bachmann, Assistant General Manager of Planning, Engineering and Construction; Brian Powell, Director of Planning; Irma Rodriguez, Administrative Assistant II; Kevin Pearson, Public Affairs Officer
City of San Jacinto Staff Present:	Mike Emberton, Assistant City Manager
Lake Hemet Staff Present:	Tom Wagoner, General Manager
Soboba Tribe Staff Present:	Frank Coate
Others Present:	Matthew Dickens, Valencia Water Company; Dr. Masoud Hoseyni, DCSE Inc.; Glen Van Dam, Van Dam Diary; Cynthia Walker, general public.

I. PUBLIC COMMENT – *Speakers are requested to limit comments to 3 minutes.*

Chairman Gorman opened the floor for public comments; Glen Van Dam requested to address the Board. Mr. Van Dam stated his family owns and operates the Van Dam Dairy in San Jacinto. In November 2012, he presented a requested to CAM, to include an additional property under Class B which was in escrow at that time. This 31-acre property was owned by

the Vanderham Family. Currently, the Van Dam property has 539 AF Class B rights, and the parcel to the west should have 131 AF of water rights. Mr. Van Dam stated, he was told by CAM he would be able to attain allocation as a Class B participant if he purchases the 31-acre parcel, CAM advised him to proceed and it would not be a problem to add the property at a later date. Escrow opened in February 2013, due to the health issues and different attorneys involved, escrow did not close until August 2013, months after stipulated judgment was finalized in April 2013. Mr. Van Dam is requesting the 31-acre parcel be added and an additional 131 AF be added to the current allocation that he has on the existing parcels.

Mr. Mortazavi stated he has been in contact with Mr. Van Dam and was advised by CAM to wait until escrow closed to move forward; unfortunately the escrow closed after the judgment took place. Mr. Mortazavi has reviewed information with Legal Counsel. Mr. Bunn stated, according to the judgment the Hemet-San Jacinto Watermaster Board has the authority to add property to Mr. Van Dam's holdings and water rights to accompany it as well, as long as Mr. Van Dam submits a written application and present to the Board at the next meeting.

Chairman Gorman requested Mr. Van Dam to submit a writ request to the Advisor and will move forward, Mr. Mortazavi will be in contact with Mr. Van Dam prior to the next board meeting.

II. ADDITIONS/DELETIONS TO AGENDA

None

III. REPORTS

A. Board Member Comments/ Questions/ Reports

B. Advisor Report

Mr. Mortazavi provided a report on recent activities in relation to EMWD. Staff has begun preparation for the annual report, as requested by the court. This would be the first report filed by the Watermaster. The 2013 annual report is expected to include limited groundwater level data for the San Jacinto Upper Pressure Sub-basin, due to problems in data gathering by EMWD. This data gap will not cause any hindrance for the long term evaluation for the management area; more data will be available for the 2014 monitoring program. MWD will not be delivering State Water Project (SWP) for recharge in 2014.

The third (final) set of invoices for 2013 will be mailed out in early March. An RFP for Watermaster's Annual Financial Audit was submitted, the accounting firm of Nigro & Nigro was selected to perform the work (contract has not been singed), estimated at $4,200, Advisor will be signing this contract.

Technical Advisory Committee (TAC) met only once on February 10, 2014.

EMWD consultant has completed and submitted the Cone Penetrometer Test (CPT) project report, will request EMWD to provide a presentation on this report to the board at the next meeting. Construction of the monitoring wells has been completed. EMWD invited eight consulting firms to provide proposals for the Groundwater Modeling Project, of which four submitted their proposals, proposals have been reviewe and will be presented before EMWD Board for action before the end of March.

All agencies reviewed and validated 2013 Groundwater Production Data; and calculations for Class A and B participants have been completed (judgment requires this).

Trying to schedule a meeting between the Soboba Tribe Council and the Watermaster Ad-hoc Committee, April 15th or 22nd may be potential dates.
Legal Counsel and Advisor Contracts will be discussed in today's closed session. Interviewed several candidates for the Executive Assistant, more information will be provided during the closed session.
The Insurance and Bell Bookkeeping agreements will be signed by the Advisor.
EMWD is pursuing local groundwater recharge project; EMWD, LHMWD, and Soboba are pursuing their Canyon Basin Operation Plan; LHMWD and Riverside County Flood are working jointly on a project at Bautista Ponds; water l at Lake Hemet is less than 50% and LHMWD cannot attains water from the lake, LHWMD is seeking to purchase a significant amount of water from EMWD in 2014; City of Hemet rehabilitated Wells No. 4 and 7 ; City of San Jacinto to hold a public hearing to discuss water rates include cost recovery on March 4, 2014.

Chairman Gorman inquired about the project scheduled for the Groundwater Modeling to be completed. Mr. Mortazavi commented the model will be calibrated by October 2014 and completed within a year. EMWD has different task associated with this project which goes above and beyond Watermaster's interest, once the project is complete, it is expected for the consultants to present their findings and results at a future Board meeting.

Vice-Chair Krupa inquired about MWD not delivering SWP, will all the allocation that Soboba is supposed to get now comes from the Colorado River, or will the local agencies' share be reduced by a certain percentage? Mr. Mortazavi stated the Colorado River Aqueduct (CRA) Water is high in salinity and is not suitable for recharge into the San Jacinto basin; also CRA water doesn't meet some of the required State Regional Board permits for recharge. Vice-Chair Krupa stated if SWP water is not delivered, does it carry over to the following year? Mr. Mortazavi states the agreement EMWD has with MWD states within a 15 year window, MWD should deliver an average of 7,500 AFY, even if water is not delivered within the following years, it is still valid and will carry-over. Chairman Gorman commented 15 years' of MWD commitment cannot be delivered at once. Mr. Mortazavi stated the current facilities can deliver up to 42 CFS (cubic feet per second) of water; this allows 4 years of MWD's commitment be recharged in one year. MWD desires to deliver its 7,500 AF commitment annually, but if they are unable to, delivery can be deferred.

Chairman Gorman noted input from all the agencies/cities on their specific projects/activities keeps the Board informed on different activities in the management area.

(see attachment no. 1)

C. Treasurer Report

Mr. Mortazavi provided an overview of the Treasurer Report on behalf of Secretary/Treasurer Paule. The total Cash and Investments as of January 31, 2014 is $610,591.79 and there is $177,835.20 pending payments. Although invoices have not been received for the Monitoring Program and Cone Penetrometer Project, the 2013 total expenditures will still be under the $505,164 budgeted amount. As of January 31, 2014, the total expenditures related to the 2013 budget items was $342,715.75. At the

next Board meeting a 3rd page will be added to the Treasurer Report for 2014 budget tracking.

(see attachment no. 2)

IV. CONSENT CALENDAR

A. Approval of Minutes – December 4, 2013 Regular Board Meeting –
Recommendation: Adopt a motion to approve Item A on the Consent Calendar.

Motion: Krupa	Noes:
Seconded: Scott	Abstain:
Ayes: Gorman, Paule, Bartel	Absent:

(see attachment no. 3)

V. ACTION ITEMS

A. 2013 Carry-Over Credits – Presentation and summary, receive and file only.

Mr. Mortazavi stated the judgment requires the Watermaster to have a record of the carry-over credits. The three items were covered were: (1) In Lieu Program Recharge, documentation of how much recycled was delivered in lieu of groundwater production; (2) Carry-Over Credits for all Class A and B participants. Class A participants not need to be track, their production is tracked in the event they would like to join as a Class B participant at a later date; (3) Carry-Over Credits for cities and agencies.

All Class A and B participants are below their allocation except Pastime Lakes Dairy, Mr. Mortazavi will coordinate with Mr. Scott to inform Pastime Lake Dairy owners and expects the over production be resolved over time. As the judgment is written, the participant that exceeds its allocation is obligated to purchase replenishment water and recharge, but can also carry over it's under production. Therefore, over the years if a participant is below their allocation, it will eventually offset the production of allocation where no payment is needed, if the over production continues the Board needs to decide what can be done.

Chairman Gorman inquired if the property is sold, how this affects the buyer. Mr. Scott stated the new owner is to assume responsibility. Chairman Gorman recommended, in assisting new owners who may not be aware of any balances, mail a letter annually to the property advising owners of any outstanding debt. Mr. Bunn stated the judgment communicates when property is transferred, the buyer can become a party but needs to agree in writing in order to be bound by terms of the dgment. He also recommended a process, when a new owner purchases a property to sign up and if any outstanding balance can be advised at that time. Otherwise, the existing owner is the responsible party. Mr. Scott stated some of the participants (especially Pastime Lake Dairy) are part of an agreement with EMWD, called "In-Lieu of Water Pipeline" where usage is monitored and are obligated to purchase a certain portion of their demand from EMWD. Mr. Mortazavi provided a background for this agreement between some dairy owners and EMWD.

Mr. Mortazavi stated the Lauda and Scott property are way below their allocation if subsidized recycled water is not counted as production. The Watermaster is subsidizing and providing recycled water in-lieu of production. Mr. Scott stated all the irrigation at his operation is recycled water; only residents and livestock use the wells for domestic water usage. Mr. Mortazavi is coordinating with Mr. Pastor and Mr. Scott to host a meeting for all the Class A and B participants to be aware of their recorded consumptions, Mr. Phillips (owner of the Pastime Lake Dairy) is not aware of the consumption and cost of his over production at this time.

The agencies Carry-Over Accounts show that LHMWD and EMWD were the only two agencies who exceeded their allocation. Last month Soboba Tribe consultant revised data provided for Tribe's 2012 production, the meeting with the Tribal Council would be an opportunity to discuss limitation on revisions, because the water that is not used by the Tribe becomes available to the cities and agencies as unused Tribal Water. Late reporting/corrections of Tribal consumption could cause problems with Court filings of the annual reports. The Advisor is required to keep track of each entity's' allocation, production and excess production separately. As of December 2013, LHMWD will no longer have any pre-2012 recharge water; EMWD will have approximately 10,000 AF to be used within the 15 year time frame. No more than 2,000 AF of pre-2012 recharge water can be used in any given year. The Carry-Over Accounts total is about 26,000 AF which is estimated to value approximately $13M.

Received and filed

(see attachment no. 4)

B. **2014 Database Management Project Agreement with Spatia Wave Inc.** – Presentation to summarize scope-of-work required to increase Watermaster database capabilities.

Mr. Mortazavi reported that he has discussed this item with TAC. The 2014 Budget includes $20,000 for the development of the data management project, which allows the Advisor to access and streamline access to the data collected by EMWD for the Watermaster. Spatial Wave Inc. has worked with EMWD; is authorization to access their system; was involved in developing EMWD's groundwater database; and is familiar with their GIS system. A Scope-of Work has been developed and an RFP is ready to be submitted, if required. The concern is if a consultant that is not familiar with EMWD system is selected, EMWD Information Systems Department (IS) will be required to get involved in the project which will increase the cost o the project beyond the current budgeted amount. Signing with Spatial Wave Inc. would eliminate this concern. Mr. Mortazavi also disclosed that his adult son works for l Wave Inc. Secretary/Treasurer Paule inquired if his adult son has equity within the company, Mr. Mortazavi stated he does not and just works part-time at the company.

Adopt a motion to Approve and Authorize the Advisor to sign an Agreement with Spatial Wave Inc. for set-up and maintenance of a groundwater management system including contingencies for an amount not-to-exceed $15,900 in 2014; and for annual maintenance for the system of an amount not-to exceed $6,000 per year.

Motion: Scott
Seconded: Krupa
Ayes: Gorman, Paule, Bartel
Noes:
Abstain:
Absent:

VI. INFORMATIONAL ITEMS/CORRESPONDENCE

A. <u>Drought Status</u> – Presented by Charlie Bachmann (EMWD)

Mr. Bachmann gave a presentation on a background status of drought from a regional, state, and local perspective. Last year it was questioned how the pre-delivery from MWD would be purchased of the settlement water and now there will be no delivery of this water. This has to do with the Snowpack survey and the amount of water to be delivered south of the Delta. First snowpack survey in December 2013 reflected low snowpack and the second survey showed less water content in the Sierras, which means, less water entering supply reservoirs up in Northern California. DWR announced 0% allocation of the more than 4 Million Acre-Feet (MAF) which was requested (first time in history for zero allocation).

From a local perspective, MWD has made investments on water supply and insulating region from drought. So we are currently not in the same condition as the State, but ll take into consideration there is a State-Wide drought. MWD storage levels are currently at 2.4 MAF, this amount will be able to supply EMWD for the next year or so. If there is a continual drought then EMWD would be affected more. The second impact of the drought is water quality impacts, when there is less water flowing through the system TDS will begin to rise, which occurs because there is less rain water diluting natural occurring minerals.

With respect to the current drought response, the Governor has declared a drought emergency as of January 17, 2014, calling for 20% voluntary reduction and creating an Interagency Drought Task Force to meet weekly to address issues associated with the drought. When there is a drought emergency California Department of Public Health (CDPH) mails out a letter to those who hold permits, to evaluate their current situation and communicate back to CDPH. If there are any issues, an action plan needs to be developed and how the issues will be addressed. This letter was dated January 24, 2014. There are some areas in Northern California who have had to comply with mandatory restrictions, while other agencies are enacting voluntary measures, which EMWD is doing. In other areas a Drought Emergency/Water Shortage has been declared (Mendocino, Kern, Santa Barbara County and Brooktrails Township). CalTrans has posted drought messages on stationary freeway light boards statewide.

MWD has taken actions by declaring a formal "alert" wh embraces the Governor's call to the 20% reduction. MWD's Conservation Budget has doubled, from $20M to $40M (some to messaging but most to incentives); EMWD is working with local agencies and cities to relay the message to customers.

There are several incentives available to the entire MWD service area, thru socalwatersmart.com, for residential and commercial, industrial, agricultural, tutional and large landscape customers, and of interest to local cities, if they have areas of large landscaping, many programs are available.

Chairman Gorman inquired about construction water and availability for development and grading operations. Mr. Bachmann stated, it is encouraged to use recycled water in close proximity to recycled water system but there are no restrictions at this time.

Mr. Mortazavi mentioned EMWD will have Colorado River at the filtration plant, and Lake Hemet will be purchasing a great quantity of Colorado River Water from EMWD. There was some concern with the water quality that LHMWD will receive, and Mr. Bachmann said EMWD will work with LHMWD on this issue.

(see attachment no. 5)

B. Insurance Agreement with Edgewood Partners Insurance Center

Mr. Mortazavi mentioned this agreement required a lot of time and thanked Board members for participating in providing information. A proposal for insurance has been attained, even though there are some elected officials who have insurance through represented entities, except Mr. Scott. With this insurance Mr. Scott would be covered by the Watermaster, this has liability insurance, public official liability and excessive liability coverage. The agreement has not been signed, but Mr. Mortazavi intends to sign agreement with Edgewood Partners.

C. Bookkeeping Agreement with Bell Bookkeeping Services

As part of 2014 Budget activities, Watermaster will be absorbing a majority of the accounting responsibilities, the bookkeeping agreement is currently through EMWD, the Board will be contracting directly with Bell Bookkeeping. All contracts currently have a 30 day termination clause; cost is not expected to be more than $6,000 per year. Agreement has not been signed; Mr. Mortazavi intends to sign this agreement.

D. Education and Training Budget

2013 Budget allocated $15,000 for Board Members to participate in different groundwater related activities, in which funds were not used. The same amount has been allocated for 2014 Budget as well, and this agenda item is to discuss how these funds can be used.

Chairman Gorman opened up for discussion as to which trainings would be beneficial for the Board to attend or any type of educational seminars that would be of interest. Water Educational Foundation has tours of water facilities and rivers, Region Critical Debate of Water Resources, Issues of Water Supply and Water Quality, Environmental Restoration, Flood Management Groundwater and Water Conservation. Association of California Water Agencies (ACWA) provides several different opportunities, in which LHMWD and EMWD participate in and are also members. Chairman Gorman asked if it would be best to become a member of ACWA. Mr. Mortazavi mentioned the membership is very costly, it would be best if each participant attended through their agency/city. Chairman Gorman assigned Mr. Mortazavi to monitor training and to inform Board members of upcoming meeting/trainings that would be beneficial. Mr. Mortazavi requested what the protocol would be, if a training arise, would it need to come back to the Board for approval or it would be authorized by Ad Chairman Gorman stated, unless the training is important to Groundwater Manage t then it is not recommended to attend. ACWA Fall Conferences are in Southern California and their Spring

Conferences are held in Northern California. Vice-Chair Krupa stated she has been attending different no cost workshops such as OWOW and DWR for her own education, and also feels the ACWA Conference would be beneficial for educational purposes. Secretary/Treasurer Paule concurred this conference would be beneficial for non-members of ACWA. It would be important for the Board to be informed on water, groundwater issues and also suggested, annually if possible, to educate the public by offering low cost facilities tours. Mr. Scott stated he is currently coordinating thin the next few months to have tour of Waste Energy and Water Reclamation Facility Project, this is something Mr. Scott will be hosting and not Watermaster, in order to fulfill public outreach commitments.

Chairman Gorman inquired if there would be an issue if all the Board members requested to attend the same conference. Mr. Bunn stated this would not be an issue as long as Watermaster business is not conducted or discussed. Chairman Gorman encouraged Board members to attend tours from MWD, especially if drought continues. Mr. Bunn advised if the quorum of the Board attends a blic tour, such as attending a tour as Mr. Scott mentioned a public notice would need to be provided.

Chairman Gorman tasked Mr. Mortazavi to keep Board members informed of an upcoming conferences or tours that may be beneficial to attend.

E. <u>Water Budget Based Tiered Rate Implementation at Valen Water Company (VWC)</u> – Presented by Matthew Dickens (Valencia Water Company) and Dr. Masoud Hoseyni (DCSE Inc.)

Mr. Mortazavi invited Mr. Dickens and Dr. Hoseyni to provide a presentation on how the Tier Rate structure billing was implemented at Valencia Water Company (VWC) which has less customer accounts compared to EMWD, and is comparable to Hemet, San Jacinto, and LHMWD.

Mr. Dickens is the Resource Conservation Manager at Valencia Water Company and Dr. Hoseyni is President of DCSE Inc., a consulting company from Laguna Hills. The presentation provided information on Water Budgets (what, why and when); How VWC implemented tiered rates; Water Budget and Utility Bil Integration; and Outreach Programs.

Mr. Scott asked since VWC is an investor owned company, was there more push back from customers on changing the rate structure. Mr. Dickens stated he worked in New Mexico prior to working at VWC and it was privately owned and there was a lot of push back from the customers on rate increase, who felt there was not sufficient science behind rate changes, and were upset with increased rates. In comparison, there was some resistance at VWC, but once customers understood they will only be charged if they use excess water use, then they were more willing to adapt this change.

Vice-chair Krupa asked if decreased consumption due to conservation caused rate increase at VWC. Mr. Dickens stated privately owned water companies like VWC have a water Revenue Adjustment Mechanism (RAM), meaning if there is an over charge a refund will be provided and if there is revenue shortfall, the customers would pay for the shortfall at a certain percentage, RAM was implemented at VWC at 0.3¢ per unit of

water. This year VWC became revenue neutral with water consumption, using tools provided by DSCE.

Mr. Mortazavi inquired what the cost to develop the program was. Dr. Hoseyni stated because VWC's rate structure development was from ground zero, the cost was $50,000, and VWC recovered this cost within the first year.

(see attachment No.6)

VII. CLOSED SESSION

A. RE: General Counsel Agreement, discussion regarding terms of the agreement. California Government Code Section 54957.1 (a)(5)

Board approved the agreement with General Counsel by unanimous vote.

B. RE: Advisor Agreement, discussion regarding terms of the agreement. California Government Code Section 54957.1 (a)(5)

Board approved the Advisor agreement by unanimous vote.

C. RE: Administrative Assistant Hiring Options, discussio s regarding options for providing administrative support services. California Government Code Section 54957.1 (a)(5)

Board authorized the Advisor to hire an Executive Assistant and to sublease an appropriate space and pass the cost onto the Watermaster, by unanimous vote.

VIII. ADJOURNMENT

There being no further business to come before the Board, Chairman Gorman adjourned the meeting at 6:40 p.m., to be reconvened on Monday, April 28, 2014 at 4:00 pm. (Adjourned Regular Meeting).

TASK ORDER NO. 6

HEMET-SAN JACINTO WATERMASTER SUPPORT SERVICES

2014 Water Resources Monitoring Program Support

This Task Order is issued by the Hemet-San Jacinto Watermaster ("Watermaster"), a judicial creation of the Superior Court of the State of California in and for the County of Riverside through the Judgment entered on April 18, 2013, and accepted by EASTERN MUNICIPAL WATER DISTRICT, a California municipal water district ("EMWD") pursuant to the mutual promises, covenants and conditions contained in the AGREEMENT between the above named parties dated _____, 2014 in connection with the Hemet-San Jacinto Watermaster Support Services.

PURPOSE

The purpose of this Task Order is to describe EMWD's services, time of performance, payment, and effective date to provide services for the Watermaster.

SCOPE OF SERVICES

The purpose of the Water Resources Monitoring Program ("Monitoring Program") is to collect, analyze, and compile groundwater level, water quality, and groundwater production data to meet the reporting requirements of the Judgment. The Monitoring Program provides the information necessary for a comprehensive view of the groundwater management zones and includes the following elements:

- Groundwater Extraction Monitoring
- Groundwater Level Monitoring
- Water Quality Monitoring
- Inactive Well Capping and Sealing
- Meter Installation, Repair, and Replacement
- Data Management, Documentation, and Reporting

Groundwater level and groundwater extraction data will be used to quantify basin stresses and to provide data for estimation of overdraft conditions within any given year and to provide the basis for replenishment in the following year. Water quality information will be used to track basin water quality trends. Such data allows for characterization of basin hydrology, evaluation of groundwater flow conditions, and monitoring of water quality improvement or degradation. In addition, inactive or unused wells will be capped and sealed as they are potential sources of groundwater contamination and present hazardous conditions. The groundwater level and extraction monitoring will allow for a more accurate estimation of the amount of groundwater in storage, changes in storage, and the identification of overdraft conditions. The information gained from these efforts will be used for decision making for the Hemet/San Jacinto Groundwater Management Area Water Management Plan ("Management Plan") area.

In conjunction with existing and planned groundwater l monitoring, accurate monitoring of groundwater extraction will allow participants to understand how groundwater conditions are changing and make informed decisions on how best to manage and replenish the groundwater resources. To improve the records of pumped groundwater, meters will be replaced on the private wells that are no longer working.

Data management, documentation, and reporting are also key elements. All water level and groundwater extraction data collected will be recorded on Field Data Sheets by EMWD field staff. The Field Data Sheets will be provided to the Watermaster Advisor ("Advisor") at the end of each calendar month and contain data collected during the preceding month (may be rounded to the nearest week). The field data shall be read from the Field Data Sheets and entered into EMWD's Data Entry Form (to be provided to Advisor as soon as available after execution of this Task Order) by Watermaster consultants after performing various quality assurance/quality control ("QA/QC") checks on the data. The completed Data Entry Form shall be returned to EMWD for EMWD staff to upload into EMWD's Regional Water Resources Database ("RWRD"). Watermaster consultants shall return the completed Data Entry Form (with the field data entered and checked) to EMWD staff within two (2) weeks of receipt of the Field Data Sheets and Data Entry Form. All of the data will be made accessible to the Watermaster. An annual report will summarize the monitoring activities and results of the analyses of the monitoring data, as well as provide other pertinent information regarding activities in the local groundwater management zones.

By undertaking an extensive data gathering effort, all parties involved in the Management Plan can be assured that operational yield e mates are based on the best available information. Continuation of the current monitoring effort will augment the database used in making decisions on implementation of the Management Plan and contribute to successful management of the groundwater management zones.

TASK 1.0 – Groundwater Extraction Monitoring Program

Groundwater extraction monitoring involves metering of wells producing 25 or more acre-feet of groundwater per year. In conjunction with groundwater level and water quality monitoring, accurate metering of groundwater extraction will allow for a better understanding of how groundwater conditions are changing and can be used by the Watermaster to quantify basin stresses.

The program participants must provide permission for meter installation and access to their wells. EMWD staff will work closely with the private well owners' representatives to acquire necessary permissions from the existing private well owners in the Management Plan area to install and maintain meters and to read the meters. All meter installation activities will be scheduled at the convenience of the well owner. Installed meters shall remain the property of EMWD as a representative of the Watermaster. Meters are to be read monthly and EMWD will periodically schedule meter maintenance and calibration with the well owner. Such activities will be at the well owners' convenience and will not impact agricultural operations.

Well owners wishing to maintain their own meters may do so. Upon the request of the well owner, EMWD will consider providing maintenance and calibration of privately owned meters, contingent upon the needs of the program and the availability of funding.

When installation of a meter on a well is not physical sible, or when a well cannot be metered for other reasons, groundwater production from that well will be estimated using one or more of the following: acreage, crop type, number of animals in the case of dairies, or electricity usage. These estimates will be compared with metered groundwater usage at sites of similar size with similar usage as a QA/QC measure.

Extraction data from one-hundred eight (108) wells with meters installed by EMWD will be monitored monthly by EMWD under this Task Order.

Extraction data from nine (9) wells with privately owned meters will be monitored monthly by EMWD under this Task Order.

Extraction data from twenty-eight (28) wells will be monitored monthly by other entities and reported to EMWD under this Task Order.

Extraction data for thirty-four (34) wells will be estimated monthly by EMWD under this Task Order.

All data collected will be entered by Watermaster consultants after performing various QA/QC checks on the data and forwarded to EMWD for upload into EMWD's RWRD.

TASK 2.0 – Groundwater Level Monitoring Program

Groundwater levels are to be measured twice a year, during the spring and fall, to capture the high and low groundwater levels and to det ine seasonal effects on groundwater levels. The measurements will be taken prior to warm weather when groundwater production is low, and following warm weather when groundwater production is high. General steps that are required for measuring groundwater levels are as follows:

- A site inspection for potential hazards including open drive shafts, automatic machinery, and motor operations including farm equipment is conducted
- The status of the well pump, i.e., pumping or static, is confirmed. The well should have been in static mode (non-operational) for at least 12 hours, preferably 24 hours, prior to measuring the level
- The depth to groundwater is measured using an electric water level indicator
- The measured depth to groundwater is recorded with the status of the pump
- If the well pump is running and cannot be turned off, then no level is recorded and collection of the level may be attempted at another time
- The recorded depth is compared with previous levels for data quality control
- A final site inspection is performed

Three-hundred twelve (320) groundwater levels will be measured by EMWD from one-hundred sixty (160) wells semi-annually following the above protocol under this Task Order.

Four-hundred eighty (480) groundwater levels will be measured by other entities from forty (40) wells monthly and reported to EMWD following the above protocol under this Task Order.

All data collected will be entered by Watermaster consultants after performing various QA/QC checks on the data and forwarded to EMWD for upload into EMWD's RWRD.

TASK 3.0 – Water Quality Monitoring Program

Water quality samples are to be collected once a year from the groundwater management zones within the San Jacinto Basin, generally in the warmer months when the wells are operating. Constituents to be routinely monitored include general minerals, metals, and total nitrogen as described in Table 1.

Table 1: Constituents Tested in a Typical Water Quality Sample

Type	Constituent:	Type	Constituent:
Cations	Calcium (Ca)	Metals	Boron (B)
	Magnesium (Mg)		Copper (Cu)
	Potassium (K)		Iron (Fe)
	Silica (SiO_3)		Manganese (Mn)
	Sodium (Na)		Zinc (Zn)
	Hardness (Calculated from Ca/Mg)	Alkalinity	Bicarbonate (HCO_3)
Anions	Chloride (Cl)		Carbonate (CO_3)
	Fluoride (F)		Hydroxide (OH)
	Nitrate as Nitrogen (NO_3-N)		Total Alkalinity as Ca CO_3
	Sulfate (SO_4)	Misc.	Electrical Conductance (EC)
Nitrogens	Ammonia as Nitrogen (NH_3-N)		Temperature at Collection
	Nitrite as Nitrogen (NO_2-N)		pH
			Total Dissolved Solids (TDS)

The procedures for taking water quality samples differ depending on whether the well has existing pumping equipment or not. The sampling procedure is lengthier and more complicated if the well does not have an existing pump.

TASK 3.1 – Water Quality Sampling of Operating Wells

When the well to be sampled has a pump and is operating, the sampling procedure will be as follows:

- A site inspection for potential hazards including open drive shafts, automatic machinery, and motor operations including farm equipment is conducted
- The status of the well, i.e., pumping or static, is confirmed. If the well is not operating, it is turned on with the permission of the well owner
- The sampling port on the well is located, opened, and flushed or purged

- The water sample is taken using standard methods and proper protocol for the constituents to be sampled
- A final site inspection is conducted

Sixty-seven (67) water quality samples will be taken by EMWD from wells with existing pumping equipment following the above protocol and analyzed by EMWD's Laboratory under this Task Order.

Twenty-nine (29) water quality samples will be taken by other entities from wells with existing pumping equipment following the above protocol and delivered to EMWD for analysis by EMWD's Laboratory under this Task Order.

All data collected will be entered into EMWD's RWRD from the EMWD LIMS system.

TASK 3.2 – Water Quality Sampling of Non-operating Wells
When the well does not have an existing pump, a mobile pump must be set in the well and the procedure is as follows:

- A site inspection for potential hazards including open drive shafts, automatic machinery, and motor operations including farm equipment is conducted
- The depth to groundwater in the well is measured to determine the pump setting depth
- The water volume in the casing is calculated to determine the length of time necessary to purge the well for a minimum of three ful well volumes
- The pump is set using either continuous reel or column pipe and all electrical and discharge lines connected
- The well is purged a minimum of three well volumes
- The water sample is taken using standard methods and proper protocol for the constituents being sampled
- Electrical and discharge lines are disconnected and the pump is pulled
- The well is closed or sealed
- A final site inspection is conducted

Twenty-seven (27) water quality samples will be taken by EMWD from wells without existing pumping equipment following the above protocol and analyzed by EMWD's Laboratory under this Task Order.

All data collected will be entered into EMWD's RWRD from the EMWD LIMS system.

TASK 4.0 – Inactive Well Capping and Sealing Program
The purpose of this program is to prevent groundwater contamination and eliminate hazards by capping and sealing inactive and/or unused ls. Open casings are especially vulnerable to contamination from surface flows or vandalism, such as the dumping of oil or other waste products. Large open casings, 16 to 18 inches in diameter, also present a hazard to small children and animals. It is not known how many open casings or unused wells exist in the area. To protect groundwater supplies,

EMWD staff will use available monitoring program funds to cap and seal inactive wells or open casings at no charge to the well owner. Priority will be given to those wells that are potentially dangerous open holes to small children and animals, 16 to 18 inches in diameter, or those located in areas where flooding resulting from precipitation might carry manure, fertilizers, or other contaminants into the well. These wells may still be used for water level and, in some cases, water quality monitoring.

Three (3) wells are estimated to be capped and sealed by EMWD under this Task Order.

TASK 5.0 – Meter Installation, Repair, and Replacement
The program participants must provide permission for meter installation and access to their wells. EMWD staff works closely with the private well owners' representatives to acquire necessary permissions from the existing private well owners in the Management Plan area to install and maintain the meters. All meter installation activities will be scheduled at the convenience of the well owner. Installed meters shall remain the property of EMWD as a representative of the Watermaster. The procedure for meter installation and replacement by EMWD will be as follows:

- Well owner's permission for meter installation is verified
- A preliminary site inspection is conducted to review piping and well configuration to determine equipment and supplies needed
- An installation design is prepared and a meeting is he with the well owner for approval/acceptance of the design
- As much as possible, off-site fabrication is prepared to minimize inconvenience to the owner's operation of the well
- The installation is approved by the well owner and scheduled for a time that is convenient to the well owner
- The meter is installed and all piping appurtenances are returned to normal operation
- A final site inspection is conducted

Four (4) meters are estimated to be replaced by EMWD under this Task Order.

TASK 6.0 – Data Management, Documentation, and Reporting
Combined with existing available data, new data generated by the Monitoring Program will be used by the Watermaster to analyze how conditions are changing in local groundwater management zones. All data collected will be used in the 2014 Annual Report. The data may be used in the following ways:

- Trend analyses of the relationship between groundwater pumping, groundwater levels, and water quality
- Analysis of the volume of groundwater contained in local groundwater management zones and determination of the rate of natural recharge of these management zones

- Preparation of mathematical models of groundwater systems for use in analyzing management alternatives
- Development of accurate water consumption figures for agricultural land use
- Protection of private water rights through the documentation of individual groundwater use
- Quantification of replenishment requirements for the following year

TASK 6.1 – 2014 Annual Report
Data reporting by EMWD to the Watermaster will include the 2014 Annual Report documenting groundwater level and water quality trends, and groundwater extraction quantities for each groundwater management zone. The 2014 Annual Report will contain the results of regional analyses performed on data collected during calendar year 2014 and a summation of any issues noted. The 2014 Annual Report will serve as the report required by the Judgment.

TASK 6.2 – Annual Well Owners' Reports
EMWD shall prepare and distribute Annual Well Owners' Reports to all private well owners participating in the Monitoring Program. These Annual Well Owners' Reports will include copies of water quality analyses, groundwater level measurements, and groundwater extraction amounts for their wells. Recordation of groundwater extraction with the State is a fundamental means of protecting private groundwater rights and all well owners are encouraged to participate.

TIME OF PERFORMANCE
EMWD shall prepare and distribute one (1) electronic copy of the Preliminary Draft 2014 Annual Report to the Advisor by March 16, 2015 for review and comment. The Advisor shall provide comments on the Preliminary Draft 2014 Annual Report to EMWD by March 30, 2015. EMWD shall prepare five (5) hard copies of the Draft 2014 Annual Report (that addresses comments received from the Advisor) by April 14, 2015 for Advisor's distribution to the Technical Advisory Committee (TAC) at the April 2015 TAC meeting for review and comment. The TAC shall provide comments on the Draft 2014 Annual Report to EMWD by April 21, 2015. EMWD shall prepare twenty (20) copies of the Final 2014 Annual Report (that addresses the comments received from the TAC) by April 27, 2015 (or as soon as practical) for Advisor's use at the April 2015 Watermaster Board meeting for receipt and filing. Backup information and files for the Final 2014 Annual Report will also be provided to the Advisor as part of this Task Order.

INVOICING
The costs of this Task Order will be borne by the Administrative Assessments of the Watermaster. The annual cost of the Monitoring Program is estimated at One-Hundred Thirty Thousand Nine-Hundred Eighty Dollars ($130,980) based on the Fee Schedule (Exhibit A) and Estimated Work Effort (Exhibit B). Payment for the work under this Task Order shall be based on Table 2 with invoicing to be sent upon completion of the work, which amount shall not be exceeded without prior writt n from Watermaster.

Table 2: Estimated Monitoring Program Costs

Category	Costs
1 – Groundwater Extraction Monitoring	$ 21,376
2 – Groundwater Level Monitoring	$ 14,784
3 – Water Quality Monitoring	$ 53,306
4 – Inactive Well Capping and Sealing	$ 5,490
5 – Direct Costs	$ 12,468
6 – Documentation and Reporting	$ 23,556
Total Monitoring Program Costs	$130,980

TERMINATION

Either Party may terminate this Task Order at any time by giving the other party thirty (30) days written notice. Upon termination, EMWD shall be paid for that portion of the work performed through termination of the Task Order.

EFFECTIVE DATE

This Task Order No. 6 is effective as of _____, 2014.

IN WITNESS WHEREOF, duly authorized representatives of the Watermaster and of the EMWD have executed this Task Order No. 6 evidencing its issuance by Watermaster and acceptance by EMWD.

Hemet-San Jacinto Watermaster

By: _____
Frank Gorman
Chairman

ATTEST:

By: _____
Phil Paule
Board Secretary-Treasurer

Approved as to Form:

By: _____
Andrew Turner
General Counsel

EASTERN MUNICIPAL WATER DISTRICT

By: _____
Paul D. Jones II
General Manager

ATTEST:

By: _____
Rosemarie V. Howard
Board Secretary

Approved as to Form:

By: _____
Steven O'Neil
General Counsel

EXHIBIT A
EASTERN MUNICIPAL WATER DISTRICT
FEE SCHEDULE 2013-14
(This fee schedule is subject to annual revisions due to labor adjustments.)

	Hourly Rate
MANAGERIAL	
Deputy General Manager (02002-DGM)	$ 285.00
Assistant General Manager (02005-AGM)	265.00
Director (02030-97)	172.00
ENGINEERS/TECHNICAL	
Senior Civil Engineer (22007-96)	160.00
Senior Engineering Geologist (28011-96)	160.00
Civil Engineer I/II (22027-94)	138.00
Sr. Water Res Planning Analyst (28017-92)	120.00
Civil Engineering Associate I/II (22010-91)	111.00
Water Resources Supervisor (28010-90)	104.00
Sr. Engineering Technician (22013-88)	90.00
Water Resources Technician (28016-87)	84.00
FINANCIAL	
Accounting Supervisor (06003-91)	111.00
Senior Accountant (06004-89)	97.00
Accountant (06005-88)	90.00
Accounting Operations Spvr (06007-86)	78.00
Accounting Technician I/II (06009-83)	67.00
ADMINISTRATIVE	
Executive Assistant (18005-86)	78.00
Administrative Assistant I/II (18006-84)	71.00
DIRECT EXPENSES	
Direct Costs	at cost

Legend: Position Title (Job Code-Salary Range)
Hourly Rate = (Annual Salary[max range]) * (2.0 fully burdened) / (1,700 hrs/yr)

GROUNDWATER MANAGEMENT TOOL MODEL CALIBRATION UPDATE
FINANCIAL PARTICIPATION AGREEMENT

This Agreement is made and entered into this _____ day of _____, 2014, by and between **EASTERN MUNICIPAL WATER DISTRICT**, organized and operating pursuant to Division 20 of the California Water Code (hereinafter "Eastern"), and the **HEMET-SAN JACINTO WATERMASTER**, a judicial creation of the Superior Court of the State of California in and for the County of Riverside (hereinafter "Watermaster") Eastern and Watermaster are sometimes collectively referred to herein as the "Parties".

RECITALS

WHEREAS, the Watermaster is a court created entity, chartered to manage the groundwater and surface waters in the Hemet-San Jacinto Management Area with powers and duties defined in the Stipulated Judgment entered on April 18, 2013 in Eastern Municipal Water District v. City of Hemet, et al, (Riverside County Superior Court case no. RIC 1207274); and

WHEREAS, Eastern owns and utilizes a Groundwater Management Tool ("Model") for purposes of monitoring groundwater levels within the Hemet-San Jacinto Management Area ("Basin"); and

WHEREAS, In 2002, Eastern last updated its Model which includes eight (8) Groundwater Management Zones within the Basin; and

WHEREAS, Groundwater levels within each of the eight (8) Groundwater Management Zones have, in some cases, fluctuated significantly. The Parties have determined that it is necessary to calibrate the Model within the Basin; and

WHEREAS, The Parties desire to work collaboratively to contract with a consultant to calibrate the aforementioned Model; and

WHEREAS, Eastern, as lead agency, has issued a competitive solicitation, attached hereto and incorporated herein as **Exhibit A**, for consulting services to update the Model, a portion of which includes the scope of work for Model calibration; and

WHEREAS, The Watermaster has agreed to share the cost of the Model update; and

WHEREAS, The purpose of this Agreement is set forth the terms and conditions whereby the parties will collaborate in the consultant selection and will share the cost of the Model update.

NOW, THEREFORE, in consideration of the premises and covenants herein contained, the parties agree as follows:

AGREEMENT

1. Incorporation of Recitals. The Recitals set forth above are incorporated into and are a part of this Agreement.

   Agreement. Eastern, as lead agency, hereby agrees to contract in its standard form, based on the outcome of the competitive solicitation, with the selected consultant to

perform the scope of services identified, therein. Watermaster, hereby, acknowledges and agrees that they have reviewed and accept the proposals, scope of work, schedule, and estimated costs and certify that they are satisfactory for Watermaster's individual use and intended purpose. Watermaster further acknowledges and agrees that the consultant shall perform the proposed services under control of Eastern, as an independent contractor and not as an employee of any Party, hereto. The Watermaster agrees to provide $120,000 towards the cost of Model calibration and update.

The Watermaster shall:

- Participate in consultant selection process;
- Participate in consultant submittal review;
- Attend technical meetings and discussions related to Model Calibration;
- Provide comments to the consultants as required; and
- Participate in determining the calibration parameters and predictive simulations of groundwater basins within the Hemet-San Jacinto Management area; and have the right to develop a separate model for the Hemet-San Jacinto Management area using the data and information developed by the Consultant.

Eastern shall:

- Provide a copy of all correspondences related to the Model development at the time of communication takes place with the Consultant, and set meeting time and dates with the consultant considering Watermaster Advisor's availability;
- Provide a copy of the calibrated model, all reports developed by the Consultant, and all related databases needed to run the Model for future simulations;
- Provide necessary presentations to the Watermaster Board and Technical Advisory Board;
- Provide training on the model; and
- Provide Watermaster the right to use the model for future simulation runs with or without direct involvement by Eastern.

2. Payment and Billing:

   a. Eastern shall, itself, pay the consultant for services performed in accordance with the terms and conditions of the Agreement. Eastern shall invoice Watermaster for payment of $120,000 of the Model update cost.
   b. Watermaster shall remit payment to Eastern within thirty (30) days of receipt of such invoice.

3. Term and Termination. This Agreement shall remain in effect unless terminated, in writing, for any reason, with or without cause, by giving sixty (60) days prior notice, by either Party.

   Watermaster shall be required to compensate Eastern for consultant services rendered prior to the effective date of the notice and further services set forth in the notice. Watermaster shall be entitled to reimbursement for compensation paid in excess of services rendered. Eastern waives claims for damages that might arise from Watermaster's termination of this Agreement.

4. Hold Harmless and Indemnification. Eastern and Watermaster, each mutually, indemnify and hold each other harmless from any and all claims, demands, causes of action, damages, costs and expenses, including attorney's fees, property damage,

bodily injury, personal injury, losses or liabilities, in law or in equity, of every kind and nature to the extent that the same are the result of an error, omission or negligent act of the other, its officers or employees, or any other person acting pursuant to its control in performing under this Agreement.

5. Binding Provision. This Agreement is binding on the representatives, successors and assigns of the Parties hereto.

6. Entire Agreement. This Agreement is intended by the Parties as a complete and exclusive statement of the terms of their agreement and supersedes all prior agreements, written or oral, as to this subject matter.

7. Notices. Any notice required by this Agreement to be given or delivered to any Party shall be deemed to have been received when personally delivered or mailed in the United States mail addressed as follows:

Eastern: Eastern Municipal Water District
Post Office Box 8300
Perris, Ca. 92572-8300
Attn: General Manager

Watermaster: Hemet-San Jacinto Watermaster
c/o Water Resources Engineers Inc.
1295 Corona Pointe Court, Suite 104
Corona, Ca. 92879
Attn: Watermaster Advisor

8. Authority to Enter Agreement. Each party warrants that the individuals who have signed this Agreement have the legal power, right, and authority to make this Agreement and bind each respective party.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the day and year first above written.

EASTERN MUNICIPAL WATER DISTRICT **HEMET-SAN JACINTO WATERMASTER**

By: _____ By: _____
Paul D. Jones II, P.E., General Manager Frank D. Gorman, Chairman

Dated: _____ Dated: _____

Revised Carry-Over Credits as of December 2013

Hemet - San Jacinto Watermaster Board Meeting

April 28, 2014

2013 Unused Soboba Water

(All Values in AF)

Agency	2013 Total Imported Water	2013 Imported Water Used by SbT (March 2014 Revision*)	2013 Unused SbT Imported Water (March 2014 Revision)
City of Hemet	1,470	34	1,436
City of San Jacinto	938	22	916
EMWD	2,528	59	2,469
LHMWD	2,565	60	2,505
Totals	7,500	174	7,326

* Soboba reported 1674 AF of production for 2013 on March 7, 2014 (revised from 1981 AF reported earlier in 2014)

Status of Water Accounts
December 31, 2013
(All Values In AF)

Agency	Pre 2012 Recharge Rights	Unused SbT Imported Water	Unused Adjusted BPR	Excess Productions
City of Hemet	--	2,976	1,322	0
City of San Jacinto	--	1,898	758	0
EMWD	12,694	5,117	0	3,365
LHMWD	950	5,193	0	1,307
Totals	13,644	15,184	2,080	4,672

Agency Revised Carry-Over Credits
For December 31, 2013
(All Values In AF)

Agency	Pre 2012 Recharge Rights	Total Unused SbT Imported Water	Total Unused Adjusted BPR	Totals
City of Hemet		2,976	1,322	4,298
City of San Jacinto		1,898	758	2,656
EMWD	10,694	3,752	0	14,446
LHMWD	0	4,836	0	4,836
Totals	10,694	13,462	2,080	26,236

Class A & B Participants
Revised Carry-Over Credits
For December 31, 2013
(All Values In AF)

	Participant	May-Dec 2013 Production	Allocation Set by Judgment	2013 Adjusted May-Dec Allocations	Production Below Allocations	Production Above Allocations
Class A Participants	Bahan	702.7	1,398	1,398	695	
	DeVries	45.0	116	80	35	
	Giess	696.1	2,093	1,678	982	
	Olsen	84.2	156	144	60	
	Oostdam	54.9	259	193	138	
	Record	0.2	193	147	147	
	Sybrandy	450.8	1,454	1,403	953	
	Ramsay	0.0	596	596	596	
Class B Participants	Boersma	130.7	195	132	1	
	Boruchin	0.0	266	266	266	
	Curci	0.0	260	260	260	
	Lauda	733.5	3,530	3,104	72	
	Goodman	0.0	151	151	151	
	Phillips	195.9	212	144		52
	Michan	0.0	166	166	166	
	Pastor	69.0	265	265	196	
	Scott	97.0	1,755	1,246		97
	Van Dam	122.8	531	245	122	
	Warren	100.7	442	360	259	

Recommendation

Receive and File the Revised 2013 Carry-Over Credits Summary Data

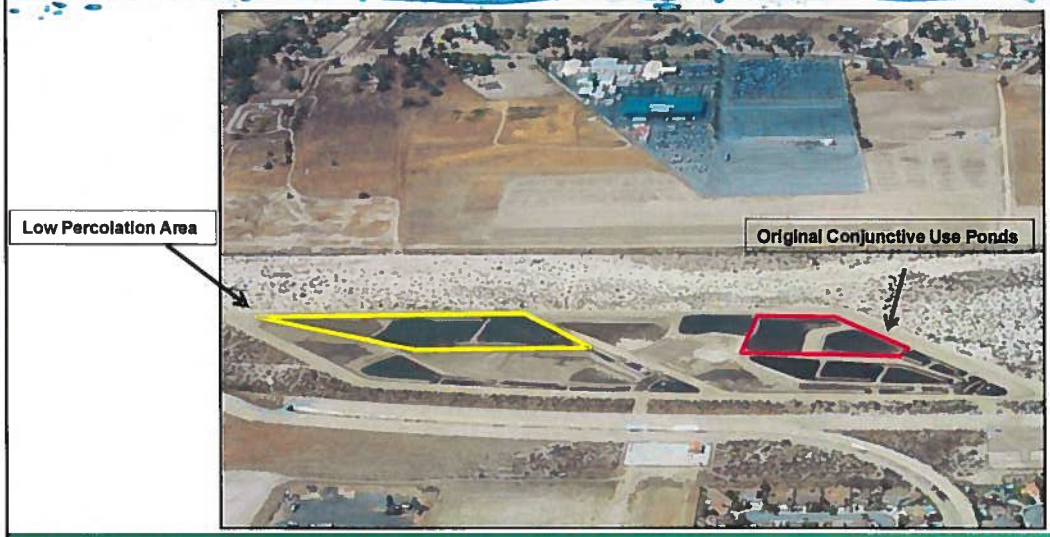
EASTERN MUNICIPAL WATER DISTRICT
SINCE 1950

EASTERN MUNICIPAL WATER DISTRICT

Geotechnical Evaluation of Integrated Recharge and Recovery Program (IRRP) Ponds

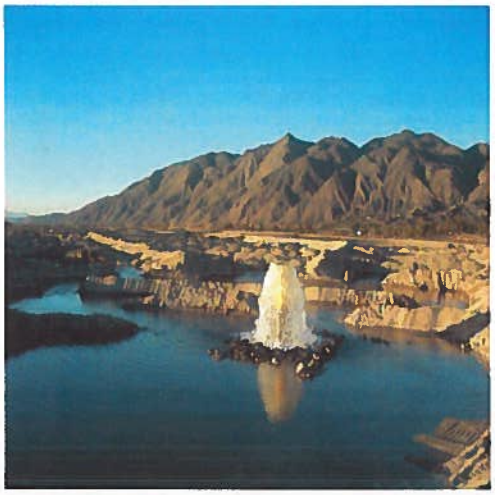
Khos Ghaderi, P.E.
Director of Water Operations, EMWD
April 14, 2014

IRRP Recharge Ponds



Background

- Percolation rates in northern (downstream) ponds has reduced overtime
- During and for approximately 2 days after rain events percolation rate is reduced in the IRRP Recharge Ponds
- Anticipated MWD will require high recharge rates after the drought to "catch up" on recharge requirement



Project Overview

- Goals
  - Set baseline understanding of local geology
  - Determine depth and thickness of fine-grained geology, if present
  - Identify viability of remedial actions to increase recharge rates

Location of CPT Sites

Cone Penetrometer Testing (CPT)

- Collected geotechnical information using CPT investigation.
- Low cost, low impact continuous reading technology.
- Provides type of Soil layers (i.e. clay, silt, sand, etc.)
- 18 locations tested using a 20-ton rig.
- Completed to approximately 100 feet below ground surface.

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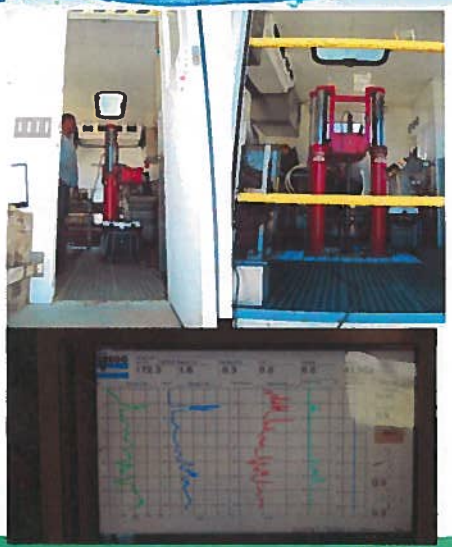
CPT Analyses

- Analyses show the relative recharge potential of a given area as follows:
  - Single coarse-grained layer results in high, deep percolation
  - Increased number of clay and/or silt layers results in significantly lower percolation rates



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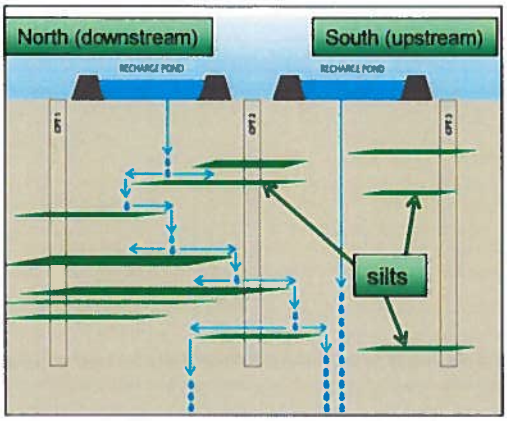
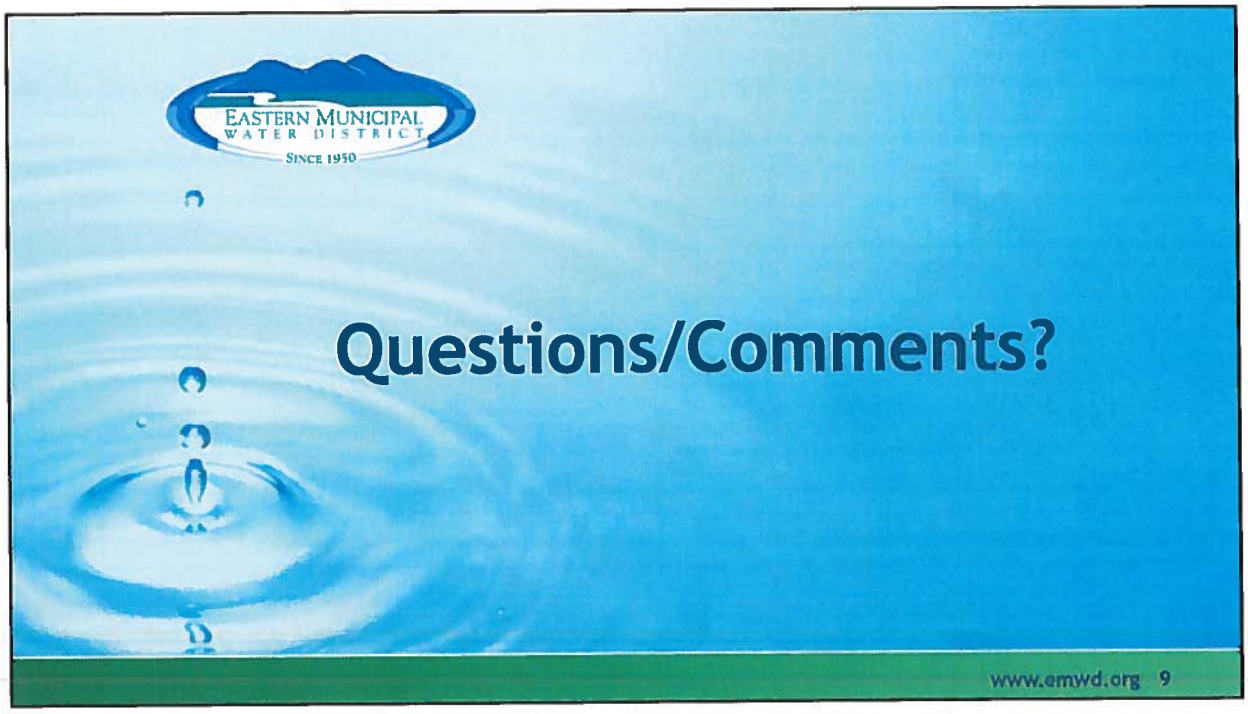
Results

- Existence of fine-grained units in localized lenses rather than as extensive continuous layers
- Few lenses are present on the south (upstream) side of ponds
  - Resulting in greater deep percolation potential
- More fine-grained lenses exist on north (downstream) side of ponds
  - High percolation rates but lower than southern ponds
  - Susceptible to reduced percolation due to storm events



Actions and Recommendations

- Removed some very shallow clay layer from under some of the northern ponds.
- Continue to optimize configurations of the ponds.
- Continue to monitor percolation rate of each pond under various operating condition.
- Re-evaluate the percolation rates after next recharge season.


EASTERN MUNICIPAL
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SINCE 1950
Questions/Comments?
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Minutes
Hemet-San Jacinto Watermaster Board of Directors Meeting
Eastern Municipal Water District
June 23, 2014

The Watermaster Board of Directors met in Regular Session in the Board Room at EMWD Headquarters, 2270 Trumble Road, Perris, California, on Monday, June 23,201 at 4:20 p.m. The meeting was called to order by Secretary Treasurer Phil Paule.

Pledge of Allegiance

The Pledge of Allegiance to the Flag of the United States was led *by Secretary Treasurer, Phil Paule*

Board Members Present:	Linda Krupa, Vice-Chair (4:45pm) Phil Paule, Secretary Treasure Mark Bartel Rick Hoffman – Alternate Representing Frank Gorman)
Board Member(s) Absent:	Bruce Scott
Board Alternate (s) Present:	None
Watermaster Staff Present:	Behrooz Mortazavi, Michelle Mayorga (Water Resources Engineers), Thomas Bunn, Legal Counsel (Lagerlof, Senecal, Gosney & Kruse)
EMWD Staff Present:	Paul D. Jones, General Manager, Charlie Bachmann, Assistant General Manager of Planning, Engineering and Construction; Brian Powell, Director of Planning; Kevin Pearson, Public Affairs Officer, Khos Ghaderi, Director of Water Operations
City of Hemet Staff Present:	Kris Jensen, Public Works Director
City of San Jacinto Staff Present:	Lynn Merrill, Public Works Director; Mike Emberton, Assistant City Manager; Dan Maudrovich, Water Utilities Superintendent
Lake Hemet Staff Present:	Tom Wagoner, General Manger;
Soboba Tribe	Frank Coate
Others Present:	Glen Van Dam, Van Dam Diary, C.J. Gaunder, Nigro & Nigro

I. PUBLIC COMMENTS –Speakers are requested to limit comments to 3 minutes.

None

II. ADDITIONS/DELETIONS TO AGENDA

None

III. Reports

A. Board Member Comments/Questions/ Reports

None

B. Advisor Report

Mr. Mortazavi reported that most of his work with EMWD has been related to the Groundwater Model Development and the Data Management project that are both on going. The invoices for 2014 Administrative Assessment will be mailed out in July. C.J. Gaunder, a partner from the firm of Nigro & Nigro, will present 2013 Financial Audit results later at this meeting. The Treasurer Report will be presented under Item III-D. The Technical Advisory Committee had one meeting on June 9th. The consultant has started working on the Groundwater Modeling Project. The Data Management Project is ongoing and in its final phase. The Data Management Project allows the Watermaster to access EMWD data. The In-lieu deliveries from Metropolitan Water District have started. EMWD has expecting to receive about 5,900 A.F. as part of this effort. . There was a meeting with the Class A and B participants on May 16th. Mr. Scott, Mr. Pastor and several private pumpers participated in this meeting. The purpose of this meeting was to share with the local producers their status, such as how much water they have pumped, how much water they were over or how much they were under. There were several communications with 2 of the Class B participants that are subject to replenishment assessment. Mr. Scott and Mr. Phillips (Pastime Lakes Dairy) are over their allocations. Mr. Mortazavi has also been in contact with Pastime Lakes Dairy and several of the family members owning this dairy in regard to this situation. The owners are aware of this issue and they are looking at how to reduce their water usage over the next couple of years. Mr. Mortazavi has been working with Mr. Bunn regarding Mr. Van Dam's request for additional base production rights. There will be more discussed on this issue during the Legal Counsel Report.

Mr. Mortazavi reported that there may be an opportunity for Agencies in the Hemet/San Jacinto area to receive grant funding. SAWPA is working with EMWD and its other member agencies to put together an application with the Department of Water Resources. This item has been discussed extensively at the TAC meeting and Watermaster member agencies' staff are aware of this. The Soboba Tribal Council is interested in meeting with the Ad-hoc Committee (Ms. Krupa and Mr. Scott) on a more regular basis. The next meeting with the Tribal Council is scheduled for October 14th at 10:00am.

Under miscellaneous activity, there has been a lot of activities that have been done by EMWD, LHMWD, Cities of Hemet and San Jacinto. One of the major activities that EMWD, LHMWD and the Soboba Tribe have jointly started the Canyon Basin Operation Plan and it is almost complete. Their final meeting was held today and the planning yield for the Canyon Basin is estimated at 10,100 acre feet per year.

Canyon Basin is where almost all of LHMWD's and some of EMWD groundwater is produced. There have been a few discussions with Bureau of Reclamation representative and Dr. Eylon Shamir regarding a potential USBR funding for a study in the region to assess natural variability of flow and its linkage with the groundwater model. Dr. Shamir is interested in submitting a proposal to the USBR for this effort. If the proposal is accepted, Dr. Shamir will be working with EMWD to gather information for this project. There have been several communications with a real estate agent inquiring about what happens if Class B participants sell their property. At this time, there is apparently one property that is up for sale that is a Class B participant. Another person from the general public has been inquiring about the cost of recharge facilities and how the Watermaster is involved in the recharge activities.

The drought continues in this regions and Metropolitan is requesting its member agencies to use more Colorado River water instead of the State project water. EMWD is cooperating with this request. By mid-July, EMWD will be receiving Colorado River water at its EM-14 connection. The EM-14 connection is the connection that takes water to the Hemet Filtration Plant and the Recharge Ponds.
As part of the Groundwater Model Project, EMWD will be inviting several Groundwater experts to form an advisory panel that will include representatives from the Department of Water Resources, Regional Water Quality Control Board, a local groundwater expert and the USGS. The first meeting is scheduled for July 16th and will be open for all TAC members to attend.

EMWD has moved into stage 2 of its Water Shortage Contingency Plan requesting a voluntary 20% reduction in water demand. It requires customers to reduce watering/irrigating of landscape by one day a week; repair all leaks, breaks or other malfunctions within seventy-two hours; refrain from filling ornamental lakes or ponds and refrain from using potable water for washing or cleaning cars.
LHMWD Well 16 is complete and being tested. LHMWD is working with Riverside County Flood Control on their joint Little Lake Storm Water and Stream Water Recharge Project. EMWD and LHMWD are working to connect Well 92 to the raw water pipeline.. LHMWD's General Manager, Mr. Tom Wagoner, has reported a properly close to Grant Avenue could be purchased and may be suitable as a recharge site.

The City of Hemet has encountered high nitrate concentration problems at Wells 4 and 14 and had to notify approximately 9,500 of its customers about the high nitrate concentration at these wells. The City is looking at the feasibility of nitrate removal and construction of a new connection with EMWD at Menlo Street to reduce the impact of not being able to pump these wells during the summer months.

The City of San Jacinto water surcharge is in effect and the city customers have started receiving bills which include the new surcharge. The City of San Jacinto and EMWD are coordinating a California Friendly Workshop on June 28th at 9am at the City of San Jacinto Community Center.
osts and will present the final results at the TAC and Watermaster Board meetings in August. This was a side agreement that all the member agencies signed independent of the Watermaster for a 23 million dollar recharge facility that was put in place.

EMWD has received the final payment for the San Jacinto Valley Integrated Recharge and Recovery Program (IRRP) from DWR.

This was a 5 million dollar grant that EWMD received from DWR. EMWD is planning to reconcile the final costs and present the final results at the TAC and Watermaster Board meetings in August.

EMWD staff compiled and distributed their 2013 Annual Well Owners' reports earlier this month. These reports are provided to all well owners participating in the groundwater monitoring programs including the Hemet/San Jacinto Groundwater Management Area. EMWD also provided each well owner their respective well extraction data, water quality sampling results, and water level measuring data collected during 2013.

Mr. Paule inquired if the Watermaster was part of the California Friendly Workshop. Mr. Mortazavi responded the Workshop is coordinated between the City of San Jacinto and EMWD without Watermaster involvement.

C. Legal Counsel Report

Mr. Bunn reported on a few questions that were asked at the April 28, 2014 Board meeting. Mr. Gorman had asked, what happens if the recharge ponds our washed out? Should Watermaster have reserve funds to reconstruct the recharge ponds? The Soboba settlement agreement which provides for the construction of the ponds does not involve the Watermaster and therefore does not require the reconstruction of the ponds to be done by the Watermaster. The local districts will provide for the reconstruction and arrange for the recharge of the water to support the Soboba Tribe's water rights directly through EMWD, without the involvement of the Watermaster. Mr. Bunn also commented that the replenishment assessment which can be collected by the Watermaster can be used for any kind of replenishment or recharge activity. If the Watermaster felt it was appropriate to be used for that purpose, it could do so. At the April meeting, Mr. Gorman also inquired if administrative assessments could be loaned for replenishment ponds repairs. Mr. Bunn confirmed that the Watermaster could loan money from one fund to the other, especially if it were an emergency or urgent situation. Mr. Bunn also addressed a question in regard to the Groundwater Modeling and what if the updated modeling effort resulted in a different Safe Yield calculation. The judgment requires the Watermaster to reduce the public agencies base production rights each year until the total management area's production goes down to the Safe Yield. The Watermaster determines each year how much to reduce the base production rights, except for the first year, which is set at 10%. The Watermaster can change the base production rights for the following years but it cannot adjust it by more than 10% per year. The judgment says that it is anticipated to bring the total production in the management area down to the Safe Yield in 6 years but it also says that if the facts are different than what were anticipated, then the 6 year time period may be adjusted by the Watermaster. Mr. Bunn addressed the issue of the sale of a Class B participant's property. The buyer does not automatically become a party to the judgment, rather it is optional. The new owner can file a petition with the court to become a party to the judgment. In most cases the new owner would want to be part of the judgment and would then notify the Watermaster and the Court. Lastly, Mr. Bunn commented on the State Water Resources Control Board and the release of its prioritization of the groundwater basins in the state of California. Prioritization of the basins is required under California State Groundwater Elevation Monitoring (CASGEM) programs. San Jacinto groundwater basin is ranked 10 out of 500 groundwater basins. This is considered to be a very important groundwater basin according to the State for Two main reasons.

The first is the importance of groundwater in the region. Approximately 80% or more of demand comes from groundwater. Many areas in the state only receive 40% which can increase up to 60% during drought years. The second reason being the overdraft in the region. It is importance that groundwater quality and levels be reported to the State. EMWD is the responsible agency that takes all the elevation data and reports to the State.

Mr. Hoffman asked if the higher prioritized basins were already adjudicated. Mr. Bunn answered that it varies. The Central Bain in Los Angeles, which is adjudicated, is a high priority Basin because of high population. The San Joaquin Valley has not been adjudicated but it does support a high population and has a high reliance on groundwater. The State is considering stepping in and having them do more groundwater management.

D. Treasurer Report

Mr. Mortazavi reported that he is working with the Bell bookkeeping to improve the accounting process as a result of the 2013 Financial Audit recommendation. The current Treasurer Report format may be revised as a result of this effort. As of April 1, 2014, the Watermaster balance was approximately $420,000. During April and May, Watermaster received another $222,471 payments on the last invoices towards the 2013 Administrative Assessment. The Watermaster paid approximately $33,000 for expenses. The total Watermaster account balance as of May 31, 2014 was about $609,000. The pending invoices which are being process add up to around $27,000. Mr. Mortazavi noted that the Watermaster now has liability insurance which was a concern of the Board. Mr. Mortazavi commented on the fact that the payment to Water Resources Engineering is increasing but that is because of the shift of responsibility from EMWD to Watermaster. The 2013 budget tracking will be completed shortly after the Cone Penetrometer Testing project is invoiced. The final 2013 budget expenditures will be approximately $400,000. Currently, the 2014 budget expenditures are estimated to be around $670,000.00.

IV. CONSENT CALENDAR

Accept Motion for approval of Consent Calendar

A. Approval of Minutes – April 28, 2014 Regular Board Meeting

Recommendation: Adopt a motion to approve Item A on the consent Calendar

Motion:	Paule	Noes:	
Seconded:	Hoffman	Abstain:	
Ayes:	Krupa, Bartel	Absent:	Gorman, Scott

V. ACTION ITEMS

A. Approve the 2013 Financial Audit

Recommendation: Adopt a motion to approve the 2013 Financial Audit

Mr. Mortazavi introduced Ms. Gaunder, partner from the firm Nigro and Nigro. Ms. Gaunder brought to the board copies of the 2013 Financial Audit and provided a presentation on the 2013 Audit process and findings. The primary goal of the auditor is to provide an independent opinion on the Watermaster's financial statements and to make sure the Watermaster is in compliance with applicable laws and regulations. The first few pages of the 2013 audit report explain what the responsibilities of the Watermaster are and what the responsibilities of the Auditors are.

Ms. Gaunder informed the board that her firm has issued an unqualified "clean" opinion which is the highest opinion that can be received. The management's discussion and analysis is an objective analysis of the Watermaster's financial activities. The next section of the audit report is the Financial Statements which is the major bulk of the report showing the asset, liabilities and current operating activities of the Watermaster, followed by the notes to the Financial Statement which describe important financial information in more detail. The significant footnotes on the report include details of the Watermaster's cash and investment balances. The Auditors Report indicates that they conducted an audit in accordance with Government Auditing Standards and that any noncompliance to laws and regulations are reported as findings. The Watermaster was issued a clean opinion on this as well. The last section of the report is the Audit Findings and Recommendations which talks about any exceptions during the audit would be shown here along with a recommendation on how to fix them. Ms. Gaunder thanked everyone for their time. A copy of the 2013 Financial Report will be distributed to all the Class A & B participants, Cities and water districts.

Motion:	Hoffman	Noes:	
Seconded:	Bartel	Abstain:	
Ayes:	Krupa, Paule	Absent:	Gorman, Scott

B. Adopt Resolution No. 7 – Addition of Base Production Rights to the Van Dam Family Trust

Recommendation: Adopt a motion to approve Resolution No. 7

Mr. Bunn reported that the Van Dam Family Trust is already a Class B participant. At the time the judgment was entered, the Van Dam Family was in escrow to purchase another piece of property but because escrow had not closed this property was not listed as a participant property on the stipulated judgment. The base production rights for this new parcel had been calculated at 139 acre-feet. The judgment provides that there has to be a written request to be a Class B participant and that the Watermaster has the authority to adjust their production rights as the Watermaster finds appropriate. Mr. Bunn recommends the approval of Resolution 7. Mr. Paule asked for clarification with regard to Class B participants. If a Class B participant purchases a new property, does that automatically allow an entryway to include the new property as a Class B participant? Mr. Bunn confirmed that would be case if one is already a Class B participant, but if the property owner is not a Class B participant then the new property cannot be included as a Class B participant. Class A participants have 3 years to convert to Class B. Ms. Krupa inquired if this has an impact on anyone in the agreement? Mr. Bunn replied no. Mr. Mortazavi asked if it mattered if the purchased property is contiguous or not? Mr. Bunn replied that what is being asked of the Watermaster today is discretionary with the Watermaster Board. Factors to be considered are whether this adds to the demand of the basin, which in this case, it doesn't because this property was using groundwater before Van Dam family bought it. The current Van Dam property is below what is allocated for 2013. Ms. Krupa asked if there was any public comment. There were no comments. Mr. Bunn was asked to read the Resolution.

Motion:	Hoffman	Noes:	
Seconded:	Paule	Abstain:	
Ayes:	Krupa, Bartel	Absent:	Gorman, Scott

C. Adopt Resolution No. 8 – Deferral of Class B Participants Replenishment Assessment Payments Until July 2016

Recommendation: Adopt a motion to approve Resolution No. 8

Mr. Bunn reported that the judgment requires the Watermaster set replenishment assessment. A few participants have gone over their production right for partial year 2013. There are a few reasons for the Board to consider deferring setting the replenishment assessment and not imposing it this year. One reason is that 2013 was a partial year, at least one of the participants is receiving recycled water and water rights include the amount of recycled water that is taken. A second reason is the current drought, and everyone is relying more on groundwater and the participants should be able to make up for it when there are wetter periods. The third reason is that Class A participants have 3 years to convert to Class B and during those 3 years they are not subject to replenishment assessment and it seems not fair to require Class B Participants to be assessed. It is proposed to wait until after 2015 to impose any replenishment assessment. At that time, Mr. Mortazavi will add up all the pumping that took place in 2013, 2014 and 2015 and the usage will be compared to the total allocations for the same period and replenishment assessment will be imposed. Ms. Krupa asked if there were any questions from the audience. There were no questions. Ms. Krupa asked Mr. Bunn to read Resolution 8, and Mr. Bunn complied. Mr. Hoffman asked Mr. Mortazavi if he will be keeping an accounting of the Class B Participants so that the Board as well as each Participant knows where they stand without any surprises. Mr. Mortazavi replied that he is keeping track of the usage and had a meeting in May with the producers to go over this exact issue.

Motion:	Paule	Noes:	
Seconded:	Bartel	Abstain:	
Ayes:	Krupa, Hoffman	Absent:	Gorman, Scott

VI. INFORMATIONAL ITEMS/CORRESPONDENCE

A. Canyon Operating Plan – EMWD/LHMWD presentation Summarizing the Operating Plan for Canyon Management Zone being discussed between Soboba Tribe, EMWD, and LHMWD

Mr. Powell presented an update on the Canyon Operating Plan which addresses one sub-basin of the entire groundwater management area and was initiated by EMWD, LHMWD, and the Soboba Tribe. Mr. Powell went over the maps of the San Jacinto Groundwater Basin, the Canyon Basin Vicinity map and the Canyon Basin Groundwater Wells. The Canyon Operating Plan study was initiated because of a Memorandum of Understanding (MOU) that was signed as part of the Soboba Settlement Agreement, which states that "in the event the Soboba Tribe is unable to pump 3,000 acre feet per year from existing wells in the Canyon Basin then the Local Districts (EMWD and LHMWD) shall deliver any shortage to the Soboba Tribe.

The MOU was required by the Tribe before they would agree to sign the Management Plan. The Tribe required that EMWD and LHMWD commit to "…the prompt development of an operating plan for the Canyon Basin…". The participants (Soboba Tribe, LHMWD and EMWD) agreed on an approach, agreed to use a consultant (RMC) and to share the costs. The project goal was to develop an operating plan that facilitates responsible water management for the Canyon Basin through the ongoing monitoring of the Basin's health and proactive operational adjustment by the Districts.

The elements of the operating plan included the most important item which is to identify Groundwater levels that will trigger proactive operational actions by the participants. Mr. Powell went over the Natural Recharge and planning yield charts from the years 1990 thru 2012. The average planning yield over that period was 10,100 Acre Feet per year. A storage curve of the basin was created to show the average basin storage estimate using 3 key well measurements taken on Spring/late summer. Operational trigger levels are called proactive, responsive and critical. The Tribal production capacity was developed using Soboba Wells data to maximize well yield and minimize pump submergence limitations. The potential actions based on operational triggers are to reduce pumping from the Canyon Basin, increase recharge into the Canyon Basin or Public Outreach to reduce pumping by Pumpers. A workshop was held earlier today for the participants to provide comments to RMC and final comments are due by Friday, June 27th. RMC will incorporate those comments into a final report before the end of July. Mr. Hoffman commented that he would like to see the RMC presentation. Ms. Krupa asked if the Canyon Basin was managed, what exactly does managing mean. Mr. Powell answered that it would mean implementing triggers and that would mean either reducing pumping or increasing recharge. Ms. Krupa asked if any of the current recharge affect the Canyon Basin. Mr. Mortazavi answered that in the early 90's there was some recharge in Canyon Basin, but all recent recharge is going into the Upper Pressure basin.

B. EWMD Request for In-lieu Delivery of Soboba Settlement Water in 2014

Mr. Mortazavi presented a letter from Mr. Kighlinger, General Manager for Metropolitan Water District to Mr. Jones, EMWD General Manager, that is an agreement response to EMWD's request for In-lieu delivery. MWD delivery is for recharge and MWD does not usually agree to provide water In-lieu of recharged water. However, Mr. Jones was able to get MWD to agree. Under this program, EMWD will reduce its groundwater production and EMWD will receive MWD water at its Hemet Filtration Plant, the water will be treated and put into EMWD system to serve its customers directly instead of pumping groundwater. Mr. Mortazavi and Mr. Jones have both communicated this program with the Soboba Tribe and have their concurrence.

Mr. Bartel asked the Board if it would consider holding future Board meetings at other agencies. Ms. Krupa asked Mr. Mortazavi if there are any issues for the staff to have meetings at different locations. Mr. Mortazavi commented that holding board meetings at different locations each time would require coordination with the hosting agency and their staff time, plus more Watermaster staff time for meeting setup and preparation, There is significant coordination between Watermaster and EMWD staff to conduct Watermaster meetings at EMWD. Another issue for the board to consider is potential of having less general public participation as a result of the general public uncertainty about the meeting location. Mr. Mortazavi suggested attending and briefing member agencies' Board/Councils on Watermaster activities, if the interest by moving the meeting location is to provide status report on Watermaster activities to constituents of different Board members..

VII. CLOSED SESSION

A. None

VIII. ADJOURNMENT

There being no further business to come before the Board; Vice Chairman Krupa adjourned the meeting at 5:25 p.m., to be reconvened on Monday, August 25, 2014 at 4:00 p.m. (Adjourned Regular Meeting).

Watermaster Advisor Report
June 23, 2014

EMWD Related Coordination/Activities:

- On-going coordination with EMWD for Watermaster related tasks.
- Most of the coordination activates with EMWD has been related to the Groundwater Model Development, and the Data Management projects.

Budget/Accounting Related Activities:

- The entire 2013 Administrative Assessments have been collected. The first set of invoices for 2014 Administrative Assessment will be mailed next month (July).
- Watermaster's Annual Financial Audit has been completed by the accounting firm of Nigro & Nigro. Their findings and recommendations are presented under item V-A.
- The Treasurer Report is provided under Item III-D.

Board & TAC Coordination/Activities:

- Technical Advisory Committee (TAC) had one meeting on June 9, 2014. Major discussion items were:
    - Review of potential Expedited Drought Relief funding opportunities under Proposition 84 for the region.
    - In-lieu deliveries of Soboba Water during 2014.
    - Agency related activities.
    - Groundwater Model project status.
    - Proposed Resolution 7 – Addition of base production rights to the Van Dam family trust.
    - Proposed Resolution 8 – Deferral of Replenishment Assessment until July 2016.
    - 2013 Annual Report filing procedure

Special Projects:

- RMC Water & Environment engineering firm has started working on the Groundwater model development project. Development and finalizing the conceptual model is the main focus of this effort at the present time.
- The 2014 Database Management project with Spatial Wave is in its final phase of development.
- MWD has agreed to provide Soboba Settlement water to EMWD using in-lieu delivery. In-lieu deliveries began on Friday, June 6, and 5,900 AF of in-lieu water is estimated to be delivered by the end of the year. Will discuss this in more detail under item VI-B.

Municipal/Private Pumpers Coordination/Activity:

- With assistance from Mr. Scott and Mr. Pastor (local groundwater producers representatives on the Watermaster Board), and LHMWD a meeting with Class A and B participants was conducted on May 16, 2014. Several judgment participants attended this meeting.
- Have had several communications with the two Class B participants that are subject to Replenishment Assessment.
- Worked with Legal Counsel on resolving Mr. Van Dam's request for additional base production rights. Mr. Bunn will discuss this item in more detail under item V-B.

Outreach/Grant Activity:

- Participated at Santa Ana Watershed Authority (SAWPA) activities related to the Expedited Drought Relief Act (EDRA) funding process. SAWPA is in charge of distributing Proposition 84 funds which includes EDRA funding. There is potential for the agencies in the Hemet-San Jacinto area to receive grant funding. SAWPA, with assistance from EMWD and its other member agencies, is submitting a grant application to the State Department of Water Resources by July 21, 2014.
- The Soboba Tribal Council is interested to meet with the Ad-hoc Committee, Vice Chair Krupa and Mr. Scott, on more regular basis. Subject to the availability of the Committee Members, the next meeting is scheduled for October 14, 2014 at 10:00 am.

Miscellaneous Activity:

- EMWD, LHMWD, and Soboba Tribe joint Canyon Basin Operation Plan effort is almost complete. The Parties have developed trigger groundwater levels and identified the key wells that they want to use as part of this effort. As part of this project, the Planning Yield for the Canyon Basin is estimated at 10,800 acre feet per year. The Tribe consultant has expressed concern that their groundwater production capacity may be inadequate to meet their demands in the later summer months. EMWD and LHMWD will provide more information on this project under item VI-A.
- Have had a couple of discussions with a U.S. Bureau of Reclamation (USBR) representative and Dr. Eylon Shamir regarding a potential USBR funding for a study in the region to assess natural variability of flow and its linkage with the groundwater model. Dr. Shamir is interested in submitting a proposal to USBR for this effort.
- Had multiple communications with two members of the public inquiring about requirements to participate as a Class B, and costs of recharge facilities, respectively.
- As drought continues, southern California will see more use of the Colorado River Water (CRW) instead of State Project Water (SPW). As part of this process,

by mid-July, EMWD is expected to take CRW at EM-14 that provides water to the Hemet Water Filtration Plant (HWFP) and the recharge ponds.

- As part of the Groundwater Model Update project, EMWD will invite several groundwater experts to participate in an Advisory Panel role and provide feedback to RMC (EMWD consultant that is developing the model). The Panel is expected to include representatives from Department of Water Resources (DWR), Regional Water Quality Control Board (RWQCB), and a local groundwater expert. EMWD has indicated meetings with the Advisory Panel will be open to TAC members. The first Advisory Panel meeting is expected to take place in early-mid July at EMWD.
- EMWD is completing the Spring water level monitoring, and administering the Groundwater Model Update effort.
- Due to drought, EMWD has moved into Stage 2 of its Water Shortage Contingency Plan (WSCP) requesting a voluntary 20% reduction in water demand. WSCP also requires customer to:
    1. Reduce watering/irrigating of landscape by one day a week.
    2. Repair all leaks, breaks, or other malfunctions within seventy-two hours.
    3. Refrain from filling or re-filling of ornamental lakes or ponds.
    4. Refrain from using potable water to wash or clean vehicles.

- LHMWD well 16 is complete and being tested, LHMWD is also working with Riverside County Flood Control and Conservation District (RCFC) on their joint Little Lake storm water and stream water recharge project.
- LHMWD and EMWD are working to connect well 92 to the raw water pipeline. Well 92 is one of the IRRP wells.
- The City of Hemet has encountered water quality (nitrate concentration) problem at Wells 4 and 14, and had to notify some 9,500 of its customers about the high nitrate concentration at this well. The City is looking at the feasibility of nitrate removal, and constructing a new connection with EMWD at Menlo Street to reduce the impact of not having this well during high demand summer months.
- The City of San Jacinto water rate surcharge is in effect. City customers have started receiving bills which include the new surcharge.
- The City of San Jacinto and EMWD are coordinating a California Friendly Workshop on June 28, 2014, from 9:00 a.m. to noon at the City of San Jacinto Community Center (625 S. Pico Ave).
- EMWD is pursuing its Water Banking project, looking at short-term and long-term potential recharge projects.
- EMWD has received the final payment for the San Jacinto Valley Integrated Recharge and Recovery Program (IRRP) from the DWR. EMWD is planning to reconcile the final costs on the program and present the final result at the TAC and Watermaster Board meetings in August.

- EMWD is the designated agency by the California State Water Resources Control Board, Division of Water Rights to oversee the groundwater extraction recordation program in the San Jacinto Watershed. The Annual Notices of Groundwater Extraction were prepared and distributed by EMWD to all groundwater producers in the San Jacinto Watershed earlier this month. Well owners have until June 30, 2014, to complete the Notices and return them to EMWD.
- EMWD staff compiled and distributed their 2013 Annual Well Owners' Reports earlier this month. These Reports are provided to all well owners participating in the groundwater monitoring programs including the Hemet/San Jacinto Groundwater Management Area. EMWD provides each well owner their respective well extraction metering, water quality sampling, and water level measuring data collected during calendar year 2013.
- Mr. Tom Wagoner, LHMWD General Manager, reported a property close to Grant Ave. could be purchased and may be suitable as a recharge site. More information will be available at the next TAC meeting.

Hemet-San Jacinto Watermaster
c/o EMWD • 2270 Trumble Road, Perris, CA 92570 • Telephone: (951) 928-3777 ext. 4338

Watermaster Board

Chair
Frank D. Gorman

Vice-Chair
Linda Krupa

Secretary-Treasurer
Philip E. Paule

Board Members
Mark Bartel
Bruce Scott

Board Alternates
Rick Hoffman
Scott Miller
Steven A. Pastor
Randy A. Record
Larry Smith

Advisor
Behrooz Mortazavi

Legal Counsel
Andrew Turner

To: Hemet-San Jacinto Watermaster Board of Directors

From: Board Treasurer

Date: June 23, 2014

The Board Treasurer has reviewed and approved the following account information:

Total Cash and Investments as of March 31, 2014		***$419,894.20***
***Revenues for April 1 – May 31, 2014*:**		
EMWD 4/1/2014	$ 95,602.00	
City of Hemet 4/9/2014	$ 18,012.00	
City of San Jacinto 4/9/2014	$ 1,775.00	
Lake Hemet Municipal Water District 5/7/14	$ 107,082.00	
Total Revenues	$222,471.00	
Payments for April 1 – May 31, 2014:		
Lagerlof, Senecal, Gosney & Kruse 4/3/14	$ 2,535.00	
Water Resources Engineers 4/3/14 & 4/30/14	$ 26,265.69	
EMWD – 4/3/14 & 5/14/14	$ 4,713.17	
Total Payments	$ 33,513.86	
Cash Flow for April 1 – May 31, 2014		***$188,957.14***
Other Income/Expense for April 1 – May 31, 2014:		
Savings Interest	$ 103.98	
Other Expense/Fees	$ 0.00	
Total Cash and Investments as of May 31, 2014		***$608,955.32***

Pending Receivables:

Total Pending Receivables ***$ 0***

Pending Payments:

LSG & K (Legal Counsel) 4/11/14 & 5/12/14	$ 4,095.00
Edgewood Partners Insurance 3/25/2014	$ 3,102.00
EMWD – 2/3/2014	$ 1,464.00
Redwine and Sherrill 5/1/2014	$ 122.50
Water Resources Engineers 5/1/14	$17,886.53

Total Pending Payments ***$26,670.03***

2013 Budget Items	Allocations	Commitments (As of May 31, 2014)
In-Lieu Program Agreement	152,000.00	158,849.37
Office Supplies and Other Dir. Cost (10% of EMWD/WM Agrmt.)	16,850.00	1.00
Legal Counsel Contract	41,600.00	37,069.00
Advisor Contract	88,000.00	74,966.40
~~Gravel Pit De-Silting~~ (See Board Approved Items for revised allocation)	~~40,000.00~~	
Education and Training	15,000.00	
EMWD/Watermaster Support Agreement:		
Administrative Assistance (EMWD Task Order No. 1)	26,500.00	22,350.84
~~Monitoring Program Support~~ (See Board Approved Items for revised allocation)	~~112,000.00~~	
Financial Assistance (EMWD Task Order No. 3)	30,000.00	8,055.95
Additional/Revised Board Approved Items:		
Monitoring Program Support (EMWD Task Order No. 2)	35,936.00	
Gravel Pit De-Silting (EMWD Task Order No. 4)	54,000.00	47,935.86
Cone Penetrometer Testing Project (EMWD Task Order No. 5)	45,278.00	
TOTALS	**505,164.00**	**349,228.42**

2014 Budget Items	Allocations	Commitments (As of May 31, 2014)
In-Lieu Program Agreement	160,000.00	
EMWD/Watermaster Support Services		
Monitoring Program Support	131,000.00	
Soboba Gravel Pit Project		
Dewatering	35,000.00	
De-silting	105,000.00	
Organization Operation & Management		
Financial Support Services	18,000.00	
Legal Counsel Contract	33,000.00	6,630.00
Advisor Contract	166,000.00	53,418.31
Part-Time Executive Assistant Contract	50,000.00	3,200.95
Insurance; Office Supplies & Other Direct Costs	15,000.00	3,387.69
Education and Training	15,000.00	
Additional Projects/Activities		
Database/Mapping Application Development	20,000.00	
Groundwater Model Development	120,000.00	
Total - 2014 Proposed Budget	**868,000.00**	**66,636.95**

Minutes
Hemet-San Jacinto Watermaster Board of Directors Meeting
Eastern Municipal Water District
April 28, 2014

The Watermaster Board of Directors met in Regular Session in the Board Room at EMWD Headquarters, 2270 Trumble Road, Perris, California, on Monday, April 28, 2014 at ***4:00*** p.m. The meeting was called to order by Chairman Gorman.

Pledge of Allegiance

The Pledge of Allegiance to the Flag of the United States was led by Chairman Gorman.

Chairman Gorman introduced and welcomed Ms. Michelle Mayorga to the position of Executive Assistant to the Board and Mr. Mortazavi.

Board Members Present:	Frank Gorman, Chair Linda Krupa, Vice-Chair Phil Paule, Secretary Treasurer Mark Bartel
Board Member(s) Absent:	Bruce Scott
Board Alternate (s) Present:	Rick Hoffman
Watermaster Staff Present:	Behrooz Mortazavi, Michelle Mayorga (Water Resources Engineers) Thomas Bunn, Legal Counsel (Lagerlof, Senecal, Gosney & Kruse)
EMWD Staff Present:	Charlie Bachmann, Assistant General Manager of Planning, Engineering and Construction; Brian Powell, Director of Planning
City of Hemet Staff Present:	Kristen Jensen, Public Works Director
City of San Jacinto Staff Present:	Lynn Merrill, Public Works Director; Mike Emberton, Assistant City Manager
Lake Hemet Municipal Water District Staff Present:	Tom Wagoner, General Manager;
Others Present:	Dale Schafer, Center for Collaborative Policy, California State University Sacramento

I. PUBLIC COMMENTS –*Speakers are requested to limit comments to 3 minutes.*

None

II. ADDITIONS/DELETIONS TO AGENDA

None

III. Reports

A. Board Member Comments/Questions/ Reports

None

B. Advisor Report

Mr. Mortazavi provided information related to the coordination, activities and tasks related to EMWD. Meetings to discuss MWD delivery issues, development of 2014 Water Resources Monitoring Support Task Order, and Groundwater Model Development Cost Sharing agreement. Task Order 6 and Groundwater Model Cost Sharing Agreement are included under items V.A and V.B, respectively. EMWD has completed the 2013 Annual Report. A copy of this report, in its final form is available today.

The third and final sets of invoices for the 2013 Administrative Assessment were mailed in early March. Watermaster's Annual Financial Audit is in the process of being completed by the Accounting Firm of Nigro & Nigro. Their findings and recommendations will be presented at the next Board meeting. The Treasurers Report is provided under Item III-C.

The Technical Advisory Committee (TAC) had one meeting on April 14, 2014.

Special projects discussed included the selection of RMC Water & Environment Engineering firm and the start of the Groundwater model development project. The start of the 2014 Database Management project with Spatial Wave will begin soon. Psomas, EMWD Consultant, has completed the Cone Penetrometer Testing project. The project findings will be presented under item VI.A.

All agencies have been consulted on the Draft 2013 Annual Report and have had the opportunity to comment on it. The carry-over credits for the agencies, Class A and B participants are revised due to updates received from the Soboba Tribe and Legal Counsel, respectively. This information will be presented under item V.C. Mr. Glen Van Dam (Class B participant) who requested inclusion of additional acreage and revision of his Base Production Rights at the February 24, 2014 Board meeting has not yet submitted his request in writing. No action has been taken on this issue since the last Board meeting.

The Soboba Ad-hoc Committee, Vice Chair Krupa and Mr. Scott, met with the Soboba Tribal council on April 15, 2014. Watermaster activities during 2013 and the proposed projects for 2014 were reviewed with the Council at this meeting. A copy of the presentation provided to the Tribal Council is attached. Ms. Krupa said that the meeting with the Tribal council was well received, and suggested that a meeting like this should be held twice a year. The Expedited Drought Relief Act will be implemented as part of the Prop 84 grant funding. Proposal Solicitation Package (PSP) for this funding has been released by DWR. DWR is interested in funding projects that provide immediate regional drought preparedness, increased local water supply reliability, assist in implementing conservation programs and reduce water quality conflicts or ecosystem conflicts created by the drought. Santa Ana Watershed Project Authority (SAWPA) which is in charge of distribution of Prop 84 funds, have indicated they want local and regional agencies within the Santa Ana Watershed to focus on demand reduction and water use efficiency projects. This is an opportunity for the agencies within the Hemet-San Jacinto area to apply for grant funding for such projects.

The following miscellaneous activity was discussed: The sublease of office space from Elan Associates in Corona is now complete and all Watermaster documents have been transferred to this location. The majority of Watermaster work is currently done by the new Administrative Assistant, Ms. Michelle Mayorga, from the Water Resources Engineers office in Corona. Mr. Mortazavi thanked EMWD staff for all their help with this transition. MWD has adopted its two year budget and rates. Their 2015 and 2016 projected rates for the Soboba Settlement water are $459 per acre-foot (AF) and $468/AF, respectively. This rate does not include the recharge cost by EMWD (approximately $80/AF). EMWD, LHMWD, and Soboba Tribe joint Canyon Basin Operation Plan effort is on schedule. EMWD has been working with MWD to reduce demand on SWP system. EMWD is looking at taking Colorado River Water (CRW) at the Hemet Water Filtration Plan (HWFP) as part of this cooperative effort. EMWD's Well 28, located along Mountain Avenue in the City of San Jacinto has recently collapsed. EMWD has hired a consultant to prepare preliminary design documents for a new well (well 38) at the same location. LHMWD well 16 is complete and the electric meter is installed, LHMWD is also working with Riverside County Flood Control and Conservation District (RCFC) on their joint Little Lake storm water and stream water recharge project. This project is expected to have its bid opening in Spring 2014. LHMWD and EMWD are working to connect well 92 to the raw water pipeline. Well 92 is one of the IRRP wells. The City of Hemet has completed their Well No. 16 rehabilitation work. The City is also trying to get a temporary connection with EMWD at Menlo Avenue. City of San Jacinto water rate surcharge will go in effect on May 1, 2014. City customers will see this change on their June bills. Chairman Gorman asked if there is a timeline for Prop 84. Mr. Mortazavi answered that there is a very short time. The deadline is May 22 to put in a request and early June to submit a proposal. Chairman Gorman asked if this money will be available annually. Mr. Mortazavi replied that this is only available for one round.

(See Attachment No. 1 for the complete Advisor Report)

C. Treasurer Report

On behalf of Mr. Paule, Board Treasurer, Mr. Mortazavi reviewed the report with the Board. Chairman Gorman asked how the money is invested, stock market or investment. Mr. Mortazavi explained that all the money is in a checking and savings account with the Bank of Hemet. Chairman Gorman asked if there is an "El Niño" next year, is there any reserve funds to pay for the re-construction of the ponds. Mr. Mortazavi explained that couple of years ago, the CAM participants decided it would be best not to put aside money for re-construction of the ponds. The participating agencies will deal with it when and if it happens. Chairman Gorman asked if we could loan Administrative Assessment funds for the re-construction of the ponds. Mr. Bunn said Watermaster should be able to loan itself money, but he would review the judgment to make sure that is the case.

(See Attachment No. 2 for the complete Treasurer Report)

IV. CONSENT CALENDAR

Accept Motion and Second for Approval of Minute Order for Item IV.A.

A. Approval of Minutes – February 24, 2014 Regular Board Meeting -
Recommendation: Adopt a motion to approve Item A on the consent Calendar

Motion: Paule	Noes:
Seconded: Krupa	Abstain:
Ayes: Gorman, Bartel	Absent: Scott

(See Attachment No. 3 for the February Meeting Minutes)

V. ACTION ITEMS

A. Approval of 2014 Water Resources Monitoring Program Support Services Task Order No. 6 with EMWD

The purpose of this Task Order is to collect, analyze and compile groundwater level, quality, and production data to meet the reporting requirements of the Judgment. The Task Order also includes meter installation and data management. The cost estimate for this Task Order is close to $131,000.

Motion: Krupa	Noes:
Seconded: Paule	Abstain:
Ayes: Gorman, Bartel	Absent: Scott

(Task Order No. 6 is included as Attachment No. 4)

B. Approve 2014 Groundwater Management Tool Model Calibration Update Cost Sharing Agreement with EMWD

Mr. Brian Powell of EMWD provided a presentation on San Jacinto Ground Water Basin Regional Numerical Flow Model Update 2014.

Mr. Powell stated the current groundwater model was calibrated for the years of 1984 – 1997 with a 2 year verification period from 1997 to 1999. The Update Project Goals are: consistency by having One Model for the Region, Evaluation of Potential Groundwater banking, project specific models for potential projects, complying with regulatory requirements. The project tasks will be to form an advisory panel to peer review the model development, update the model's physical construction based on the conceptual model update, calibrate the updated physical model, prepare water balances and safe yield estimates, complete five predictive simulation runs and document the results in the final report. The consultant that was selected was RMC Water & Environment. There were 8 consultants that were asked to propose and only 4 submitted proposals. Mr. Mortazavi was one of four on the committee that reviewed the proposals. The project schedule is as follows: RFP released date was January 2, 2014, the proposals received date was January 30, 2014, EMWD Board awarded contract on March 26, 2014, the notice to proceed was issued on March 31, 2014, the kickoff meeting was held on April 15, 2014 and the expected project completion date will be mid- April 2015. Mr. Mortazavi explained the significance of this project for the Watermaster by stating, the Stipulated Judgment estimated the safe yield of the basin to be between 40-45 thousand AF. This effort is going to update the Safe Yield number. The Model Update may increase or decrease the safe yield estimate. But regardless, this effort is important to be completed and the estimated safe yield change can cause significant impact to your agencies because every 1,000 AF of change in the safe yield number, given current MWD prices, is costing about $660,000. Chairman Gorman questioned that once we have new safe yield data in 2015, what do you see us doing?. Mr. Mortazavi replied he needs to check on how specific agencies can reduce or increase production as a result of safe yield estimate changes. Mr. Paule questioned in Mr. Mortazavi's professional capacity have you dealt with this firm before? Mr. Mortazavi replied yes, this firm actually did the Water Management Plan for Hemet – San Jacinto area which was approved by the Federal government. They are very familiar with the area and as Mr. Powell said, they did have a good proposal.

Motion: Paule
Seconded: Krupa
Ayes: Gorman, Bartel
Noes:
Abstain:
Absent: Scott

(See Attachment No. 5 for the presentation)

C. 2013 Revised Carry-over Credit Accounts – Receive and File

Mr. Mortazavi provided a "Revised Carry-Over Credits as of December 2013"presentation. This presentation has been seen before, however since we have to pass this information along to the court, we must provide the corrected information. On March 7, 2014 Soboba reported 1674 AF of production in 2013 which was a revision from 1984 AF reported earlier by the Tribe. So with the change of this number, the unused Soboba water number had to be updated. There is a meeting with the Class A and B Participants on May 16, 2014, to review the Carry-Over Credits. There are two Class B Participants who are over their allocations, Mr. Phillips and Mr. Scott. These 2 participants will need to buy replenishment water. Mr. Mortazavi suggests that we wait to see if these 2 participants can offset their production by reducing their production. Mr. Mortazavi will need to get some feedback regarding this suggestion from General Counsel before bringing it back to the Board for action.

(See Attachment No. 6 for the presentation)

D. 2013 Annual Report – Receive and File

Mr. Mortazavi provided a presentation of the Hemet/San Jacinto Groundwater Management Area 2013 Annual Report. This report documents the core activities of the Watermaster. Groundwater is the main source of supply in the management area. This report shall be filed with the Court once the Board receives and files the report.

(See Attachment No. 7 for the complete presentation)

VI. INFORMATIONAL ITEMS/CORRESPONDNCE

A. Review of Cone Penetrometer Test (CPT) project results and findings

Mr. Powell of EMWD provided a presentation on Geotechnical Evaluation of Integrated Recharge and Recovery Program (IRRP) Ponds.

Mr. Powell provided a map of Low percolation area and the original conjunctive use ponds. The low percolation area does not recharge as well as the original conjunctive use ponds area. The percolation rates in northern ponds have reduced overtime. It is observed that for approximately 2 days after rain events percolation rate is reduced in the IRRP recharge ponds. EMWD anticipates that MWD will require high water deliveries after the drought to "catch up" on recharge requirement. The project overview goals are to set baseline understanding of local geology, determine depth and thickness of fine-grained geology, if present and identify viability of remedial actions to increase recharge rates. The Cone Penetrometer Testing (CPT) included collecting geotechnical information using CPT investigation of soil layers such as clay, silt and sand. There were 18 locations that were tested using a 20-ton rig. This process was completed to approximately 100 feet below ground surface. The CPT analyses shows that relative recharge potential of a given area as single coarse-grained layer results in high, deep percolation and the increased number of clay and/or silt layers results in significantly lower percolation rates. The results indicate existence of fine-grained units in localized lenses rather than as extensive continuous layers. Few lenses are present on the south (upstream) side of ponds, resulting in greater deep percolation potential. More fine-grained lenses exist on the north (downstream) side of ponds resulting in percolation rates that are lower than southern ponds and are susceptible to reduced percolation due to storm evens. The actions and recommendations are to remove some very shallow clay layers from under some of the northern ponds. Chairman Gorman asked how thick are the layers that are being removed. Mr. Mortazavi stated that they are not very thick. It is also recommended that continued monitoring of percolation rates of each pond under various operating conditions continue and to re-evaluate the percolation rates after the next recharge season. Mr. Paule questioned what the cost of this project was. Mr. Mortazavi stated it did cost close to $45,000. Mr. Paule questioned how clay layers can be broken. Mr. Powell replied that they are broken by drilling through them and removing the material. Chairman Gorman pointed out that MWD agreement requires about 18,000 gallons per minute (gpm) flows to be recharged, and currently the ponds can handle up to 15,000 gpm flows, does EMWD have analysis of the free board? Mr. Powell responded that EMWD tries to keep water in the ponds at a low level to prevent the outer berms from being breached. Chairman Gorman inquired at what capacity it would be breached. Mr. Powell replied that EMWD does not want to raise the levels to a point that the berms would be breached.

(See Attachment No. 8 for the presentation)

VII. CLOSED SESSION

None

VIII. ADJOURNMENT

There being no further business to come before the Board; Chairman Gorman adjourned the meeting at ***5:30 p.m***., to be reconvened on Monday, June 23, 2014 at 4:00 p.m. (Adjourned Regular Meeting).

2013 Financial Audit Highlights

Hemet - San Jacinto Watermaster Board Meeting

June 23, 2014

What Is An Audit?

- Express an independent opinion of the financial statements.
- Determine compliance with applicable laws and regulations.
- Not designed to look for fraud, waste, and abuse.

Independent Auditor's Report - pages 1-2

- Opinion on financial statements is unqualified
- "Clean" opinion

Management's Discussion and Analysis (MD&A) - pages 3-5

- An objective and easily readable analysis of the Entity's financial activities.
- Summary of current year information.
- Analysis of Entity's overall financial position and results of operations.

Financial Statements - pages 6-8

- Reports financial position and activities
- Statement of Net Position, p.6
  - Includes capital assets, less accumulated depreciation, *if applicable*
  - Reports long-term liabilities, *if applicable*
  - Reports "net position"
  - Uses full accrual basis of accounting
- Statement of Revenues, Expenditures, and Changes in Net Position, p.7
  - Reports net expense by type
  - Operating revenues and non-operating revenues shown separately
- Statement of Cash Flows, p.8
  - Includes ending cash balance
  - Reports cash flows from operating and investing activities

Notes to the Financial Statements pages 9-12

- Describe important financial information in more detail
- Significant footnotes include:
  - Note 2 reports details of the Watermaster's cash and investment balances, pp.11-12

Other Independent Auditors' Reports pages 13-14

- Indicates that we conducted our audit in accordance with *Government Auditing Standards* and that any noncompliance is reported as findings.
- Any findings or material weaknesses were noted in the Findings & Recommendations section.

Audit Findings and Recommendations pages 15

- Financial Statement Findings

Questions and Comments?

HEMET–SAN JACINTO WATERMASTER

RESOLUTION NO. 7

RESOLUTION OF THE WATERMASTER BOARD RE ADDITION OF BASE PRODUCTION RIGHTS TO THE VAN DAM FAMILY TRUST

WHEREAS, Donald Dick Van Dam and Frances L. Van Dam, Trustees of the Donald Dick & Frances L. Van Dam Revocable Family Trust (the Van Dams), are Class B participants, and

WHEREAS, since the entry of Judgment, the Van Dams have acquired additional property, described as A.P.N. 432-180-002-6, the Base Production Rights of which are calculated at 139 acre-feet. The Van Dams have submitted a written request that this property and the associated Base Production Rights be added to their rights under the Judgment, and

WHEREAS, section 4.4.1.2 of the Judgment provides that upon written request by a Class B Participant, the Watermaster shall have the authority to adjust the Class B Participant's Base Production Rights for such period, and on such terms and conditions, as the Watermaster deems appropriate under the circumstances.

NOW, THEREFORE, BE IT RESOLVED AS FOLLOWS:

The Watermaster hereby adjusts the properties and Base Production Rights of the Van Dams to account for the new property. Their Class B Base Production Rights now total 670 acre-feet.

ADOPTED THIS 23rd day of June, 2014.

Frank Gorman, Chairperson

ATTEST:

Phil Paule, Secretary

HEMET–SAN JACINTO WATERMASTER

RESOLUTION NO. 8

RESOLUTION OF THE WATERMASTER BOARD
RE DEFERRAL OF REPLENISHMENT ASSESSMENT

WHEREAS, the Judgment in Eastern Municipal Water District vs. City of Hemet, et al., requires the Watermaster to levy Replenishment Assessments on each Public Agency and Class B Participant, and

WHEREAS, the first year of pumping under the Judgment was a partial year, which might not accurately reflect what the pumping would be over a full year. In addition, parties have not yet had an opportunity to accumulate Carry-Over Credits, which can be used to offset Replenishment Assessments. Finally, the grace period for Class A Participants to convert to Class B Participants has not yet expired. For these reasons, it would be inequitable to impose a Replenishment Assessment on the first year's pumping alone.

NOW, THEREFORE, BE IT RESOLVED AS FOLLOWS:

Replenishment Assessments are hereby deferred until after 2015, at which time they will be imposed on the cumulative excess pumping from entry of judgment through 2015, as provided in section 1.31 of the Judgment.

ADOPTED THIS 23rd day of June, 2014

Frank Gorman, Chairperson

ATTEST:

Phil Paule, Secretary

EASTERN MUNICIPAL WATER DISTRICT

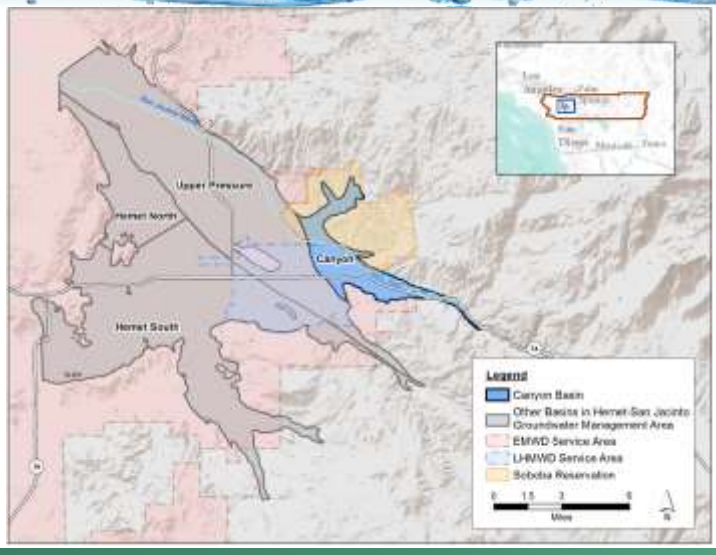
Canyon Operating Plan

Brian Jack Powell, P.E.
Director of Planning
June 23, 2014

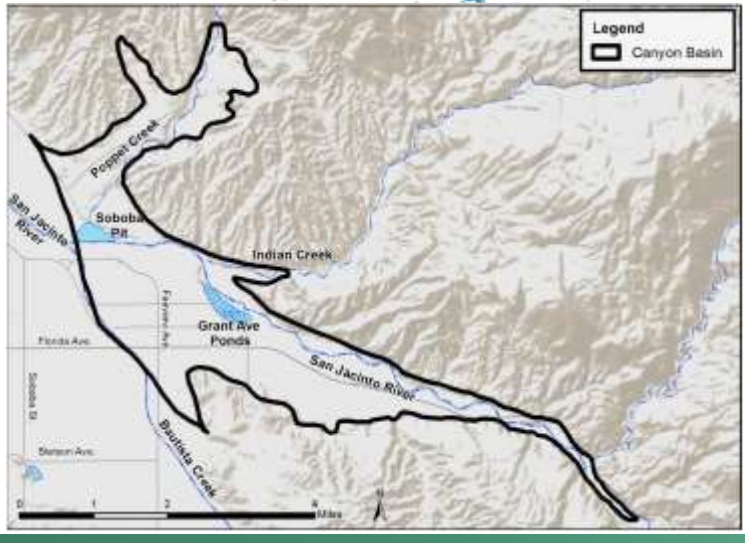
Agenda

- Canyon Basin Vicinity
- History of the Canyon Basin Operating Plan
- Plan for the Plan
- Project Goal
- Elements of the Plan
- Planning Yield
- Operational Triggers
- Tribal Production Capacity
- Potential Actions by the Districts
- Project Status

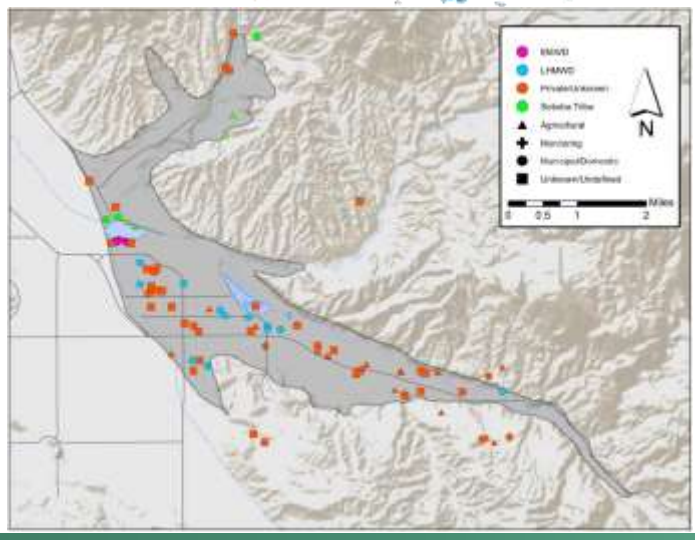
San Jacinto Groundwater Basin



Canyon Basin Vicinity



Canyon Basin Groundwater Wells



History of the Canyon Operating Plan

- The Soboba Settlement Agreement states…

"In the event the Soboba Tribe is unable, except for mechanical failure of its wells, pumps or water facilities, to produce from its existing wells or equivalent replacements up to 3,000 afy production from the Canyon Sub-basin and the remainder of its Tribal Water Right from the Intake Sub-basin, …**the Local Districts [EMWD & LHMWD] shall deliver any shortage to the Soboba Tribe**."

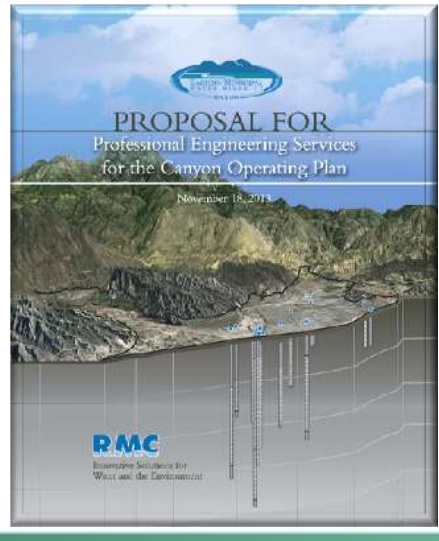
History of the Canyon Operating Plan

- Memorandum of Understanding

  Before agreeing to sign to the settlement agreement, **the Tribe required that EMWD and LHMWD commit to "…the prompt development of an operating plan for the Canyon Basin**…" This Operating Plan would be designed to help avoid shortages that would result in involuntary pumping restrictions on one or both of the agencies.

Plan for the Plan

- Participants Agreed on an Approach
  - Soboba Tribe, LHMWD and EMWD
  - Agreed to use a Consultant and Share the Costs
- Developed a Scope of Work and RFP
  - Agreed on 4 Firms to Invite
  - Received 2 Proposals
  - Reviewed and Ranked Proposals
- Unanimously Selected RMC
- Participants Working Cooperatively on Development of the Plan



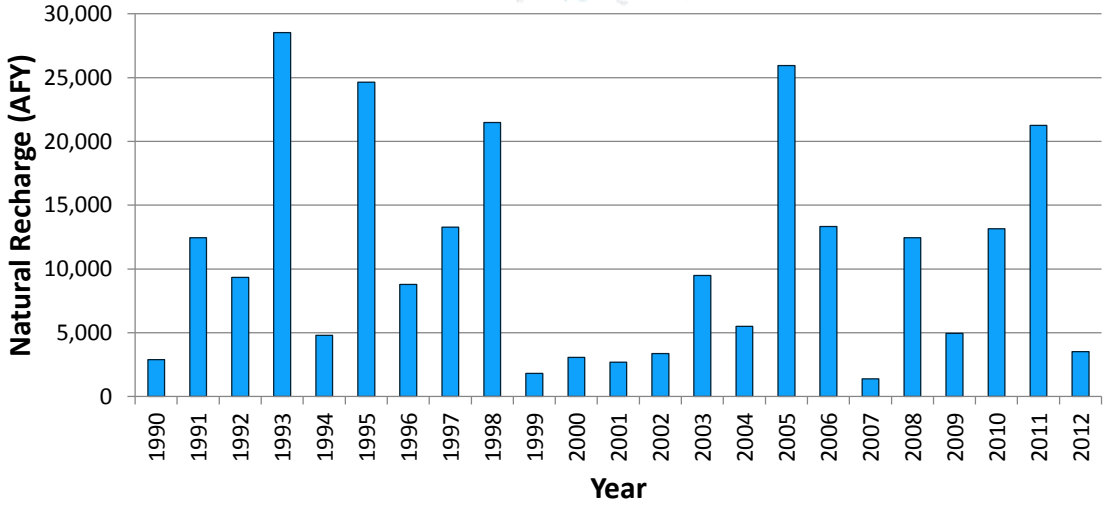
Project Goal

To develop an operating plan that facilitates responsible water management of the Canyon Basin through the ongoing monitoring of the basin's health and proactive operational adjustments by the Districts.

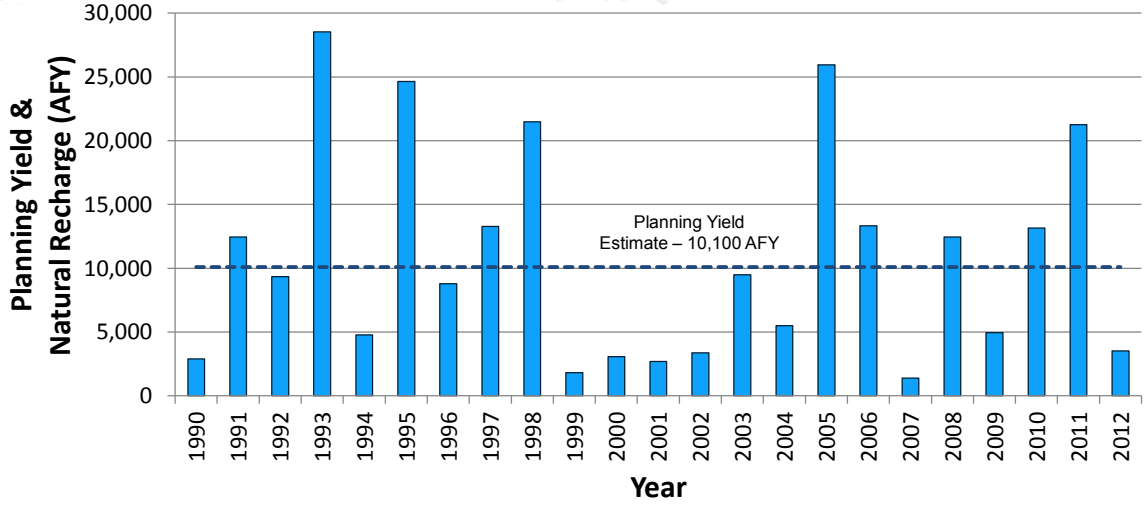
Elements of the Operating Plan

- Estimate the Planning Yield for the Basin
- Estimate the Volume of Storage in the Basin
- Develop a Storage Curve for various levels within the Basin
- Identify Key Wells
- **Identify Groundwater Levels that will Trigger Proactive Operational Actions by the Districts**
- Document historical water levels, pumping and recharge
- Summarize the findings and recommendations in a Report

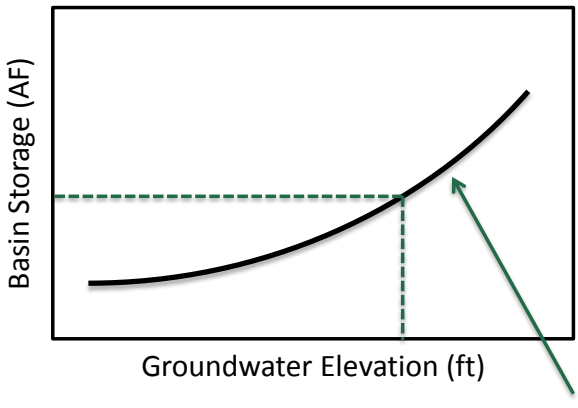
Planning Yield



Planning Yield

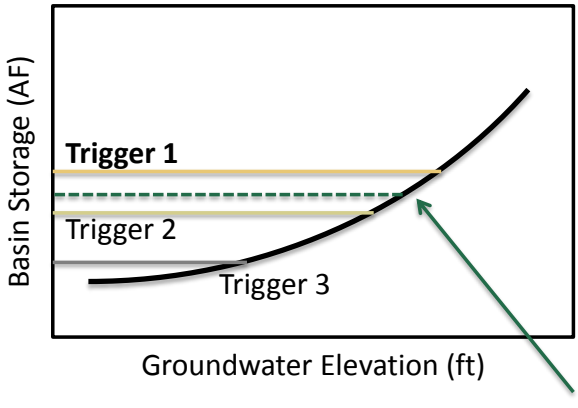


Operational Triggers



- Average Basin Storage estimated using 3 Key Wells – One from each Participant
- Based on Spring Levels and Adjusted to estimate Late Summer Levels

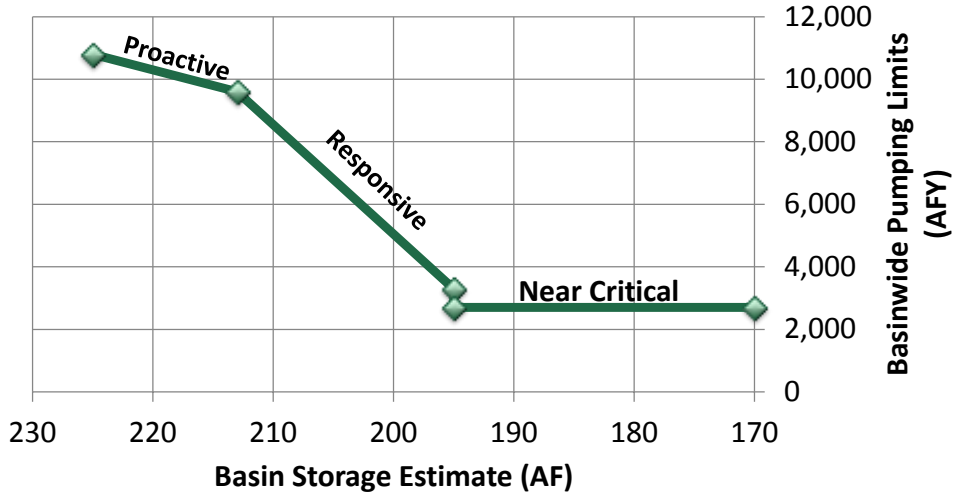
Operational Triggers



Trigger Levels:

- Trigger 1 – Proactive
- Trigger 2 – Responsive
- Trigger 3 – Critical

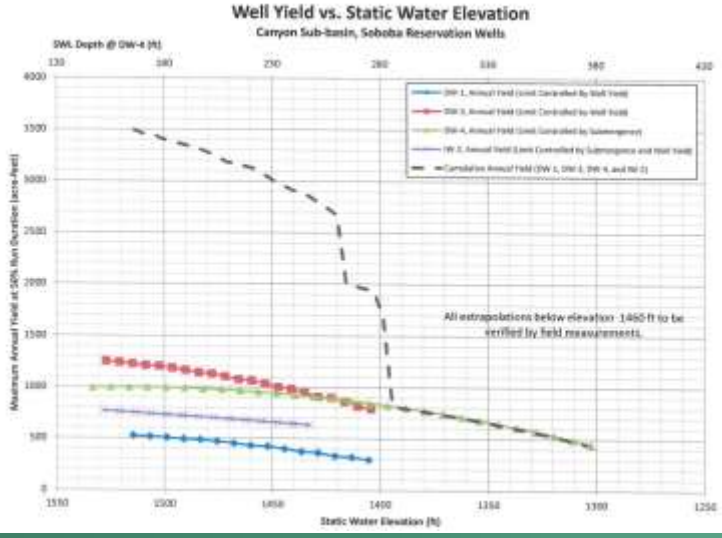
Operational Triggers



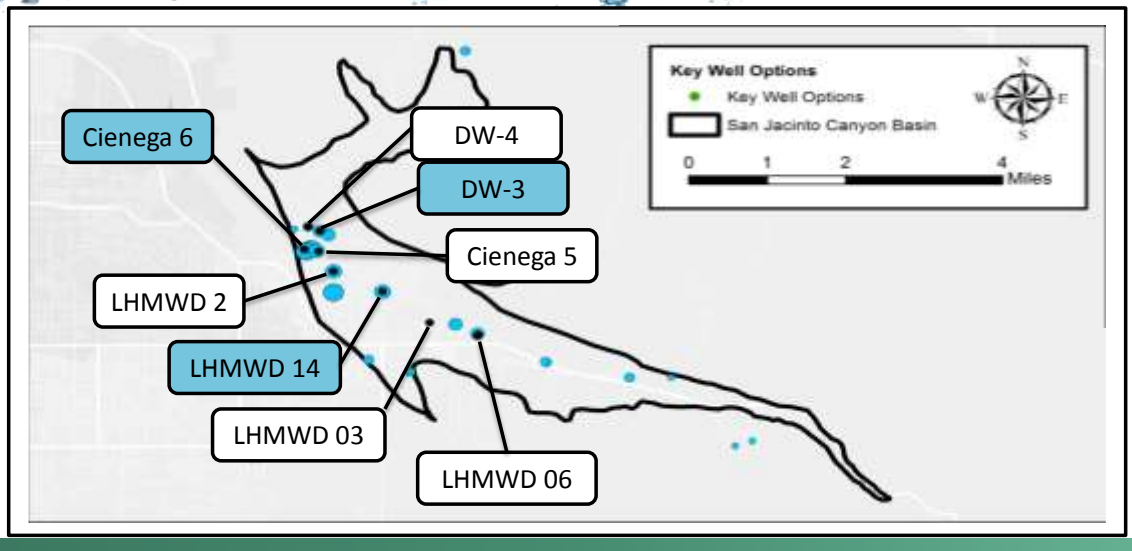
Tribal Production Capacity

- Critical Water Levels were Developed using Soboba Wells
  - **Maximum Well Yield**
  - Minimum Recommended Continuous Flow Limitations
  - **Minimum Pump Submergence Limitations**
  - Maximum Pump Capacity

Tribal Production Capacity



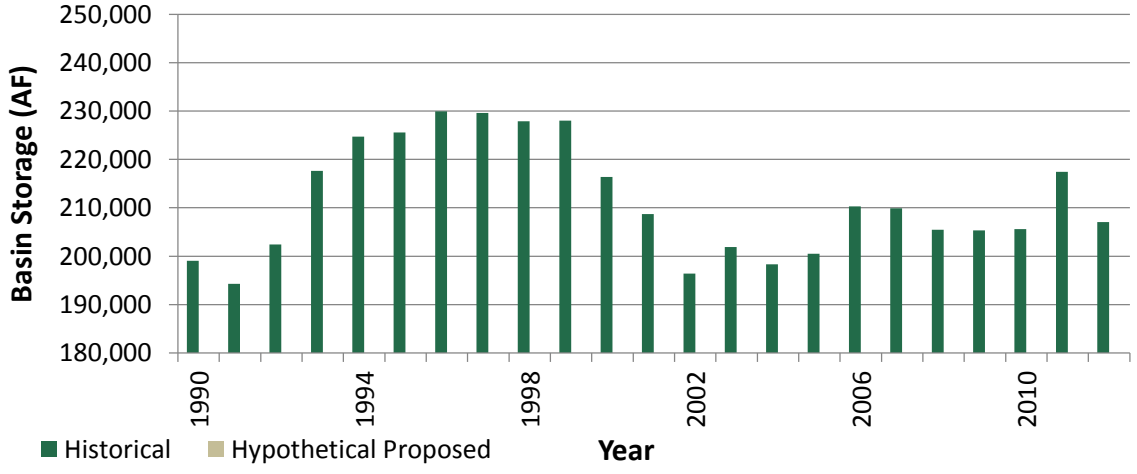
Key Wells



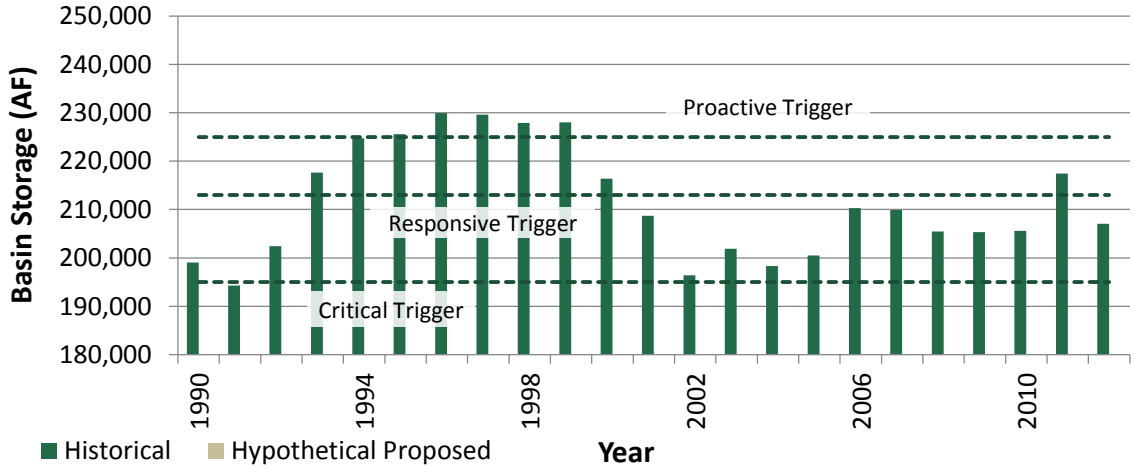
Potential Actions by the Districts

- Potential Actions based on Operational Triggers
  - Reduce Pumping from the Canyon Basin
  - Increase Recharge into the Canyon Basin
  - Public Outreach to Reduce Pumping by Private Pumpers

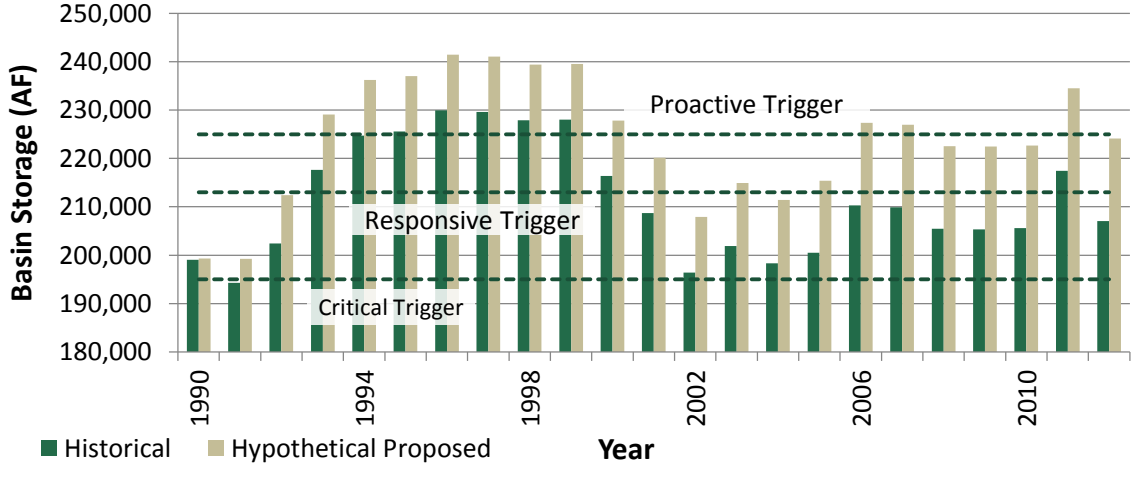
Basin Management Results



Basin Management Results



Basin Management Results



Project Status

- Workshop Monday, June 23
  - Participants Provide Comments to RMC
  - Final Comments Due Friday, June 27
- RMC Incorporate Comments
- RMC Presentation of Final Report before end of July

EASTERN MUNICIPAL WATER DISTRICT

Contact Information

Brian Jack Powell, P.E.
Director of Planning
(951) 928-3777 ext. 4278
powellb@emwd.org

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

June 5, 2014

Mr. Paul D. Jones, II, P. E.
General Manager
Eastern Municipal Water District
P. O. Box 8300
Perris, CA 92572-8300

Dear Mr. Jones:

Soboba Settlement Water Delivery Agreement Response to
Eastern Municipal Water District's Request for In-lieu Delivery

I appreciate your recent interest in the purchase of in-lieu delivery of Soboba Settlement Water for recharge of the groundwater basin. Such deliveries would help fulfill delivery obligations specified in the *Soboba Band of Luiseño Indians Settlement Agreement* (Soboba Agreement) and *Contract for Delivery of Water Pursuant to Settlement* (Delivery Agreement) to which the Metropolitan Water District of Southern California (Metropolitan) and Eastern Municipal Water District (Eastern) are parties.

Pursuant to the Soboba Agreement and Delivery Agreement, Metropolitan shall use its best efforts to deliver an average of 7,500 acre-feet (AF) per year of water to Eastern for the direct recharge of the groundwater basin. Metropolitan must deliver this water at the EM-14 service connection, which typically conveys untreated State Water Project (SWP) water to Eastern via the Lakeview Pipeline. However, this year's shortage of SWP water has required Metropolitan to minimize deliveries of SWP water for recharge purposes.

While the intent of the Soboba Agreement and Delivery Agreement is to deliver Soboba Settlement Water for groundwater spreading, Metropolitan will accommodate Eastern's request for temporary in-lieu water, with water deliveries at EM-14 which are anticipated to consist of Colorado River water by mid-July 2014. Metropolitan recognizes that levels of total dissolved solids (TDS) in Colorado River water may constrain direct recharge operations as these levels

700 N. Alameda Street, Los Angeles, California 90012 • Mailing Address: Box 54153, Los Angeles, California 90054-0153 • Telephone (213) 217-6000

exceed water quality objectives for the basin established by the Santa Ana Regional Water Quality Control Board. On the other hand, in-lieu operations will preclude any potential degradation of ambient groundwater quality caused by direct recharge of the basin with water of higher TDS content.

Although not expressly disallowed by the Delivery Agreement, it should be noted that the proposed in-lieu operation is not intended to set a precedent for future Soboba Settlement Water deliveries. As such, Metropolitan will agree to the temporary in-lieu delivery of Soboba Settlement water through December 31, 2014 according to the following specific provisions:

1. In-lieu deliveries shall commence upon developing a mutually agreeable operating plan by Metropolitan and Eastern staff, and end on December 31, 2014. During this period, Eastern shall cease groundwater production from not less than four wells in the management area adjacent to the Soboba Reservation to achieve a reduction in groundwater production by up to 5,900 AF in 2014, thereby providing in-lieu recharge.

2. Metropolitan shall deliver Soboba Settlement Water at an amount equal to the reduction in groundwater production through December 31, 2014, to the EM-14 connection for treatment at the Hemet Water Filtration Plant. This delivery will be treated at Eastern's sole expense for delivery to its customers and will replace Eastern's foregone groundwater production for the period.

3. The rate to be paid by Eastern for Metropolitan in-lieu water deliveries shall be at the rate as stipulated in the Soboba Agreement and Delivery Agreement.

4. Direct groundwater recharge may resume when sufficient SWP supplies are available, but no earlier than January 1, 2015.

Nothing in this letter agreement shall be construed to waive, amend, or terminate any right or obligation created by the Delivery Agreement and the Soboba Agreement except as specifically set forth and for the time periods provided herein. If you agree with the terms described above, please acknowledge your agreement by signing and returning a copy of this letter.

Metropolitan is looking forward to our agencies' continued cooperation in meeting obligations under the Soboba Agreement.

Very truly yours,

Jeffrey Kightlinger

Date:

Paul D. Jones, II, P.E.
General Manager
Eastern Municipal Water District

Date: 6.5.14

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AGENDA

HEMET – SAN JACINTO WATERMASTER
BOARD OF DIRECTORS

August 25, 2014
4:00 pm
2270 Trumble Road, Perris, CA 92750

CALL TO ORDER

PLEDGE OF ALLEGIANCE

ROLL CALL

I. PUBLIC COMMENTS

Any person may address the Board on any subject within the Watermaster's jurisdiction which is not on the agenda. However, any non-agenda matter that requires action will be referred to staff for a report and action at a subsequent Board meeting. Any person may also address the Board on any agenda matter at the time that matter is discussed, prior to Board action.

II. ADDITIONS/DELETIONS TO THE AGENDA

III. REPORTS

The following agenda items are reports. They are placed on the agenda to provide information to the Board and public. There is no action called for in these items.

A. Board Member Comments/Questions/Reports

B. Advisor Report

C. Legal Counsel Report

D. Treasurer Report

IV. CONSENT CALENDAR

A. Approval of Minutes – June 23, 2014 Regular Board Meeting.
Recommendation: Adopt a motion to approve item A on the Consent Calendar.

Consent Calendar items are expected to be routine and non-controversial and are to be acted upon by the Board at one time without discussion. If any Board member, staff member, or interested person requests that an item be removed from the Consent Calendar, it will be removed from the Consent Calendar for separate action.

V. ACTION ITEMS - NONE

The following items call for discussion and possible action by the Board. These items are placed on the Agenda so that the Board may discuss and possibly take action on the items if the Board desires.

VI. INFORMATIONAL ITEMS/CORRESPONDENCE

A. Grants and Loans Opportunities – Presentation by Mr. Greg Kahlen, The Kahlen Group, on funding opportunities for water related projects.

B. Groundwater Model Update – Status Report – Overview of the groundwater model update project status.

C. 2014 Imported Water In-lieu Program Status – Presentation by Mr. Khos Ghaderi, EMWD, on the status of 2014 in-lieu recharge.

D. Assembly Bill 1739 and Senate Bill 1168 Overview – Presentation by Ms. Danielle Coats, EMWD, on draft groundwater management legislations being considered in Sacramento.

E. Change Order No. 1 to EMWD Task Order No.6 – 2014 Water Resources Monitoring Program Support – additional meter replacements not-to-exceed $4,333.80.

VII. CLOSED SESSION - NONE

VIII. ADJOURNMENT

Next Regular Board of Directors Meeting
October 27, 2014 at 4:00 pm. at:
Eastern Municipal Water District Board Room
2270 Trumble Road, Perris, CA 92750

Upon request, this agenda will be made available in appropriate alternative formats to persons with disabilities, as required by Section 202 of the Americans With Disabilities Act of 1990. Any person with a disability who requires a modification or accommodation in order to participate in a meeting should direct such a request to the Watermaster Executive Assistant at 714-707-4787, at least 48 hours before the meeting, if possible.

Pursuant to Government Code Section 54957.5, any writing that (a) is a public record; (b) relates to an agenda item for an open session of a regular meeting of the Watermaster Board of Directors; and (c) is distributed less than 72 hours prior to that meeting, will be made available for public inspection at the time the writing is distributed to the Board of Directors. Any such writing will be available for public inspection at Watermaster's office located at 2270 Trumble Road, Perris, CA 92750.

Minutes
Hemet-San Jacinto Watermaster Board of Directors Meeting
Eastern Municipal Water District
June 23, 2014

The Watermaster Board of Directors met in Regular Session in the Board Room at EMWD Headquarters, 2270 Trumble Road, Perris, California, on Monday, June 23,201 at 4:20 p.m. The meeting was called to order by Secretary Treasurer Phil Paule.

Pledge of Allegiance

The Pledge of Allegiance to the Flag of the United States was led *by Secretary Treasurer, Phil Paule*

Board Members Present:	Linda Krupa, Vice-Chair (4:45pm) Phil Paule, Secretary Treasure Mark Bartel Rick Hoffman – Alternate Representing Frank Gorman
Board Member(s) Absent:	Bruce Scott
Board Alternate (s) Present:	None
Watermaster Staff Present:	Behrooz Mortazavi, Michelle Mayorga (Water Resources Engineers), Thomas Bunn, Legal Counsel (Lagerlof, Senecal, Gosney & Kruse)
EMWD Staff Present:	Paul D. Jones, General Manager, Charlie Bachmann, Assistant General Manager of Planning, Engineering and Construction; Brian Powell, Director of Planning; Kevin Pearson, Public Affairs Officer, Khos Ghaderi, Director of Water Operations
City of Hemet Staff Present:	Kris Jensen, Public Works Director
City of San Jacinto Staff Present:	Lynn Merrill, Public Works Director; Mike Emberton, Assistant City Manager; Dan Maudrovich, Water Utilities Superintendent
Lake Hemet Staff Present:	Tom Wagoner, General Manger;
Soboba Tribe	Frank Coate
Others Present:	Glen Van Dam, Van Dam Diary, C.J. Gaunder, Nigro & Nigro

I. PUBLIC COMMENTS –Speakers are requested to limit comments to 3 minutes.

None

II. ADDITIONS/DELETIONS TO AGENDA

None

III. Reports

A. Board Member Comments/Questions/ Reports

None

B. Advisor Report

Mr. Mortazavi reported that most of his work with EMWD has been related to the Groundwater Model Development and the Data Management project that are both on going. The invoices for 2014 Administrative Assessment will be mailed out in July. C.J. Gaunder, a partner from the firm of Nigro & Nigro, will present 2013 Financial Audit results later at this meeting. The Treasurer Report will be presented under Item III-D. The Technical Advisory Committee had one meeting on June 9th. The consultant has started working on the Groundwater Modeling Project. The Data Management Project is ongoing and in its final phase. The Data Management Project allows the Watermaster to access EMWD data. The In-lieu deliveries from Metropolitan Water District have started. EMWD has expecting to receive about 5,900 A.F. as part of this effort. . There was a meeting with the Class A and B participants on May 16th. Mr. Scott, Mr. Pastor and several private pumpers participated in this meeting. The purpose of this meeting was to share with the local producers their status, such as how much water they have pumped, how much water they were over or how much they were under. There were several communications with 2 of the Class B participants that are subject to replenishment assessment. Mr. Scott and Mr. Phillips (Pastime Lakes Dairy) are over their allocations. Mr. Mortazavi has also been in contact with Pastime Lakes Dairy and several of the family members owning this dairy in regard to this situation. The owners are aware of this issue and they are looking at how to reduce their water usage over the next couple of years. Mr. Mortazavi has been working with Mr. Bunn regarding Mr. Van Dam's request for additional base production rights. There will be more discussed on this issue during the Legal Counsel Report.

Mr. Mortazavi reported that there may be an opportunity for Agencies in the Hemet/San Jacinto area to receive grant funding. SAWPA is working with EMWD and its other member agencies to put together an application with the Department of Water Resources. This item has been discussed extensively at the TAC meeting and Watermaster member agencies' staff are aware of this. The Soboba Tribal Council is interested in meeting with the Ad-hoc Committee (Ms. Krupa and Mr. Scott) on a more regular basis. The next meeting with the Tribal Council is scheduled for October 14th at 10:00am.

Under miscellaneous activity, there has been a lot of activities that have been done by EMWD, LHMWD, Cities of Hemet and San Jacinto. One of the major activities that EMWD, LHMWD and the Soboba Tribe have jointly started the Canyon Basin Operation Plan and it is almost complete. Their final meeting was held today and the planning yield for the Canyon Basin is estimated at 10,100 acre feet per year.

Canyon Basin is where almost all of LHMWD's and some of EMWD groundwater is produced. There have been a few discussions with Bureau of Reclamation representative and Dr. Eylon Shamir regarding a potential USBR funding for a study in the region to assess natural variability of flow and its linkage with the groundwater model. Dr. Shamir is interested in submitting a proposal to the USBR for this effort. If the proposal is accepted, Dr. Shamir will be working with EMWD to gather information for this project. There have been several communications with a real estate agent inquiring about what happens if Class B participants sell their property. At this time, there is apparently one property that is up for sale that is a Class B participant. Another person from the general public has been inquiring about the cost of recharge facilities and how the Watermaster is involved in the recharge activities.

The drought continues in this regions and Metropolitan is requesting its member agencies to use more Colorado River water instead of the State project water. EMWD is cooperating with this request. By mid-July, EMWD will be receiving Colorado River water at its EM-14 connection. The EM-14 connection is the connection that takes water to the Hemet Filtration Plant and the Recharge Ponds.
As part of the Groundwater Model Project, EMWD will be inviting several Groundwater experts to form an advisory panel that will include representatives from the Department of Water Resources, Regional Water Quality Control Board, a local groundwater expert and the USGS. The first meeting is scheduled for July 16th and will be open for all TAC members to attend.

EMWD has moved into stage 2 of its Water Shortage Contingency Plan requesting a voluntary 20% reduction in water demand. It requires customers to reduce watering/irrigating of landscape by one day a week; repair all leaks, breaks or other malfunctions within seventy-two hours; refrain from filling ornamental lakes or ponds and refrain from using potable water for washing or cleaning cars.
LHMWD Well 16 is complete and being tested. LHMWD is working with Riverside County Flood Control on their joint Little Lake Storm Water and Stream Water Recharge Project. EMWD and LHMWD are working to connect Well 92 to the raw water pipeline.. LHMWD's General Manager, Mr. Tom Wagoner, has reported a properly close to Grant Avenue could be purchased and may be suitable as a recharge site.

The City of Hemet has encountered high nitrate concentration problems at Wells 4 and 14 and had to notify approximately 9,500 of its customers about the high nitrate concentration at these wells. The City is looking at the feasibility of nitrate removal and construction of a new connection with EMWD at Menlo Street to reduce the impact of not being able to pump these wells during the summer months.

The City of San Jacinto water surcharge is in effect and the city customers have started receiving bills which include the new surcharge. The City of San Jacinto and EMWD are coordinating a California Friendly Workshop on June 28th at 9am at the City of San Jacinto Community Center.
osts and will present the final results at the TAC and Watermaster Board meetings in August. This was a side agreement that all the member agencies signed independent of the Watermaster for a 23 million dollar recharge facility that was put in place.

EMWD has received the final payment for the San Jacinto Valley Integrated Recharge and Recovery Program (IRRP) from DWR.

This was a 5 million dollar grant that EWMD received from DWR. EMWD is planning to reconcile the final costs and present the final results at the TAC and Watermaster Board meetings in August.

EMWD staff compiled and distributed their 2013 Annual Well Owners' reports earlier this month. These reports are provided to all well owners participating in the groundwater monitoring programs including the Hemet/San Jacinto Groundwater Management Area. EMWD also provided each well owner their respective well extraction data, water quality sampling results, and water level measuring data collected during 2013.

Mr. Paule inquired if the Watermaster was part of the California Friendly Workshop. Mr. Mortazavi responded the Workshop is coordinated between the City of San Jacinto and EMWD without Watermaster involvement.

C. Legal Counsel Report

Mr. Bunn reported on a few questions that were asked at the April 28, 2014 Board meeting. Mr. Gorman had asked, what happens if the recharge ponds our washed out? Should Watermaster have reserve funds to reconstruct the recharge ponds? The Soboba settlement agreement which provides for the construction of the ponds does not involve the Watermaster and therefore does not require the reconstruction of the ponds to be done by the Watermaster. The local districts will provide for the reconstruction and arrange for the recharge of the water to support the Soboba Tribe's water rights directly through EMWD, without the involvement of the Watermaster. Mr. Bunn also commented that the replenishment assessment which can be collected by the Watermaster can be used for any kind of replenishment or recharge activity. If the Watermaster felt it was appropriate to be used for that purpose, it could do so. At the April meeting, Mr. Gorman also inquired if administrative assessments could be loaned for replenishment ponds repairs. Mr. Bunn confirmed that the Watermaster could loan money from one fund to the other, especially if it were an emergency or urgent situation. Mr. Bunn also addressed a question in regard to the Groundwater Modeling and what if the updated modeling effort resulted in a different Safe Yield calculation. The judgment requires the Watermaster to reduce the public agencies base production rights each year until the total management area's production goes down to the Safe Yield. The Watermaster determines each year how much to reduce the base production rights, except for the first year, which is set at 10%. The Watermaster can change the base production rights for the following years but it cannot adjust it by more than 10% per year. The judgment says that it is anticipated to bring the total production in the management area down to the Safe Yield in 6 years but it also says that if the facts are different than what were anticipated, then the 6 year time period may be adjusted by the Watermaster. Mr. Bunn addressed the issue of the sale of a Class B participant's property. The buyer does not automatically become a party to the judgment, rather it is optional. The new owner can file a petition with the court to become a party to the judgment. In most cases the new owner would want to be part of the judgment and would then notify the Watermaster and the Court. Lastly, Mr. Bunn commented on the State Water Resources Control Board and the release of its prioritization of the groundwater basins in the state of California. Prioritization of the basins is required under California State Groundwater Elevation Monitoring (CASGEM) programs. San Jacinto groundwater basin is ranked 10 out of 500 groundwater basins. This is considered to be a very important groundwater basin according to the State for Two main reasons.

The first is the importance of groundwater in the region. Approximately 80% or more of demand comes from groundwater. Many areas in the state only receive 40% which can increase up to 60% during drought years. The second reason being the overdraft in the region. It is importance that groundwater quality and levels be reported to the State. EMWD is the responsible agency that takes all the elevation data and reports to the State.

Mr. Hoffman asked if the higher prioritized basins were already adjudicated. Mr. Bunn answered that it varies. The Central Bain in Los Angeles, which is adjudicated, is a high priority Basin because of high population. The San Joaquin Valley has not been adjudicated but it does support a high population and has a high reliance on groundwater. The State is considering stepping in and having them do more groundwater management.

D. Treasurer Report

Mr. Mortazavi reported that he is working with the Bell bookkeeping to improve the accounting process as a result of the 2013 Financial Audit recommendation. The current Treasurer Report format may be revised as a result of this effort. As of April 1, 2014, the Watermaster balance was approximately $420,000. During April and May, Watermaster received another $222,471 payments on the last invoices towards the 2013 Administrative Assessment. The Watermaster paid approximately $33,000 for expenses. The total Watermaster account balance as of May 31, 2014 was about $609,000. The pending invoices which are being process add up to around $27,000. Mr. Mortazavi noted that the Watermaster now has liability insurance which was a concern of the Board. Mr. Mortazavi commented on the fact that the payment to Water Resources Engineering is increasing but that is because of the shift of responsibility from EMWD to Watermaster. The 2013 budget tracking will be completed shortly after the Cone Penetrometer Testing project is invoiced. The final 2013 budget expenditures will be approximately $400,000. Currently, the 2014 budget expenditures are estimated to be around $670,000.00.

IV. CONSENT CALENDAR

Accept Motion for approval of Consent Calendar

A. Approval of Minutes – April 28, 2014 Regular Board Meeting

Recommendation: Adopt a motion to approve Item A on the consent Calendar

Motion:	Paule	Noes:	
Seconded:	Hoffman	Abstain:	
Ayes:	Krupa, Bartel	Absent:	Gorman, Scott

V. ACTION ITEMS

A. Approve the 2013 Financial Audit

Recommendation: Adopt a motion to approve the 2013 Financial Audit

Mr. Mortazavi introduced Ms. Gaunder, partner from the firm Nigro and Nigro. Ms. Gaunder brought to the board copies of the 2013 Financial Audit and provided a presentation on the 2013 Audit process and findings. The primary goal of the auditor is to provide an independent opinion on the Watermaster's financial statements and to make sure the Watermaster is in compliance with applicable laws and regulations. The first few pages of the 2013 audit report explain what the responsibilities of the Watermaster are and what the responsibilities of the Auditors are.

Ms. Gaunder informed the board that her firm has issued an unqualified "clean" opinion which is the highest opinion that can be received. The management's discussion and analysis is an objective analysis of the Watermaster's financial activities. The next section of the audit report is the Financial Statements which is the major bulk of the report showing the asset, liabilities and current operating activities of the Watermaster, followed by the notes to the Financial Statement which describe important financial information in more detail. The significant footnotes on the report include details of the Watermaster's cash and investment balances. The Auditors Report indicates that they conducted an audit in accordance with Government Auditing Standards and that any noncompliance to laws and regulations are reported as findings. The Watermaster was issued a clean opinion on this as well. The last section of the report is the Audit Findings and Recommendations which talks about any exceptions during the audit would be shown here along with a recommendation on how to fix them. Ms. Gaunder thanked everyone for their time. A copy of the 2013 Financial Report will be distributed to all the Class A & B participants, Cities and water districts.

Motion:	Hoffman	Noes:	
Seconded:	Bartel	Abstain:	
Ayes:	Krupa, Paule	Absent:	Gorman, Scott

B. Adopt Resolution No. 7 – Addition of Base Production Rights to the Van Dam Family Trust

Recommendation: Adopt a motion to approve Resolution No. 7

Mr. Bunn reported that the Van Dam Family Trust is already a Class B participant. At the time the judgment was entered, the Van Dam Family was in escrow to purchase another piece of property but because escrow had not closed this property was not listed as a participant property on the stipulated judgment. The base production rights for this new parcel had been calculated at 139 acre-feet. The judgment provides that there has to be a written request to be a Class B participant and that the Watermaster has the authority to adjust their production rights as the Watermaster finds appropriate. Mr. Bunn recommends the approval of Resolution 7. Mr. Paule asked for clarification with regard to Class B participants. If a Class B participant purchases a new property, does that automatically allow an entryway to include the new property as a Class B participant? Mr. Bunn confirmed that would be case if one is already a Class B participant, but if the property owner is not a Class B participant then the new property cannot be included as a Class B participant. Class A participants have 3 years to convert to Class B. Ms. Krupa inquired if this has an impact on anyone in the agreement? Mr. Bunn replied no. Mr. Mortazavi asked if it mattered if the purchased property is contiguous or not? Mr. Bunn replied that what is being asked of the Watermaster today is discretionary with the Watermaster Board. Factors to be considered are whether this adds to the demand of the basin, which in this case, it doesn't because this property was using groundwater before Van Dam family bought it. The current Van Dam property is below what is allocated for 2013. Ms. Krupa asked if there was any public comment. There were no comments. Mr. Bunn was asked to read the Resolution.

Motion:	Hoffman	Noes:	
Seconded:	Paule	Abstain:	
Ayes:	Krupa, Bartel	Absent:	Gorman, Scott

C. Adopt Resolution No. 8 – Deferral of Class B Participants Replenishment Assessment Payments Until July 2016

Recommendation: Adopt a motion to approve Resolution No. 8

Mr. Bunn reported that the judgment requires the Watermaster set replenishment assessment. A few participants have gone over their production right for partial year 2013. There are a few reasons for the Board to consider deferring setting the replenishment assessment and not imposing it this year. One reason is that 2013 was a partial year, at least one of the participants is receiving recycled water and water rights include the amount of recycled water that is taken. A second reason is the current drought, and everyone is relying more on groundwater and the participants should be able to make up for it when there are wetter periods. The third reason is that Class A participants have 3 years to convert to Class B and during those 3 years they are not subject to replenishment assessment and it seems not fair to require Class B Participants to be assessed. It is proposed to wait until after 2015 to impose any replenishment assessment. At that time, Mr. Mortazavi will add up all the pumping that took place in 2013, 2014 and 2015 and the usage will be compared to the total allocations for the same period and replenishment assessment will be imposed. Ms. Krupa asked if there were any questions from the audience. There were no questions. Ms. Krupa asked Mr. Bunn to read Resolution 8, and Mr. Bunn complied. Mr. Hoffman asked Mr. Mortazavi if he will be keeping an accounting of the Class B Participants so that the Board as well as each Participant knows where they stand without any surprises. Mr. Mortazavi replied that he is keeping track of the usage and had a meeting in May with the producers to go over this exact issue.

Motion:	Paule	Noes:	
Seconded:	Bartel	Abstain:	
Ayes:	Krupa, Hoffman	Absent:	Gorman, Scott

VI. INFORMATIONAL ITEMS/CORRESPONDENCE

A. Canyon Operating Plan – EMWD/LHMWD presentation Summarizing the Operating Plan for Canyon Management Zone being discussed between Soboba Tribe, EMWD, and LHMWD

Mr. Powell presented an update on the Canyon Operating Plan which addresses one sub-basin of the entire groundwater management area and was initiated by EMWD, LHMWD, and the Soboba Tribe. Mr. Powell went over the maps of the San Jacinto Groundwater Basin, the Canyon Basin Vicinity map and the Canyon Basin Groundwater Wells. The Canyon Operating Plan study was initiated because of a Memorandum of Understanding (MOU) that was signed as part of the Soboba Settlement Agreement, which states that "in the event the Soboba Tribe is unable to pump 3,000 acre feet per year from existing wells in the Canyon Basin then the Local Districts (EMWD and LHMWD) shall deliver any shortage to the Soboba Tribe.

The MOU was required by the Tribe before they would agree to sign the Management Plan. The Tribe required that EMWD and LHMWD commit to "...the prompt development of an operating plan for the Canyon Basin...". The participants (Soboba Tribe, LHMWD and EMWD) agreed on an approach, agreed to use a consultant (RMC) and to share the costs. The project goal was to develop an operating plan that facilitates responsible water management for the Canyon Basin through the ongoing monitoring of the Basin's health and proactive operational adjustment by the Districts.

The elements of the operating plan included the most important item which is to identify Groundwater levels that will trigger proactive operational actions by the participants. Mr. Powell went over the Natural Recharge and planning yield charts from the years 1990 thru 2012. The average planning yield over that period was 10,100 Acre Feet per year. A storage curve of the basin was created to show the average basin storage estimate using 3 key well measurements taken on Spring/late summer. Operational trigger levels are called proactive, responsive and critical. The Tribal production capacity was developed using Soboba Wells data to maximize well yield and minimize pump submergence limitations. The potential actions based on operational triggers are to reduce pumping from the Canyon Basin, increase recharge into the Canyon Basin or Public Outreach to reduce pumping by Pumpers. A workshop was held earlier today for the participants to provide comments to RMC and final comments are due by Friday, June 27th. RMC will incorporate those comments into a final report before the end of July. Mr. Hoffman commented that he would like to see the RMC presentation. Ms. Krupa asked if the Canyon Basin was managed, what exactly does managing mean. Mr. Powell answered that it would mean implementing triggers and that would mean either reducing pumping or increasing recharge. Ms. Krupa asked if any of the current recharge affect the Canyon Basin. Mr. Mortazavi answered that in the early 90's there was some recharge in Canyon Basin, but all recent recharge is going into the Upper Pressure basin.

B. EWMD Request for In-lieu Delivery of Soboba Settlement Water in 2014

Mr. Mortazavi presented a letter from Mr. Kighlinger, General Manager for Metropolitan Water District to Mr. Jones, EMWD General Manager, that is an agreement response to EMWD's request for In-lieu delivery. MWD delivery is for recharge and MWD does not usually agree to provide water In-lieu of recharged water. However, Mr. Jones was able to get MWD to agree. Under this program, EMWD will reduce its groundwater production and EMWD will receive MWD water at its Hemet Filtration Plant, the water will be treated and put into EMWD system to serve its customers directly instead of pumping groundwater. Mr. Mortazavi and Mr. Jones have both communicated this program with the Soboba Tribe and have their concurrence.

Mr. Bartel asked the Board if it would consider holding future Board meetings at other agencies. Ms. Krupa asked Mr. Mortazavi if there are any issues for the staff to have meetings at different locations. Mr. Mortazavi commented that holding board meetings at different locations each time would require coordination with the hosting agency and their staff time, plus more Watermaster staff time for meeting setup and preparation, There is significant coordination between Watermaster and EMWD staff to conduct Watermaster meetings at EMWD. Another issue for the board to consider is potential of having less general public participation as a result of the general public uncertainty about the meeting location. Mr. Mortazavi suggested attending and briefing member agencies' Board/Councils on Watermaster activities, if the interest by moving the meeting location is to provide status report on Watermaster activities to constituents of different Board members..

VII. CLOSED SESSION

A. None

VIII. ADJOURNMENT

There being no further business to come before the Board; Vice Chairman Krupa adjourned the meeting at 5:25 p.m., to be reconvened on Monday, August 25, 2014 at 4:00 p.m. (Adjourned Regular Meeting).

Watermaster Advisor Report
June 23, 2014

EMWD Related Coordination/Activities:

- On-going coordination with EMWD for Watermaster related tasks.
- Most of the coordination activates with EMWD has been related to the Groundwater Model Development, and the Data Management projects.

Budget/Accounting Related Activities:

- The entire 2013 Administrative Assessments have been collected. The first set of invoices for 2014 Administrative Assessment will be mailed next month (July).
- Watermaster's Annual Financial Audit has been completed by the accounting firm of Nigro & Nigro. Their findings and recommendations are presented under item V-A.
- The Treasurer Report is provided under Item III-D.

Board & TAC Coordination/Activities:

- Technical Advisory Committee (TAC) had one meeting on June 9, 2014. Major discussion items were:
    - Review of potential Expedited Drought Relief funding opportunities under Proposition 84 for the region.
    - In-lieu deliveries of Soboba Water during 2014.
    - Agency related activities.
    - Groundwater Model project status.
    - Proposed Resolution 7 – Addition of base production rights to the Van Dam family trust.
    - Proposed Resolution 8 – Deferral of Replenishment Assessment until July 2016.
    - 2013 Annual Report filing procedure

Special Projects:

- RMC Water & Environment engineering firm has started working on the Groundwater model development project. Development and finalizing the conceptual model is the main focus of this effort at the present time.
- The 2014 Database Management project with Spatial Wave is in its final phase of development.
- MWD has agreed to provide Soboba Settlement water to EMWD using in-lieu delivery. In-lieu deliveries began on Friday, June 6, and 5,900 AF of in-lieu water is estimated to be delivered by the end of the year. Will discuss this in more detail under item VI-B.

Municipal/Private Pumpers Coordination/Activity:

- With assistance from Mr. Scott and Mr. Pastor (local groundwater producers representatives on the Watermaster Board), and LHMWD a meeting with Class A and B participants was conducted on May 16, 2014. Several judgment participants attended this meeting.
- Have had several communications with the two Class B participants that are subject to Replenishment Assessment.
- Worked with Legal Counsel on resolving Mr. Van Dam's request for additional base production rights. Mr. Bunn will discuss this item in more detail under item V-B.

Outreach/Grant Activity:

- Participated at Santa Ana Watershed Authority (SAWPA) activities related to the Expedited Drought Relief Act (EDRA) funding process. SAWPA is in charge of distributing Proposition 84 funds which includes EDRA funding. There is potential for the agencies in the Hemet-San Jacinto area to receive grant funding. SAWPA, with assistance from EMWD and its other member agencies, is submitting a grant application to the State Department of Water Resources by July 21, 2014.
- The Soboba Tribal Council is interested to meet with the Ad-hoc Committee, Vice Chair Krupa and Mr. Scott, on more regular basis. Subject to the availability of the Committee Members, the next meeting is scheduled for October 14, 2014 at 10:00 am.

Miscellaneous Activity:

- EMWD, LHMWD, and Soboba Tribe joint Canyon Basin Operation Plan effort is almost complete. The Parties have developed trigger groundwater levels and identified the key wells that they want to use as part of this effort. As part of this project, the Planning Yield for the Canyon Basin is estimated at 10,800 acre feet per year. The Tribe consultant has expressed concern that their groundwater production capacity may be inadequate to meet their demands in the later summer months. EMWD and LHMWD will provide more information on this project under item VI-A.
- Have had a couple of discussions with a U.S. Bureau of Reclamation (USBR) representative and Dr. Eylon Shamir regarding a potential USBR funding for a study in the region to assess natural variability of flow and its linkage with the groundwater model. Dr. Shamir is interested in submitting a proposal to USBR for this effort.
- Had multiple communications with two members of the public inquiring about requirements to participate as a Class B, and costs of recharge facilities, respectively.
- As drought continues, southern California will see more use of the Colorado River Water (CRW) instead of State Project Water (SPW). As part of this process,

by mid-July, EMWD is expected to take CRW at EM-14 that provides water to the Hemet Water Filtration Plant (HWFP) and the recharge ponds.

- As part of the Groundwater Model Update project, EMWD will invite several groundwater experts to participate in an Advisory Panel role and provide feedback to RMC (EMWD consultant that is developing the model). The Panel is expected to include representatives from Department of Water Resources (DWR), Regional Water Quality Control Board (RWQCB), and a local groundwater expert. EMWD has indicated meetings with the Advisory Panel will be open to TAC members. The first Advisory Panel meeting is expected to take place in early-mid July at EMWD.
- EMWD is completing the Spring water level monitoring, and administering the Groundwater Model Update effort.
- Due to drought, EMWD has moved into Stage 2 of its Water Shortage Contingency Plan (WSCP) requesting a voluntary 20% reduction in water demand. WSCP also requires customer to:
    1. Reduce watering/irrigating of landscape by one day a week.
    2. Repair all leaks, breaks, or other malfunctions within seventy-two hours.
    3. Refrain from filling or re-filling of ornamental lakes or ponds.
    4. Refrain from using potable water to wash or clean vehicles.

- LHMWD well 16 is complete and being tested, LHMWD is also working with Riverside County Flood Control and Conservation District (RCFC) on their joint Little Lake storm water and stream water recharge project.
- LHMWD and EMWD are working to connect well 92 to the raw water pipeline. Well 92 is one of the IRRP wells.
- The City of Hemet has encountered water quality (nitrate concentration) problem at Wells 4 and 14, and had to notify some 9,500 of its customers about the high nitrate concentration at this well. The City is looking at the feasibility of nitrate removal, and constructing a new connection with EMWD at Menlo Street to reduce the impact of not having this well during high demand summer months.
- The City of San Jacinto water rate surcharge is in effect. City customers have started receiving bills which include the new surcharge.
- The City of San Jacinto and EMWD are coordinating a California Friendly Workshop on June 28, 2014, from 9:00 a.m. to noon at the City of San Jacinto Community Center (625 S. Pico Ave).
- EMWD is pursuing its Water Banking project, looking at short-term and long-term potential recharge projects.
- EMWD has received the final payment for the San Jacinto Valley Integrated Recharge and Recovery Program (IRRP) from the DWR. EMWD is planning to reconcile the final costs on the program and present the final result at the TAC and Watermaster Board meetings in August.

- EMWD is the designated agency by the California State Water Resources Control Board, Division of Water Rights to oversee the groundwater extraction recordation program in the San Jacinto Watershed. The Annual Notices of Groundwater Extraction were prepared and distributed by EMWD to all groundwater producers in the San Jacinto Watershed earlier this month. Well owners have until June 30, 2014, to complete the Notices and return them to EMWD.
- EMWD staff compiled and distributed their 2013 Annual Well Owners' Reports earlier this month. These Reports are provided to all well owners participating in the groundwater monitoring programs including the Hemet/San Jacinto Groundwater Management Area. EMWD provides each well owner their respective well extraction metering, water quality sampling, and water level measuring data collected during calendar year 2013.
- Mr. Tom Wagoner, LHMWD General Manager, reported a property close to Grant Ave. could be purchased and may be suitable as a recharge site. More information will be available at the next TAC meeting.

Hemet-San Jacinto Watermaster
c/o EMWD • 2270 Trumble Road, Perris, CA 92570 • Telephone: (951) 928-3777 ext. 4338

Watermaster Board

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Frank D. Gorman

Vice-Chair
Linda Krupa

Secretary-Treasurer
Philip E. Paule

Board Members
Mark Bartel
Bruce Scott

Board Alternates
Rick Hoffman
Scott Miller
Steven A. Pastor
Randy A. Record
Larry Smith

Advisor
Behrooz Mortazavi

Legal Counsel
Andrew Turner

To: Hemet-San Jacinto Watermaster Board of Directors

From: Board Treasurer

Date: June 23, 2014

The Board Treasurer has reviewed and approved the following account information:

Total Cash and Investments as of March 31, 2014		***$419,894.20***
Revenues for April 1 – May 31, 2014:		
EMWD 4/1/2014	$ 95,602.00	
City of Hemet 4/9/2014	$ 18,012.00	
City of San Jacinto 4/9/2014	$ 1,775.00	
Lake Hemet Municipal Water District 5/7/14	$ 107,082.00	
Total Revenues	$222,471.00	
Payments for April 1 – May 31, 2014:		
Lagerlof, Senecal, Gosney & Kruse 4/3/14	$ 2,535.00	
Water Resources Engineers 4/3/14 & 4/30/14	$ 26,265.69	
EMWD – 4/3/14 & 5/14/14	$ 4,713.17	
Total Payments	$ 33,513.86	
Cash Flow for April 1 – May 31, 2014		***$188,957.14***
Other Income/Expense for April 1 – May 31, 2014:		
Savings Interest	$ 103.98	
Other Expense/Fees	$ 0.00	
Total Cash and Investments as of May 31, 2014		***$608,955.32***
Pending Receivables:		
Total Pending Receivables		***$ 0***
Pending Payments:		
LSG & K (Legal Counsel) 4/11/14 & 5/12/14	$ 4,095.00	
Edgewood Partners Insurance 3/25/2014	$ 3,102.00	
EMWD – 2/3/2014	$ 1,464.00	
Redwine and Sherrill 5/1/2014	$ 122.50	
Water Resources Engineers 5/1/14	$17,886.53	
Total Pending Payments		***$26,670.03***

2013 Budget Items	Allocations	Commitments (As of May 31, 2014)
In-Lieu Program Agreement	152,000.00	158,849.37
Office Supplies and Other Dir. Cost (10% of EMWD/WM Agrmt.)	16,850.00	1.00
Legal Counsel Contract	41,600.00	37,069.00
Advisor Contract	88,000.00	74,966.40
~~Gravel Pit De-Silting~~ (See Board Approved Items for revised allocation)	~~40,000.00~~	
Education and Training	15,000.00	
EMWD/Watermaster Support Agreement:		
Administrative Assistance (EMWD Task Order No. 1)	26,500.00	22,350.84
~~Monitoring Program Support~~ (See Board Approved Items for revised allocation)	~~112,000.00~~	
Financial Assistance (EMWD Task Order No. 3)	30,000.00	8,055.95
Additional/Revised Board Approved Items:		
Monitoring Program Support (EMWD Task Order No. 2)	35,936.00	
Gravel Pit De-Silting (EMWD Task Order No. 4)	54,000.00	47,935.86
Cone Penetrometer Testing Project (EMWD Task Order No. 5)	45,278.00	
TOTALS	**505,164.00**	**349,228.42**

2014 Budget Items	Allocations	Commitments (As of May 31, 2014)
In-Lieu Program Agreement	160,000.00	
EMWD/Watermaster Support Services		
Monitoring Program Support	131,000.00	
Soboba Gravel Pit Project		
Dewatering	35,000.00	
De-silting	105,000.00	
Organization Operation & Management		
Financial Support Services	18,000.00	
Legal Counsel Contract	33,000.00	6,630.00
Advisor Contract	166,000.00	53,418.31
Part-Time Executive Assistant Contract	50,000.00	3,200.95
Insurance; Office Supplies & Other Direct Costs	15,000.00	3,387.69
Education and Training	15,000.00	
Additional Projects/Activities		
Database/Mapping Application Development	20,000.00	
Groundwater Model Development	120,000.00	
Total - 2014 Proposed Budget	**868,000.00**	**66,636.95**

Minutes
Hemet-San Jacinto Watermaster Board of Directors Meeting
Eastern Municipal Water District
April 28, 2014

The Watermaster Board of Directors met in Regular Session in the Board Room at EMWD Headquarters, 2270 Trumble Road, Perris, California, on Monday, April 28, 2014 at ***4:00*** p.m. The meeting was called to order by Chairman Gorman.

Pledge of Allegiance

The Pledge of Allegiance to the Flag of the United States was led by Chairman Gorman.

Chairman Gorman introduced and welcomed Ms. Michelle Mayorga to the position of Executive Assistant to the Board and Mr. Mortazavi.

Board Members Present:	Frank Gorman, Chair Linda Krupa, Vice-Chair Phil Paule, Secretary Treasurer Mark Bartel
Board Member(s) Absent:	Bruce Scott
Board Alternate (s) Present:	Rick Hoffman
Watermaster Staff Present:	Behrooz Mortazavi, Michelle Mayorga (Water Resources Engineers) Thomas Bunn, Legal Counsel (Lagerlof, Senecal, Gosney & Kruse)
EMWD Staff Present:	Charlie Bachmann, Assistant General Manager of Planning, Engineering and Construction; Brian Powell, Director of Planning
City of Hemet Staff Present:	Kristen Jensen, Public Works Director
City of San Jacinto Staff Present:	Lynn Merrill, Public Works Director; Mike Emberton, Assistant City Manager
Lake Hemet Municipal Water District Staff Present:	Tom Wagoner, General Manager;
Others Present:	Dale Schafer, Center for Collaborative Policy, California State University Sacramento

I. PUBLIC COMMENTS –*Speakers are requested to limit comments to 3 minutes.*

None

II. ADDITIONS/DELETIONS TO AGENDA

None

III. Reports

A. Board Member Comments/Questions/ Reports

None

B. Advisor Report

Mr. Mortazavi provided information related to the coordination, activities and tasks related to EMWD. Meetings to discuss MWD delivery issues, development of 2014 Water Resources Monitoring Support Task Order, and Groundwater Model Development Cost Sharing agreement. Task Order 6 and Groundwater Model Cost Sharing Agreement are included under items V.A and V.B, respectively. EMWD has completed the 2013 Annual Report. A copy of this report, in its final form is available today.

The third and final sets of invoices for the 2013 Administrative Assessment were mailed in early March. Watermaster's Annual Financial Audit is in the process of being completed by the Accounting Firm of Nigro & Nigro. Their findings and recommendations will be presented at the next Board meeting. The Treasurers Report is provided under Item III-C.

The Technical Advisory Committee (TAC) had one meeting on April 14, 2014.

Special projects discussed included the selection of RMC Water & Environment Engineering firm and the start of the Groundwater model development project. The start of the 2014 Database Management project with Spatial Wave will begin soon. Psomas, EMWD Consultant, has completed the Cone Penetrometer Testing project. The project findings will be presented under item VI.A.

All agencies have been consulted on the Draft 2013 Annual Report and have had the opportunity to comment on it. The carry-over credits for the agencies, Class A and B participants are revised due to updates received from the Soboba Tribe and Legal Counsel, respectively. This information will be presented under item V.C. Mr. Glen Van Dam (Class B participant) who requested inclusion of additional acreage and revision of his Base Production Rights at the February 24, 2014 Board meeting has not yet submitted his request in writing. No action has been taken on this issue since the last Board meeting.

The Soboba Ad-hoc Committee, Vice Chair Krupa and Mr. Scott, met with the Soboba Tribal council on April 15, 2014. Watermaster activities during 2013 and the proposed projects for 2014 were reviewed with the Council at this meeting. A copy of the presentation provided to the Tribal Council is attached. Ms. Krupa said that the meeting with the Tribal council was well received, and suggested that a meeting like this should be held twice a year. The Expedited Drought Relief Act will be implemented as part of the Prop 84 grant funding. Proposal Solicitation Package (PSP) for this funding has been released by DWR. DWR is interested in funding projects that provide immediate regional drought preparedness, increased local water supply reliability, assist in implementing conservation programs and reduce water quality conflicts or ecosystem conflicts created by the drought. Santa Ana Watershed Project Authority (SAWPA) which is in charge of distribution of Prop 84 funds, have indicated they want local and regional agencies within the Santa Ana Watershed to focus on demand reduction and water use efficiency projects. This is an opportunity for the agencies within the Hemet-San Jacinto area to apply for grant funding for such projects.

The following miscellaneous activity was discussed: The sublease of office space from Elan Associates in Corona is now complete and all Watermaster documents have been transferred to this location. The majority of Watermaster work is currently done by the new Administrative Assistant, Ms. Michelle Mayorga, from the Water Resources Engineers office in Corona. Mr. Mortazavi thanked EMWD staff for all their help with this transition. MWD has adopted its two year budget and rates. Their 2015 and 2016 projected rates for the Soboba Settlement water are $459 per acre-foot (AF) and $468/AF, respectively. This rate does not include the recharge cost by EMWD (approximately $80/AF). EMWD, LHMWD, and Soboba Tribe joint Canyon Basin Operation Plan effort is on schedule. EMWD has been working with MWD to reduce demand on SWP system. EMWD is looking at taking Colorado River Water (CRW) at the Hemet Water Filtration Plan (HWFP) as part of this cooperative effort. EMWD's Well 28, located along Mountain Avenue in the City of San Jacinto has recently collapsed. EMWD has hired a consultant to prepare preliminary design documents for a new well (well 38) at the same location. LHMWD well 16 is complete and the electric meter is installed, LHMWD is also working with Riverside County Flood Control and Conservation District (RCFC) on their joint Little Lake storm water and stream water recharge project. This project is expected to have its bid opening in Spring 2014. LHMWD and EMWD are working to connect well 92 to the raw water pipeline. Well 92 is one of the IRRP wells. The City of Hemet has completed their Well No. 16 rehabilitation work. The City is also trying to get a temporary connection with EMWD at Menlo Avenue. City of San Jacinto water rate surcharge will go in effect on May 1, 2014. City customers will see this change on their June bills. Chairman Gorman asked if there is a timeline for Prop 84. Mr. Mortazavi answered that there is a very short time. The deadline is May 22 to put in a request and early June to submit a proposal. Chairman Gorman asked if this money will be available annually. Mr. Mortazavi replied that this is only available for one round.

(See Attachment No. 1 for the complete Advisor Report)

C. Treasurer Report

On behalf of Mr. Paule, Board Treasurer, Mr. Mortazavi reviewed the report with the Board. Chairman Gorman asked how the money is invested, stock market or investment. Mr. Mortazavi explained that all the money is in a checking and savings account with the Bank of Hemet. Chairman Gorman asked if there is an "El Niño" next year, is there any reserve funds to pay for the re-construction of the ponds. Mr. Mortazavi explained that couple of years ago, the CAM participants decided it would be best not to put aside money for re-construction of the ponds. The participating agencies will deal with it when and if it happens. Chairman Gorman asked if we could loan Administrative Assessment funds for the re-construction of the ponds. Mr. Bunn said Watermaster should be able to loan itself money, but he would review the judgment to make sure that is the case.

(See Attachment No. 2 for the complete Treasurer Report)

IV. CONSENT CALENDAR

Accept Motion and Second for Approval of Minute Order for Item IV.A.

A. Approval of Minutes – February 24, 2014 Regular Board Meeting -
Recommendation: Adopt a motion to approve Item A on the consent Calendar

Motion: Paule	Noes:
Seconded: Krupa	Abstain:
Ayes: Gorman, Bartel	Absent: Scott

(See Attachment No. 3 for the February Meeting Minutes)

V. ACTION ITEMS

A. Approval of 2014 Water Resources Monitoring Program Support Services Task Order No. 6 with EMWD

The purpose of this Task Order is to collect, analyze and compile groundwater level, quality, and production data to meet the reporting requirements of the Judgment. The Task Order also includes meter installation and data management. The cost estimate for this Task Order is close to $131,000.

Motion: Krupa	Noes:
Seconded: Paule	Abstain:
Ayes: Gorman, Bartel	Absent: Scott

(Task Order No. 6 is included as Attachment No. 4)

B. Approve 2014 Groundwater Management Tool Model Calibration Update Cost Sharing Agreement with EMWD

Mr. Brian Powell of EMWD provided a presentation on San Jacinto Ground Water Basin Regional Numerical Flow Model Update 2014.

Mr. Powell stated the current groundwater model was calibrated for the years of 1984 – 1997 with a 2 year verification period from 1997 to 1999. The Update Project Goals are: consistency by having One Model for the Region, Evaluation of Potential Groundwater banking, project specific models for potential projects, complying with regulatory requirements. The project tasks will be to form an advisory panel to peer review the model development, update the model's physical construction based on the conceptual model update, calibrate the updated physical model, prepare water balances and safe yield estimates, complete five predictive simulation runs and document the results in the final report. The consultant that was selected was RMC Water & Environment. There were 8 consultants that were asked to propose and only 4 submitted proposals. Mr. Mortazavi was one of four on the committee that reviewed the proposals. The project schedule is as follows: RFP released date was January 2, 2014, the proposals received date was January 30, 2014, EMWD Board awarded contract on March 26, 2014, the notice to proceed was issued on March 31, 2014, the kickoff meeting was held on April 15, 2014 and the expected project completion date will be mid- April 2015. Mr. Mortazavi explained the significance of this project for the Watermaster by stating, the Stipulated Judgment estimated the safe yield of the basin to be between 40-45 thousand AF. This effort is going to update the Safe Yield number. The Model Update may increase or decrease the safe yield estimate. But regardless, this effort is important to be completed and the estimated safe yield change can cause significant impact to your agencies because every 1,000 AF of change in the safe yield number, given current MWD prices, is costing about $660,000. Chairman Gorman questioned that once we have new safe yield data in 2015, what do you see us doing?. Mr. Mortazavi replied he needs to check on how specific agencies can reduce or increase production as a result of safe yield estimate changes. Mr. Paule questioned in Mr. Mortazavi's professional capacity have you dealt with this firm before? Mr. Mortazavi replied yes, this firm actually did the Water Management Plan for Hemet – San Jacinto area which was approved by the Federal government. They are very familiar with the area and as Mr. Powell said, they did have a good proposal.

Motion: Paule
Seconded: Krupa
Ayes: Gorman, Bartel

Noes:
Abstain:
Absent: Scott

(See Attachment No. 5 for the presentation)

C. 2013 Revised Carry-over Credit Accounts – Receive and File

Mr. Mortazavi provided a "Revised Carry-Over Credits as of December 2013"presentation. This presentation has been seen before, however since we have to pass this information along to the court, we must provide the corrected information. On March 7, 2014 Soboba reported 1674 AF of production in 2013 which was a revision from 1984 AF reported earlier by the Tribe. So with the change of this number, the unused Soboba water number had to be updated. There is a meeting with the Class A and B Participants on May 16, 2014, to review the Carry-Over Credits. There are two Class B Participants who are over their allocations, Mr. Phillips and Mr. Scott. These 2 participants will need to buy replenishment water. Mr. Mortazavi suggests that we wait to see if these 2 participants can offset their production by reducing their production. Mr. Mortazavi will need to get some feedback regarding this suggestion from General Counsel before bringing it back to the Board for action.

(See Attachment No. 6 for the presentation)

D. 2013 Annual Report – Receive and File

Mr. Mortazavi provided a presentation of the Hemet/San Jacinto Groundwater Management Area 2013 Annual Report. This report documents the core activities of the Watermaster. Groundwater is the main source of supply in the management area. This report shall be filed with the Court once the Board receives and files the report.

(See Attachment No. 7 for the complete presentation)

VI. INFORMATIONAL ITEMS/CORRESPONDNCE

A. Review of Cone Penetrometer Test (CPT) project results and findings

Mr. Powell of EMWD provided a presentation on Geotechnical Evaluation of Integrated Recharge and Recovery Program (IRRP) Ponds.

Mr. Powell provided a map of Low percolation area and the original conjunctive use ponds. The low percolation area does not recharge as well as the original conjunctive use ponds area. The percolation rates in northern ponds have reduced overtime. It is observed that for approximately 2 days after rain events percolation rate is reduced in the IRRP recharge ponds. EMWD anticipates that MWD will require high water deliveries after the drought to "catch up" on recharge requirement. The project overview goals are to set baseline understanding of local geology, determine depth and thickness of fine-grained geology, if present and identify viability of remedial actions to increase recharge rates. The Cone Penetrometer Testing (CPT) included collecting geotechnical information using CPT investigation of soil layers such as clay, silt and sand. There were 18 locations that were tested using a 20-ton rig. This process was completed to approximately 100 feet below ground surface. The CPT analyses shows that relative recharge potential of a given area as single coarse-grained layer results in high, deep percolation and the increased number of clay and/or silt layers results in significantly lower percolation rates. The results indicate existence of fine-grained units in localized lenses rather than as extensive continuous layers. Few lenses are present on the south (upstream) side of ponds, resulting in greater deep percolation potential. More fine-grained lenses exist on the north (downstream) side of ponds resulting in percolation rates that are lower than southern ponds and are susceptible to reduced percolation due to storm evens. The actions and recommendations are to remove some very shallow clay layers from under some of the northern ponds. Chairman Gorman asked how thick are the layers that are being removed. Mr. Mortazavi stated that they are not very thick. It is also recommended that continued monitoring of percolation rates of each pond under various operating conditions continue and to re-evaluate the percolation rates after the next recharge season. Mr. Paule questioned what the cost of this project was. Mr. Mortazavi stated it did cost close to $45,000. Mr. Paule questioned how clay layers can be broken. Mr. Powell replied that they are broken by drilling through them and removing the material. Chairman Gorman pointed out that MWD agreement requires about 18,000 gallons per minute (gpm) flows to be recharged, and currently the ponds can handle up to 15,000 gpm flows, does EMWD have analysis of the free board? Mr. Powell responded that EMWD tries to keep water in the ponds at a low level to prevent the outer berms from being breached. Chairman Gorman inquired at what capacity it would be breached. Mr. Powell replied that EMWD does not want to raise the levels to a point that the berms would be breached.

(See Attachment No. 8 for the presentation)

VII. CLOSED SESSION

None

VIII. ADJOURNMENT

There being no further business to come before the Board; Chairman Gorman adjourned the meeting at ***5:30 p.m.***, to be reconvened on Monday, June 23, 2014 at 4:00 p.m. (Adjourned Regular Meeting).

2013 Financial Audit Highlights

Hemet - San Jacinto Watermaster Board Meeting

June 23, 2014

What Is An Audit?

- Express an independent opinion of the financial statements.
- Determine compliance with applicable laws and regulations.
- Not designed to look for fraud, waste, and abuse.

Independent Auditor's Report - pages 1-2

- Opinion on financial statements is unqualified
- "Clean" opinion

Management's Discussion and Analysis (MD&A) - pages 3-5

- An objective and easily readable analysis of the Entity's financial activities.
- Summary of current year information.
- Analysis of Entity's overall financial position and results of operations.

Financial Statements - pages 6-8

- Reports financial position and activities
- Statement of Net Position, p.6
  - Includes capital assets, less accumulated depreciation, *if applicable*
  - Reports long-term liabilities, *if applicable*
  - Reports "net position"
  - Uses full accrual basis of accounting
- Statement of Revenues, Expenditures, and Changes in Net Position, p.7
  - Reports net expense by type
  - Operating revenues and non-operating revenues shown separately
- Statement of Cash Flows, p.8
  - Includes ending cash balance
  - Reports cash flows from operating and investing activities

Notes to the Financial Statements pages 9-12

- Describe important financial information in more detail
- Significant footnotes include:
  - Note 2 reports details of the Watermaster's cash and investment balances, pp.11-12

Other Independent Auditors' Reports pages 13-14

- Indicates that we conducted our audit in accordance with *Government Auditing Standards* and that any noncompliance is reported as findings.
- Any findings or material weaknesses were noted in the Findings & Recommendations section.

Audit Findings and Recommendations pages 15

- Financial Statement Findings

Questions and Comments?

HEMET–SAN JACINTO WATERMASTER

RESOLUTION NO. 7

RESOLUTION OF THE WATERMASTER BOARD RE ADDITION OF BASE PRODUCTION RIGHTS TO THE VAN DAM FAMILY TRUST

WHEREAS, Donald Dick Van Dam and Frances L. Van Dam, Trustees of the Donald Dick & Frances L. Van Dam Revocable Family Trust (the Van Dams), are Class B participants, and

WHEREAS, since the entry of Judgment, the Van Dams have acquired additional property, described as A.P.N. 432-180-002-6, the Base Production Rights of which are calculated at 139 acre-feet. The Van Dams have submitted a written request that this property and the associated Base Production Rights be added to their rights under the Judgment, and

WHEREAS, section 4.4.1.2 of the Judgment provides that upon written request by a Class B Participant, the Watermaster shall have the authority to adjust the Class B Participant's Base Production Rights for such period, and on such terms and conditions, as the Watermaster deems appropriate under the circumstances.

NOW, THEREFORE, BE IT RESOLVED AS FOLLOWS:

The Watermaster hereby adjusts the properties and Base Production Rights of the Van Dams to account for the new property. Their Class B Base Production Rights now total 670 acre-feet.

ADOPTED THIS 23rd day of June, 2014.

_____
Frank Gorman, Chairperson

ATTEST:

_____
Phil Paule, Secretary

HEMET–SAN JACINTO WATERMASTER

RESOLUTION NO. 8

RESOLUTION OF THE WATERMASTER BOARD
RE DEFERRAL OF REPLENISHMENT ASSESSMENT

WHEREAS, the Judgment in Eastern Municipal Water District vs. City of Hemet, et al., requires the Watermaster to levy Replenishment Assessments on each Public Agency and Class B Participant, and

WHEREAS, the first year of pumping under the Judgment was a partial year, which might not accurately reflect what the pumping would be over a full year. In addition, parties have not yet had an opportunity to accumulate Carry-Over Credits, which can be used to offset Replenishment Assessments. Finally, the grace period for Class A Participants to convert to Class B Participants has not yet expired. For these reasons, it would be inequitable to impose a Replenishment Assessment on the first year's pumping alone.

NOW, THEREFORE, BE IT RESOLVED AS FOLLOWS:

Replenishment Assessments are hereby deferred until after 2015, at which time they will be imposed on the cumulative excess pumping from entry of judgment through 2015, as provided in section 1.31 of the Judgment.

ADOPTED THIS 23rd day of June, 2014

_____
Frank Gorman, Chairperson

ATTEST:

_____
Phil Paule, Secretary

EASTERN MUNICIPAL WATER DISTRICT

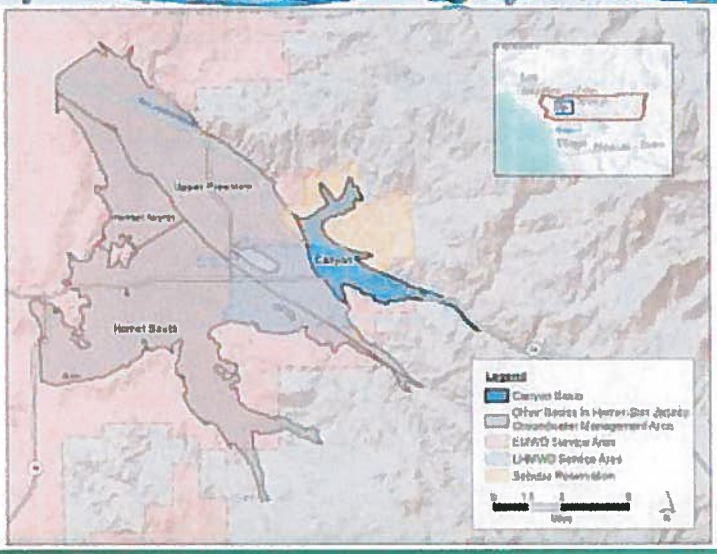
Canyon Operating Plan

Brian Jack Powell, P.E.
Director of Planning
June 23, 2014

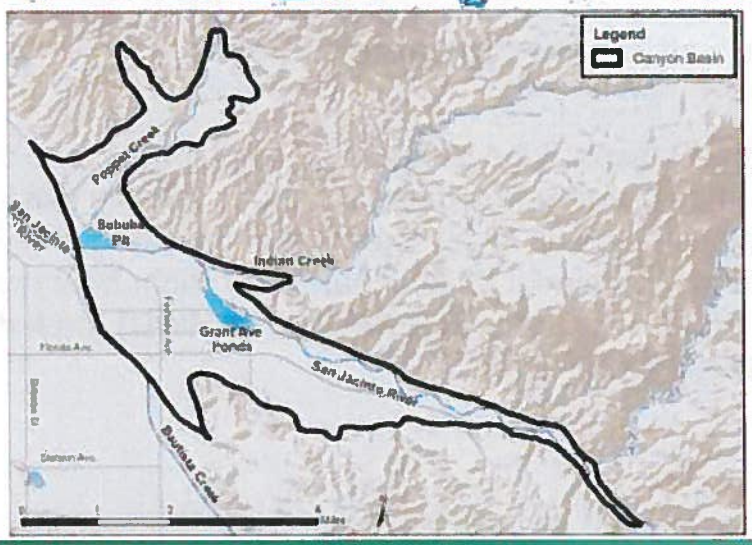
Agenda

- Canyon Basin Vicinity
- History of the Canyon Basin Operating Plan
- Plan for the Plan
- Project Goal
- Elements of the Plan
- Planning Yield
- Operational Triggers
- Tribal Production Capacity
- Potential Actions by the Districts
- Project Status

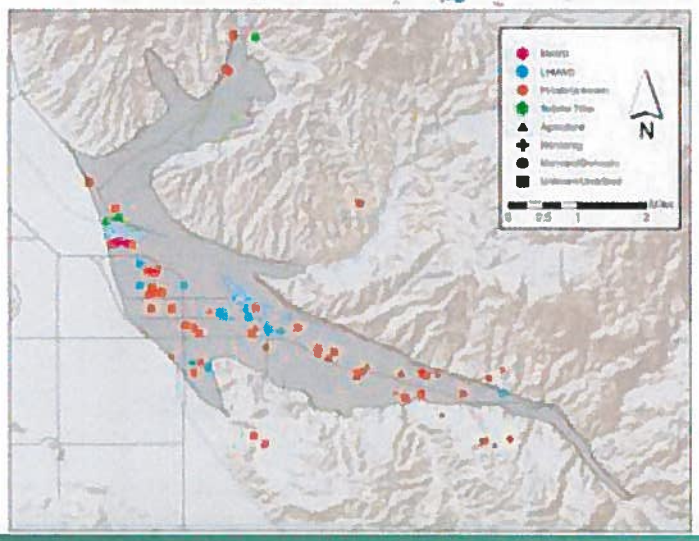
San Jacinto Groundwater Basin



Canyon Basin Vicinity



Canyon Basin Groundwater Wells



History of the Canyon Operating Plan

- The Soboba Settlement Agreement states…

"In the event the Soboba Tribe is unable, except for mechanical failure of its wells, pumps or water facilities, to produce from its existing wells or equivalent replacements up to 3,000 afy production from the Canyon Sub-basin and the remainder of its Tribal Water Right from the Intake Sub-basin, …**the Local Districts [EMWD & LHMWD] shall deliver any shortage to the Soboba Tribe.**"

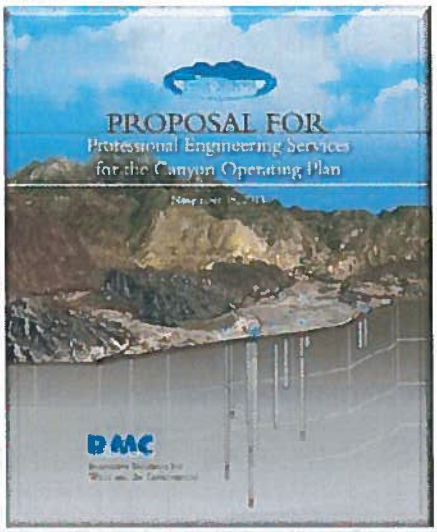
History of the Canyon Operating Plan

- Memorandum of Understanding

  Before agreeing to sign to the settlement agreement, **the Tribe required that EMWD and LHMWD commit to "…the prompt development of an operating plan for the Canyon Basin**…" This Operating Plan would be designed to help avoid shortages that would result in involuntary pumping restrictions on one or both of the agencies.

Plan for the Plan

- Participants Agreed on an Approach
  - Soboba Tribe, LHMWD and EMWD
  - Agreed to use a Consultant and Share the Costs
- Developed a Scope of Work and RFP
  - Agreed on 4 Firms to Invite
  - Received 2 Proposals
  - Reviewed and Ranked Proposals
- Unanimously Selected RMC
- Participants Working Cooperatively on Development of the Plan



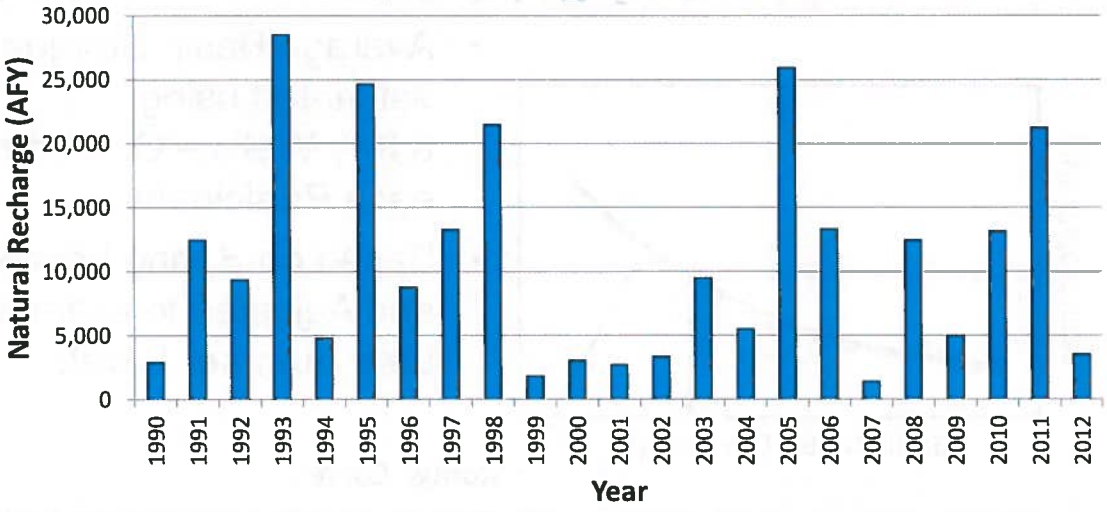
Project Goal

To develop an operating plan that facilitates responsible water management of the Canyon Basin through the ongoing monitoring of the basin's health and proactive operational adjustments by the Districts.

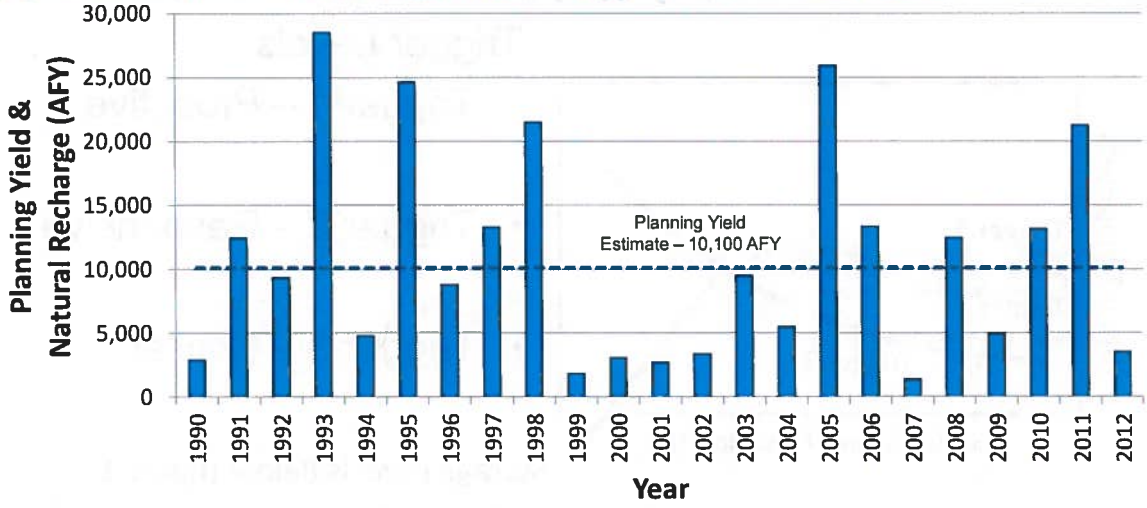
Elements of the Operating Plan

- Estimate the Planning Yield for the Basin
- Estimate the Volume of Storage in the Basin
- Develop a Storage Curve for various levels within the Basin
- Identify Key Wells
- **Identify Groundwater Levels that will Trigger Proactive Operational Actions by the Districts**
- Document historical water levels, pumping and recharge
- Summarize the findings and recommendations in a Report

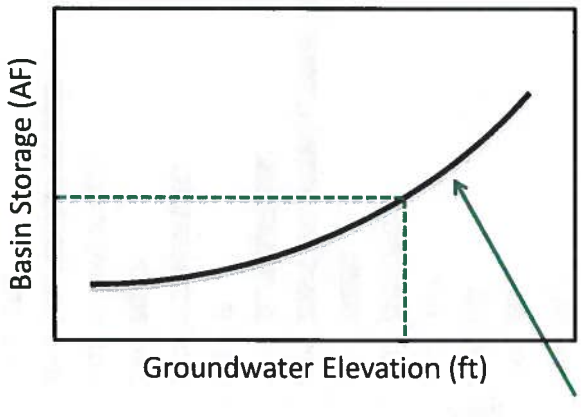
Planning Yield



Planning Yield

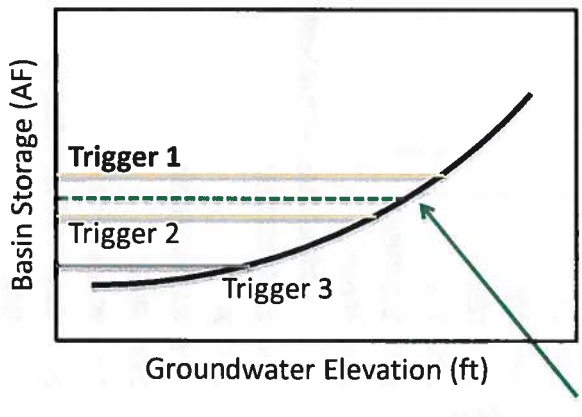


Operational Triggers



- Average Basin Storage estimated using 3 Key Wells – One from each Participant
- Based on Spring Levels and Adjusted to estimate Late Summer Levels

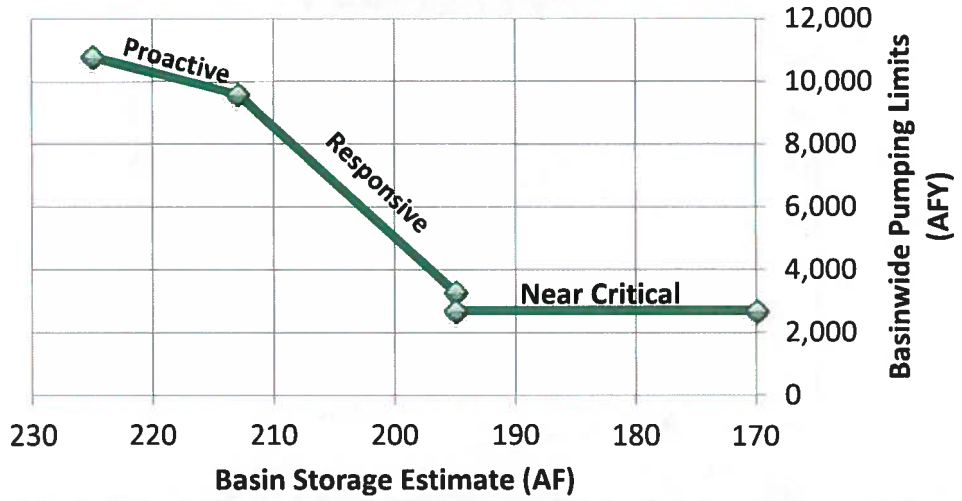
Operational Triggers



Trigger Levels:

- Trigger 1 – Proactive
- Trigger 2 – Responsive
- Trigger 3 – Critical

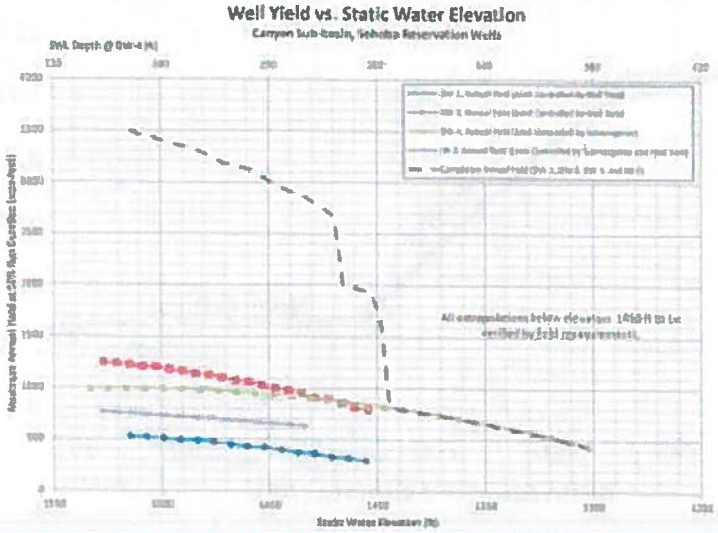
Operational Triggers



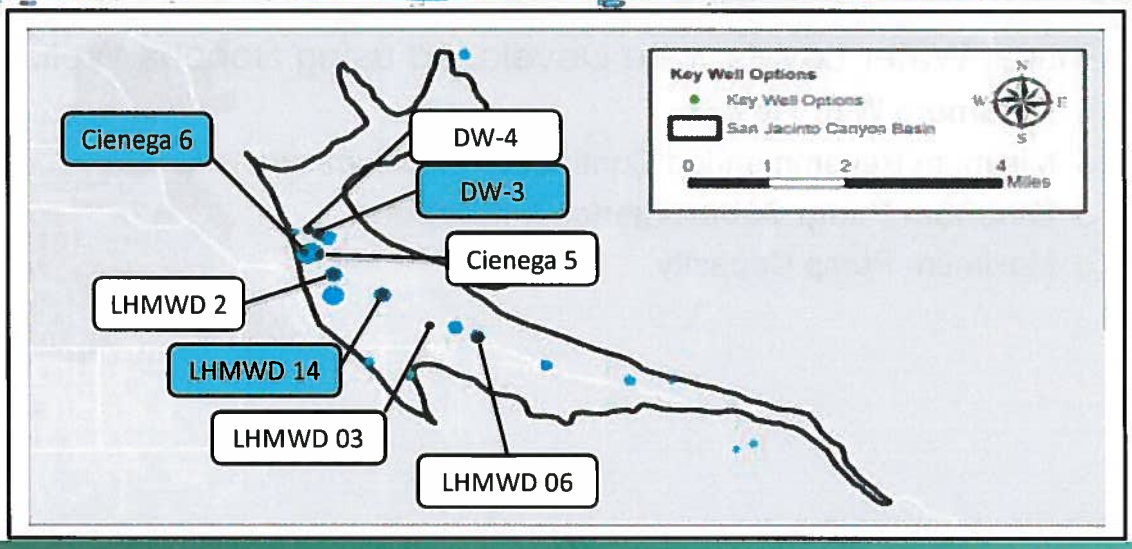
Tribal Production Capacity

- Critical Water Levels were Developed using Soboba Wells
  - **Maximum Well Yield**
  - Minimum Recommended Continuous Flow Limitations
  - **Minimum Pump Submergence Limitations**
  - Maximum Pump Capacity

Tribal Production Capacity



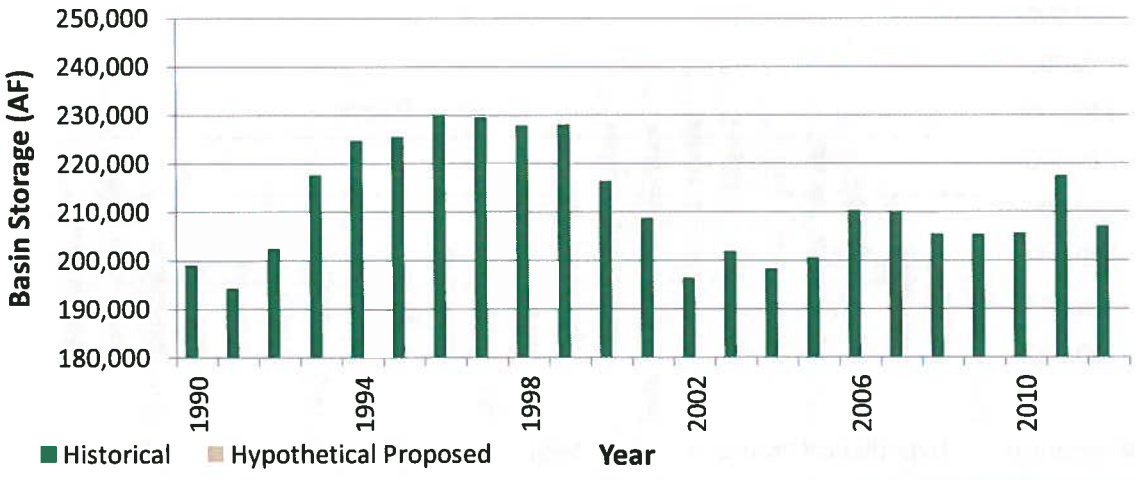
Key Wells



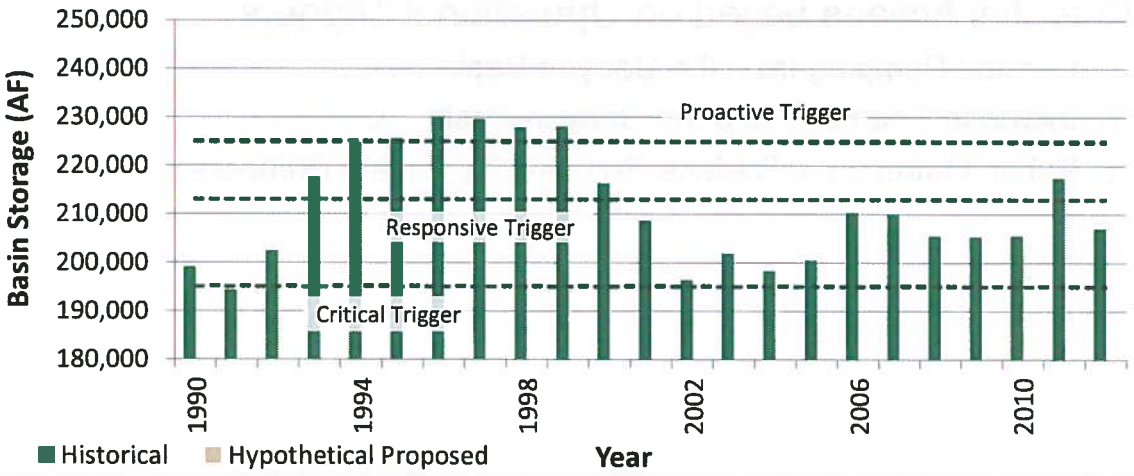
Potential Actions by the Districts

- Potential Actions based on Operational Triggers
  - Reduce Pumping from the Canyon Basin
  - Increase Recharge into the Canyon Basin
  - Public Outreach to Reduce Pumping by Private Pumpers

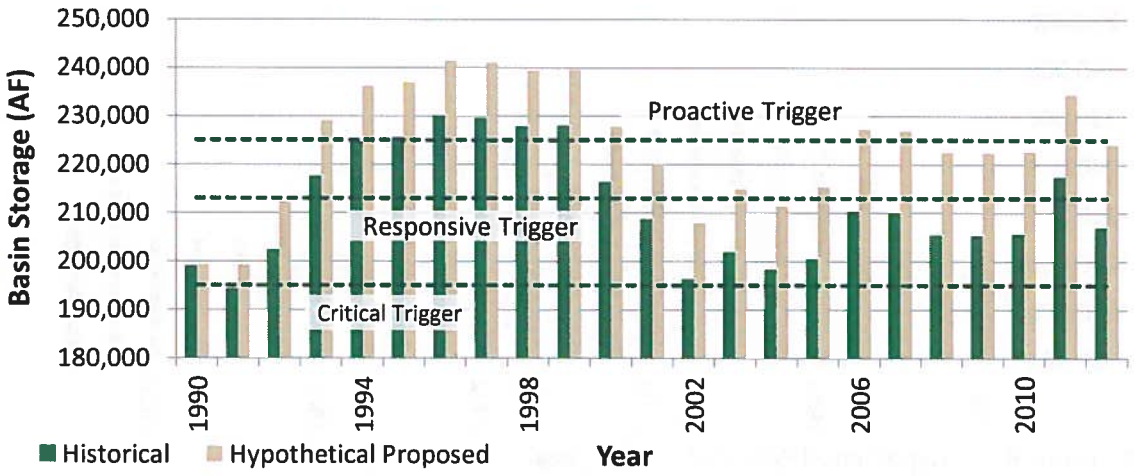
Basin Management Results



Basin Management Results



Basin Management Results



Project Status

- Workshop Monday, June 23
  - Participants Provide Comments to RMC
  - Final Comments Due Friday, June 27
- RMC Incorporate Comments
- RMC Presentation of Final Report before end of July

EASTERN MUNICIPAL WATER DISTRICT

Contact Information

Brian Jack Powell, P.E.
Director of Planning
(951) 928-3777 ext. 4278
powellb@emwd.org

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

June 5, 2014

Mr. Paul D. Jones, II, P. E.
General Manager
Eastern Municipal Water District
P. O. Box 8300
Perris, CA 92572-8300

Dear Mr. Jones:

Soboba Settlement Water Delivery Agreement Response to
Eastern Municipal Water District's Request for In-lieu Delivery

I appreciate your recent interest in the purchase of in-lieu delivery of Soboba Settlement Water for recharge of the groundwater basin. Such deliveries would help fulfill delivery obligations specified in the *Soboba Band of Luiseño Indians Settlement Agreement* (Soboba Agreement) and *Contract for Delivery of Water Pursuant to Settlement* (Delivery Agreement) to which the Metropolitan Water District of Southern California (Metropolitan) and Eastern Municipal Water District (Eastern) are parties.

Pursuant to the Soboba Agreement and Delivery Agreement, Metropolitan shall use its best efforts to deliver an average of 7,500 acre-feet (AF) per year of water to Eastern for the direct recharge of the groundwater basin. Metropolitan must deliver this water at the EM-14 service connection, which typically conveys untreated State Water Project (SWP) water to Eastern via the Lakeview Pipeline. However, this year's shortage of SWP water has required Metropolitan to minimize deliveries of SWP water for recharge purposes.

While the intent of the Soboba Agreement and Delivery Agreement is to deliver Soboba Settlement Water for groundwater spreading, Metropolitan will accommodate Eastern's request for temporary in-lieu water, with water deliveries at EM-14 which are anticipated to consist of Colorado River water by mid-July 2014. Metropolitan recognizes that levels of total dissolved solids (TDS) in Colorado River water may constrain direct recharge operations as these levels

700 N. Alameda Street, Los Angeles, California 90012 • Mailing Address: Box 54153, Los Angeles, California 90054-0153 • Telephone (213) 217-6000

exceed water quality objectives for the basin established by the Santa Ana Regional Water Quality Control Board. On the other hand, in-lieu operations will preclude any potential degradation of ambient groundwater quality caused by direct recharge of the basin with water of higher TDS content.

Although not expressly disallowed by the Delivery Agreement, it should be noted that the proposed in-lieu operation is not intended to set a precedent for future Soboba Settlement Water deliveries. As such, Metropolitan will agree to the temporary in-lieu delivery of Soboba Settlement water through December 31, 2014 according to the following specific provisions:

1. In-lieu deliveries shall commence upon developing a mutually agreeable operating plan by Metropolitan and Eastern staff, and end on December 31, 2014. During this period, Eastern shall cease groundwater production from not less than four wells in the management area adjacent to the Soboba Reservation to achieve a reduction in groundwater production by up to 5,900 AF in 2014, thereby providing in-lieu recharge.

2. Metropolitan shall deliver Soboba Settlement Water at an amount equal to the reduction in groundwater production through December 31, 2014, to the EM-14 connection for treatment at the Hemet Water Filtration Plant. This delivery will be treated at Eastern's sole expense for delivery to its customers and will replace Eastern's foregone groundwater production for the period.

3. The rate to be paid by Eastern for Metropolitan in-lieu water deliveries shall be at the rate as stipulated in the Soboba Agreement and Delivery Agreement.

4. Direct groundwater recharge may resume when sufficient SWP supplies are available, but no earlier than January 1, 2015.

Nothing in this letter agreement shall be construed to waive, amend, or terminate any right or obligation created by the Delivery Agreement and the Soboba Agreement except as specifically set forth and for the time periods provided herein. If you agree with the terms described above, please acknowledge your agreement by signing and returning a copy of this letter.

Metropolitan is looking forward to our agencies' continued cooperation in meeting obligations under the Soboba Agreement.

Very truly yours,

Jeffrey Kightlinger

Date:

Paul D. Jones, II, P.E.
General Manager
Eastern Municipal Water District

Date: 6.5.14

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Groundwater Model Update Status Report

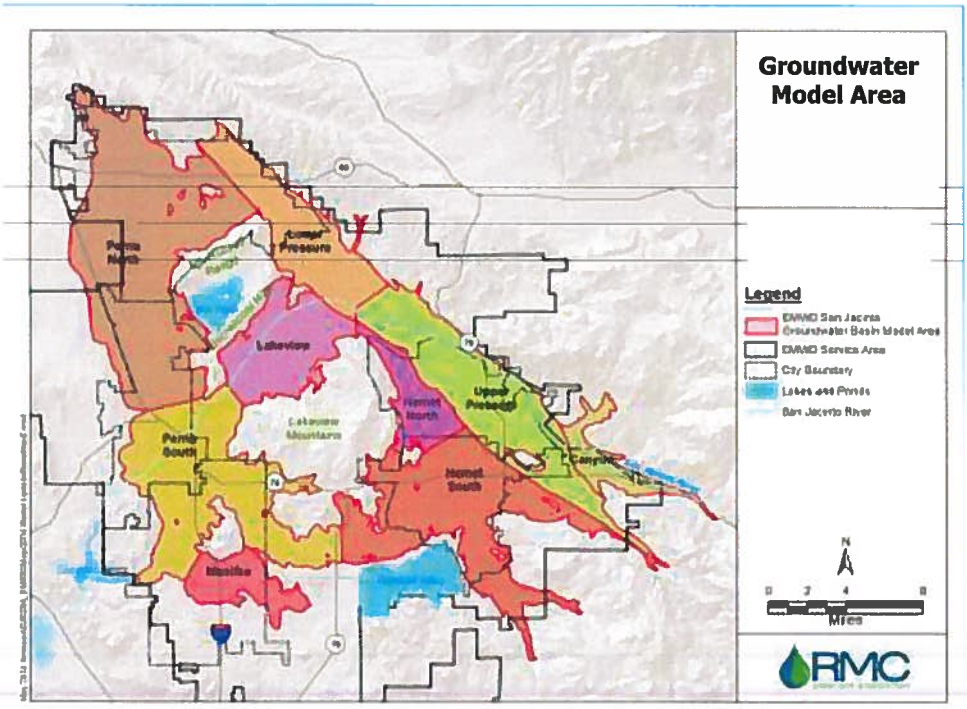
Hemet - San Jacinto Watermaster Board Meeting

August 25, 2014

Presentation Outline

- Overview of Project Goals
- Summary of Previous Modeling Efforts in the Region
- Project Schedule and Tasks
- Advisory Panel Members and Workshop Schedule

Recognition: Significant amount of information used for this presentation was developed by RMC (project consultants) as part of the Advisory Panel Workshop presentations.



PROJECT GOALS

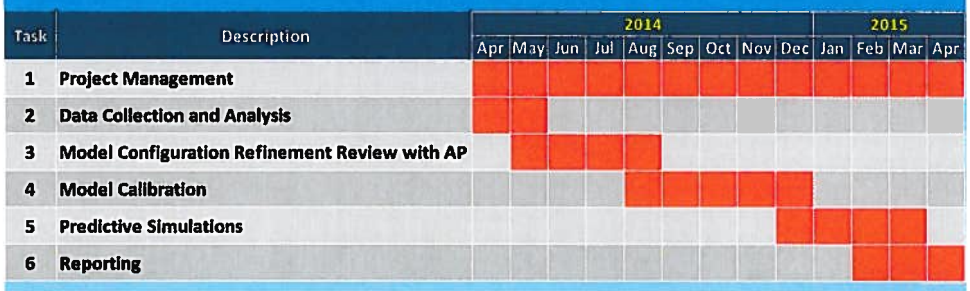
Develop an updated and more accurate planning tool to better analyze:

- Physical processes within the groundwater basin
- Regulatory compliance requirements
- Effectiveness/impacts of water resources projects:
  - Integrated Recharge & Recovery Project (IRRP)
  - Groundwater Banking
  - Indirect Potable Reuse (IPR)
  - Desalination System
- Groundwater production impacts/sustainability

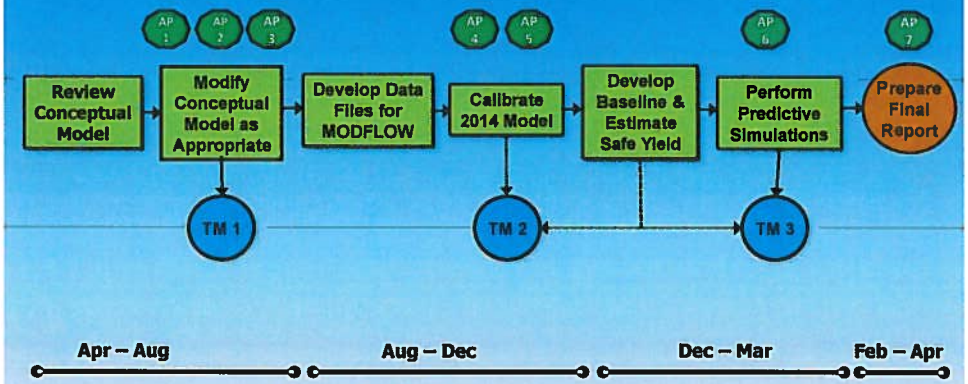
Modeling Efforts within San Jacinto Groundwater Basin

Year	Model Area	Type of Model	Simulation Period	Consultant	Client
1975	San Jacinto Groundwater Basin	Flow & Water Quality (WQ)	1963-1972	WRE & CDM	SAWPA/Santa Ana Regional WQ Board
1991	Upper Pressure (UP), Lower Pressure, Canyon	Flow & WQ	1963-1983	UCLA	MWD, EMWD, SAWPA
1995	Hemet	Flow & WQ	1963-1983	UCLA	MWD, EMWD, SAWPA
1998	Hemet, UP, Canyon	Flow & WQ	1972-1991	DHI	EMWD
2001	Perris North	Flow & WQ	1993-1999	Tetra Tech	EPA/U.S. Air Force
2002	San Jacinto Groundwater Basin	Flow & WQ	1984-1999	TechLink	EMWD
2014	San Jacinto Groundwater Basin	Flow	1984-2012	RMC	EMWD, Watermaster

PROJECT SCHEDULE



PROJECT TASKS



AP = Advisory Panel
TM = Technical Memorandum

Advisory Panel Members and Workshop Schedule

- Mr. Aleksander Vdovichenko (Department of Water Resources)
- Dr. Cindy Li (Regional Water Quality Control Board)
- Mr. Ralph Phraner (Local Groundwater Expert)
- Dr. Tracy Nishikawa (U.S. Geological Survey)

Workshop	Purpose	Approx. Date
1	Review proposed conceptual model	July 16, 2014
2	Review proposed landuse and water recharge components of the model	August 5, 2014
3	Review proposed approach for water balance, safe yield and model calibration	August 28, 2014
4	Review model calibration process	October 2014
5	Review model calibration results	December 2014
6	Review simulation scenarios results	March 2015
7	Comment/review of Draft Report (Optional)	April 2015

Questions/Comments?

Status of In-Lieu Water Deliveries

Khos Ghaderi, P.E.
Director of Water Operations
August 11, 2014

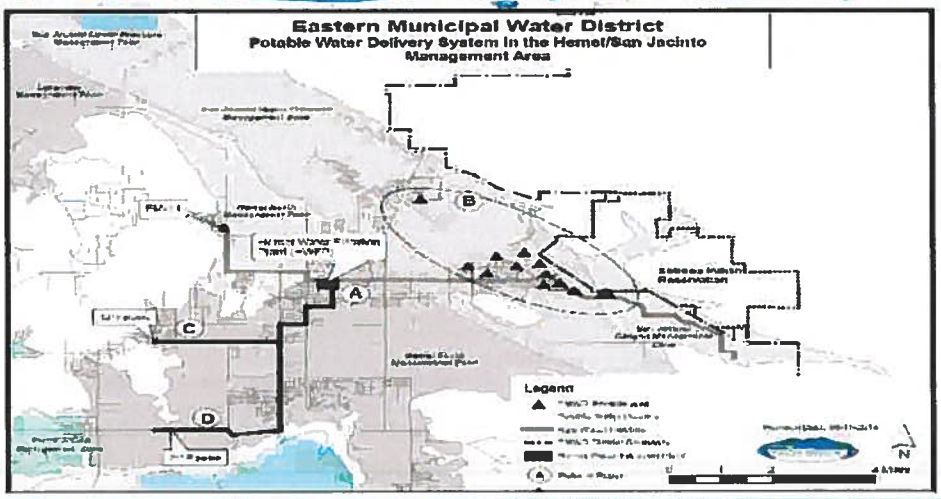
Background

IRRP Recharge		
Mo/Yr	AF/mo	YTD (AF)
Jun-12	412	412
Jul-12	802	1,214
Aug-12	1,001	2,215
Sep-12	816	3,031
Oct-12	1,031	4,062
Nov-12	1,343	5,405
Dec-12	347	5,752
Total		*5,752*
Jan-13	685	685
Feb-13	718	1,403
Mar-13	827	2,230
Apr-13	1,362	3,592
May-13	1,543	5,135
Jun-13	1,647	6,782
Jul-13	728	7,510
Total		7,510

- Maximum sustained recharge rate;15,500* gallons per minute (gpm)
- Required flow rate for 42 cubic feet per second (CFS);18,860 gpm
- Shortfall; 3,360 gpm

* Flows were subject to operational constraints

In-Lieu Area



In-Lieu Reporting Method 1

GROUNDWATER OPERATIONS

IN-LIEU BASELINE											ACTUAL OPERATIONS								
Well Designation	Account #	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS		JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
14 West Ring	01387-01	17.0	144.1	111.3	124.1	81.5	0.0	0.0	481.2		0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1
17 Cienega	03380-05	152.7	164.8	143.0	156.4	129.4	0.4	117.2	863.9		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23 Esplanade	04193-01	189.1	183.8	128.7	148.0	169.5	143.6	167.1	1,062.0		0.0	23.5	0.0	0.0	0.0	0.0	0.0	23.5
26 Cienega	04893-01	189.8	221.4	171.2	171.3	131.9	183.1	178.8	1,344.4		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27 Hemet/Evans	01704-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28 Gossett Well	01368-01	123.8	116.3	161.5	139.3	161.8	178.4	8.3	1,139.3		0.0	19.1	0.0	0.0	0.0	0.0	0.0	19.1
33 Moreno (Not Iron Hill)	04417-01	0.0	99.7	94.0	100.0	106.1	99.4	62.4	561.3		54.7	13.0	7.3	0.0	0.0	0.0	0.0	67.8
34 Cienega	01408-01	122.3	140.3	110.3	122.7	78.3	109.5	4.0	793.4		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35 Palm/Meade	07017-01	10.4	113.3	83.8	113.3	60.8	0.0	0.0	466.2		0.0	16.8	0.0	0.0	0.0	0.0	0.0	16.8
36 Washington	07107-01	106.4	108.7	147.8	107.8	156.7	93.9	33.0	856.3		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
39 7th Street	07099-01	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.2		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40 Evans/Old Mtn (Not Iron Hill #3)	07214-01	104.6	117.3	104.6	116.3	0.0	0.0	157.3	511.0		173.1	113.7	12.8	0.0	0.0	0.0	0.0	429.7
41 Ramona/Sipl	07215-01	0.0	104.7	126.3	123.3	101.3	104.3	34.3	593.8		82.7	177.3	17.0	0.0	0.0	0.0	0.0	257.2
42 Ramona/Harvest	07215-01	102.3	104.3	93.8	101.3	98.4	101.0	91.5	592.2			0.4						0.4
Total GW Production ("A" on attached Figure)		1270.5	1671.3	1551.4	1675.8	1422.8	1048.0	837.5	9,484.8		332.5	553.9	48.1	0.0	0.0	0.0	0.0	882.3
									Groundwater Underproduction		979.7	1117.4	1503.3	1675.8	1422.8	1048.0	837.5	9602.4

HEMET WATER FILTRATION PLANT SYSTEM DELIVERIES

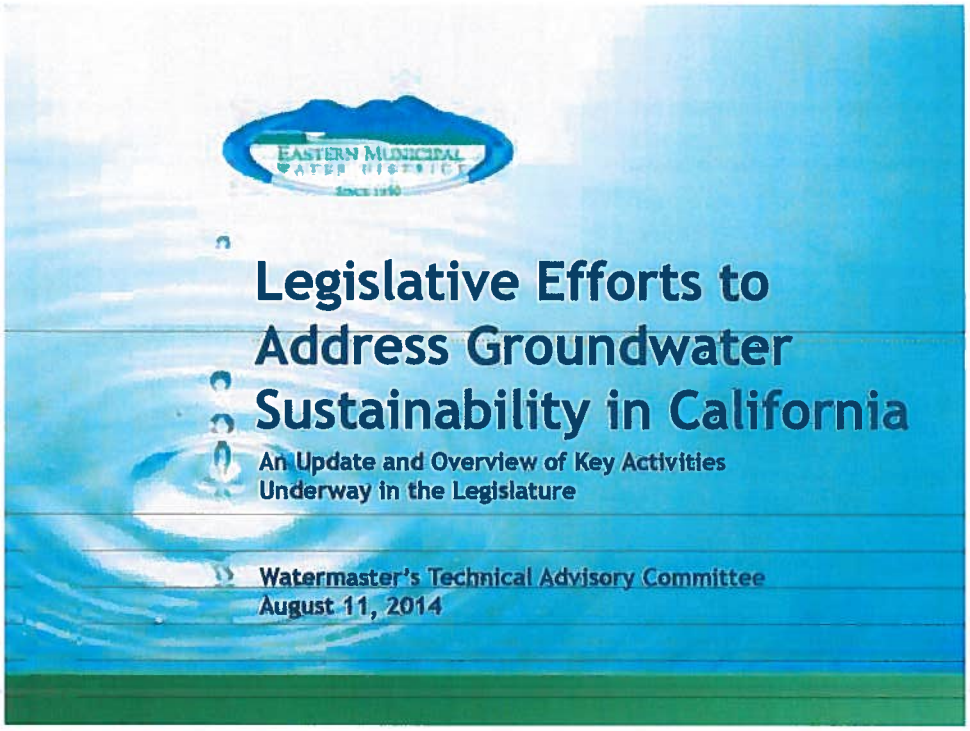
	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
Metered HWFP Production ("A" on attached figure)	548.9	678.7	503.3	496.7	454.4	378.1	316.8	3,947.8	827.4	833.8	102.3	0.0	0.0	0.0	0.0	1763.3
Metered Flow to the West																
12"P/L("C" on attached figure)Homecorp Pump 1 - 33466-01	1.8	49.3	21.4	52.8	42.4	59.0	10.3	229.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PPI Pump 2 - 19035-01	23.8	39.8	39.4	34.3	37.3	7.3	34.2	224.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24" P/L ("D" on figure)Simpson Bypass) 29067-01	194.2	487.1	353.6	417.4	417.9	389.8	428.6	2,710.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total flow to the West	220.0	583.1	414.4	514.6	513.2	456.6	469.3	3,172.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Groundwater going to the West	0.0	104.4	0.0	58.1	84.9	80.5	133.3	457.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total HWFP going to the West	220.0	478.7	414.4	456.7	454.4	376.1	336.0	2,715.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total flow to the East	328.9	0.0	88.1	0.0	0.0	0.0	0.0	417.0	827.4	833.8	102.3	0.0	0.0	0.0	0.0	1763.3
Simpson Booster to EV	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	372.2	655.1	11.8	0.0	0.0	0.0	0.0	779.7
CHECK - HWFP Flows to the East	328.9	0.0	88.1	0.0	0.0	0.0	0.0	417.0	827.4	833.8	102.3	0.0	0.0	0.0	0.0	1763.3

In-Lieu Reporting Method 2

2014 IN-LIEU PLAN

	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
DEMAND	1220	1780	1715					4715
HWFP	827.4	833.8	102.1					1763
WELLS	290.6	553.6	48.1					892
QUALIFYING IN-LIEU	827.4	833.8	102.1	0	0	0	0	1763

QUESTIONS/COMMENTS?



Overview

- Background on Legislation
- Two Bills Currently in the Legislature
- The Stakeholder Process
- What's in the Groundwater Sustainability Act of 2014 Legislation?
- State Backstop
- Areas Requiring Additional Clarification
- Next steps for the Legislation

Background on Legislation

- Governor releases the "*California Water Action Plan*" which calls for a wide range of activities over the next five years to provide reliable water supplies in California.
  - ➢ Calls for actions to expand water storage capacity and improve groundwater management to be developed for successful water supply management.
- ACWA Groundwater Sustainability Task Force releases "*Recommendations for Achieving Groundwater Sustainability*", shares document with the Legislature and the Governor.
- California Water Foundation releases "*Recommendations for Sustainable Groundwater Management*", shares with the Legislature.

Two Bills Introduced in the Legislature

- AB 1739 (Dickinson): Groundwater Management
  - ACWA's "Recommendations for Achieving Groundwater Sustainability" serves as the foundation for AB 1739.
- SB 1168 (Pavley): Groundwater Management
  - The California Water Foundation's Recommendations for Sustainable Groundwater Management is the foundation for SB 1168.

* Both bills are identified as a work in progress, and both authors became the principal co-author on the other's bill.

Stakeholder Process Initiated

- SB 1168 and AB 1739 are held to allow for a stakeholder process to be implemented.
- Four stakeholder meetings have been held to-date.
  - July 2, 2014
  - July 10, 2014
  - July 16, 2014
  - July 31, 2014
- Draft language for both bills emerged on July 29, 2014.
- The language has been amended into both SB 1168 and AB 1739.

Who Does the Act Apply to?

The Groundwater Sustainability Act of 2014 does not apply to:

- Adjudicated basins, except for the provision of the judgment or judicial order.
  - However annual reporting will be required which specifies groundwater use.
- Low and very low priority basins, however they will be encouraged to adopt a groundwater sustainability plan.

Details of the Bills (8/6 version)

- 2015 will serve as the baseline;
- States that groundwater management is best achieved locally;
- Bulletin 118 basin boundaries serve as the foundation, however a local agency may petition DWR to revise boundaries;
- Requires DWR to consult with Fish and Wildlife to identify and establish prioritization criteria when identifying groundwater basins/sub-basins based on adverse impacts to habitat and surface water resources;
- A local agency/combination of local agencies may elect to be a groundwater sustainability agency;
- The agency may adopt fees to implement the program;

Details of the Bills

- A Groundwater Sustainability Agency may require registration of extraction facilities and installation of a water-measuring device. May also require reporting (excludes de minimis extractors);
- Groundwater sustainability plans must be submitted to DWR by January 2020 and every five years after that;
- A local agency may submit an alternative plan believed to be the functional equivalent as a groundwater sustainability plan (plan);
- Annual pumping reports must also be transmitted to DWR;
- State Board and DWR may develop a fee schedule to recover costs of oversight and implementation.
- As of right now long term drought will not trigger state intervention.

Groundwater Sustainability Plan

Covers the entire basin – can be one plan or multiple plans with a single coordination agreement. Includes:

- Description of physical setting and characteristics of the aquifer;
- Historical data;
- Groundwater levels, quality, subsidence and surface/groundwater interaction;
- Description of historical/projected water demand/supplies;
- Map of the area, basin and boundaries;
- Map of recharge areas;
- Measurable objectives and milestones (5 year increments) for sustainability within 20 years; and
- Mitigation of overdraft;
- Summary of monitoring sites; and
- Monitoring protocols.

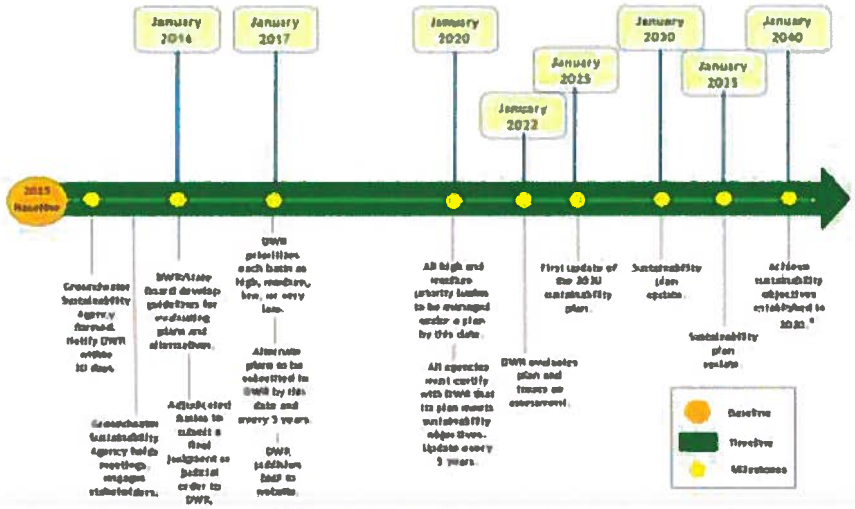
State Backstop

State may intervene when:

1. If after January 1, 2017 a groundwater sustainability agency has not been formed;
2. After January 31, 2020 a groundwater sustainability plan/ alternate plan has not been adopted by the local agency(s); and
3. DWR/State Board has determined that the groundwater sustainability plan is inadequate or is not being implemented, AND the basin is in a condition of long-term overdraft or extractions result in significant depletions.

- If a basin is designated as probationary by the State Board the agency will have 180 days to remedy. Additional time may be granted or the board may intervene.

Timeline for Implementation

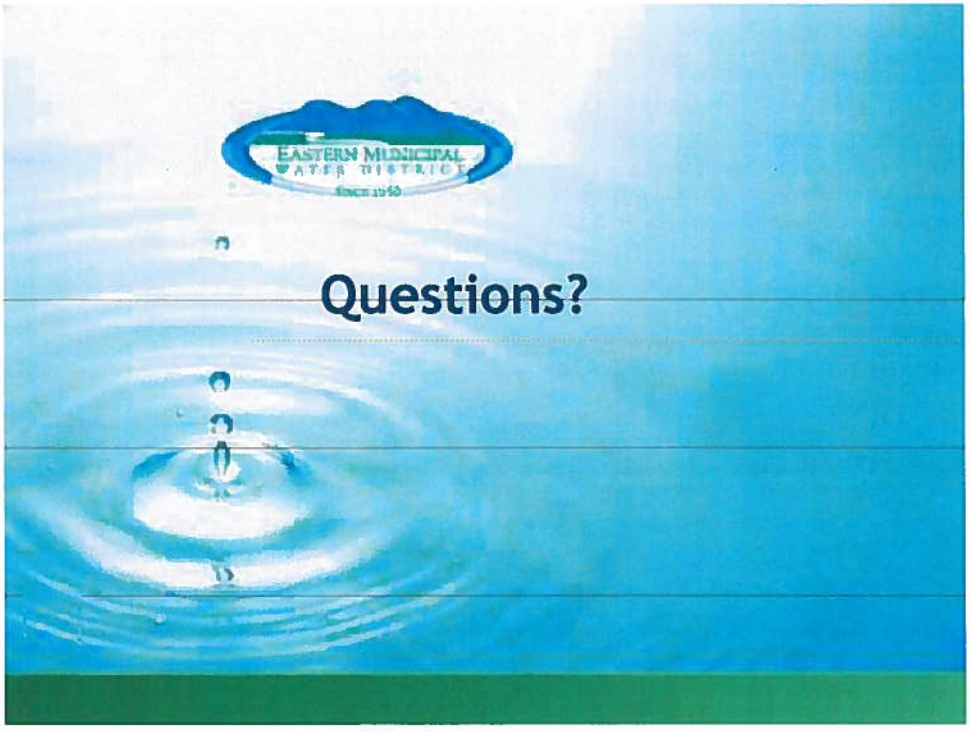


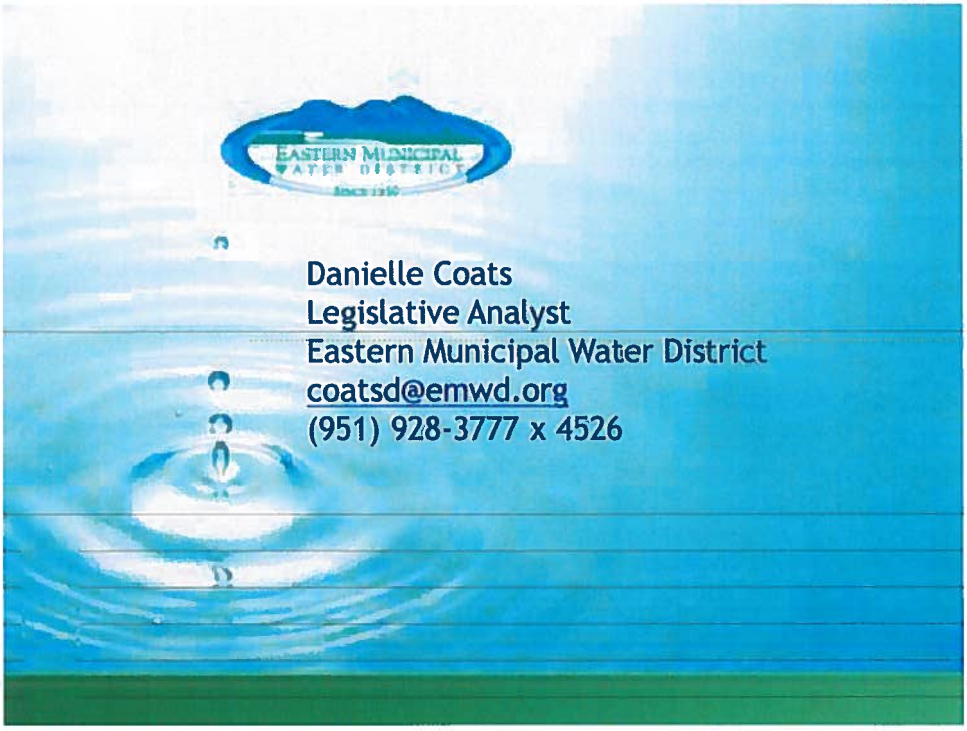
Areas Requiring Additional Input

- Refinements on the annual data that would be transmitted to DWR, ie. Annual groundwater reporting;
- What information will DWR want to see for adjudicated basins, and how will the public be involved;
- Clarifications on the process and timeline for DWR's review of the groundwater sustainability plans;
- How and when will CEQA apply to the sustainability plans;
- What happens when there are conflicts within the same basin, and what happens when a jurisdiction encompasses multiple basins; and
- How will basins not currently identified as high or medium priority basins be incorporated if DWR reprioritizes them.

Next Steps for the Legislation

- Second round of stakeholder/small group amendments released at the end of last week.
- Small group met again on Friday to work on final amendments.
- The third and final set of amendments are expected next week, prior to the bill(s) being heard on the floor.
- If the bill(s) fail to pass, then the Governor may exercise his ability to pass a trailer bill with limited discussion.




Danielle Coats
Legislative Analyst
Eastern Municipal Water District
coatsd@emwd.org
(951) 928-3777 x 4526

SUMMARY OF
SB 1168 (PAVLEY) & AB 1739 (DICKINSON)

THESE BILLS WOULD:

Establish the Sustainable Groundwater Management Act:

- Applies to groundwater basins.
- Applies to the United States & an Indian tribe to the extent authorized under federal or tribal law.

The Act does not apply to:

- Adjudicated basins, except for the provision of the judgment or judicial order & annual reporting of groundwater use.
- Low & very low priority basins, though such basins are encouraged to adopt groundwater sustainability plans.

Timetable:

- By January 1, 2017:
  - Local agencies must identify whether they elect to be, or to form, a groundwater sustainability agency. There can be more than one groundwater sustainability agency for a basin.
  - The entire basin must be covered by one or more groundwater sustainability agencies; i.e. no "unmanaged areas."
  - Counties are presumed to be the default groundwater sustainability agency if no other local agency identifies itself as such; counties may elect, or decline, to undertake the role.
  - If there is more than one groundwater sustainability agency for a basin, the agencies must coordinate their planning.
- By January 1, 2020:
  - Each high & medium priority basin must be covered by an adopted groundwater sustainability plan.
  - If there is more than one adopted groundwater sustainability plan for a basin, the plans must use common data & demonstrate how they are coordinated with each other to achieve the basin objectives.

- Annually, upon adoption of a groundwater sustainability plan:
  - Each groundwater sustainability agency would report to DWR groundwater data, including elevation, aggregate extraction, water usage & change in groundwater storage. ***Note: additional refinements will be made in the bill to address reporting requirements.***
- Every 5 years after 2020:
  - Each groundwater sustainability agency and each local agency with a functional equivalent would recertify it is making progress towards achieving groundwater sustainability.
- By January 1, 2040:
  - Each high & medium priority basin shall achieve its sustainability goals.
  - DWR may grant an extension of up to 10 years upon a showing of good cause.

The groundwater sustainability agency shall:

- Consider the interests of all beneficial uses & users of groundwater, as well as those responsible for implementing groundwater sustainability plans. These interests include, but are not limited to, all of the following:
  - Holders of overlying groundwater rights, including Agricultural & domestic well owners.
  - Municipal well operators.
  - Public water systems.
  - Local land use planning agencies.
  - Environmental users of groundwater.
  - Surface water users, if there is a hydrologic connection between surface & groundwater bodies.
  - The federal government, including, but not limited to, the military & managers of federal lands.
  - Indian tribes.
- Establish & maintain a list of persons interested in receiving notices regarding plan preparation, meeting announcements, & availability of draft plans, maps, & other relevant documents.
- Inform the department of its election or formation & its intent to undertake sustainable groundwater management within 30 days of its election or formation.
- Be presumed to be the County for any area within a basin that is not within the management area of an existing groundwater sustainability agency; counties may elect, or decline, to undertake the role.

Agency powers & authorities:

- In addition to any other powers & authorities an agency may have, upon becoming an groundwater sustainability agency, the agency would be authorized to do the following:
  - To prepare & adopt a groundwater sustainability plan.
  - Adopt rules, regulations, ordinances, & resolutions.
  - To propose & update fees.
  - To monitor compliance & enforcement.
  - To require registration of groundwater extraction facilities.
  - To require every groundwater extraction facility be measured.
  - To appropriate & acquire surface water or groundwater & surface water or groundwater rights, import surface water or groundwater into the agency, & conserve & store that water within or outside the agency.
  - To transport, reclaim, purify, desalinate, treat, or otherwise manage & control polluted water, wastewater, or other waters for subsequent use.
  - File an action to determine the validity of the groundwater sustainability plan.
- This Act does not grant new authorities to groundwater sustainability agencies to do any of the following:
  - Issue permits for the construction, modification, or abandonment of groundwater wells
  - However, a county may authorize a groundwater sustainability agency to issue permits for the construction, modification, or abandonment of groundwater wells.

Contents of the plans:

- A groundwater sustainability plan must include:
  - A planning & implementation horizon of at least 50 years.
  - Measurable objectives, as well as interim milestones in increments of five years, to achieve the sustainability goal in the basin within 20 years of implementing the plan.
  - A description of the physical setting & characteristics of the aquifer system underlying the basin.
  - A description of how the plan helps meet each objective & how each objective is intended to achieve the sustainability goal for the basin for long-term beneficial uses of groundwater.
  - Components relating to the monitoring & management of groundwater levels, groundwater quality degradation, inelastic land surface subsidence, & changes in surface flow & surface water quality that directly affect groundwater levels or quality or are caused by groundwater pumping in the basin.
  - Mitigation of overdraft.
- A groundwater sustainability plan may when appropriate & in collaboration with the appropriate local agencies include any of the following:
  - Control of saline water intrusion.
  - Wellhead protection areas & recharge areas.
  - Migration of contaminated groundwater.
  - A well abandonment & well destruction program.
  - Replenishment of groundwater extractions.
  - Activities implementing, opportunities for, & impediments to, conjunctive use.
  - Well construction policies.
  - Measures addressing groundwater contamination cleanup, recharge, diversions to storage, conservation, water recycling, conveyance, & extraction projects.
  - Efficient water management practices.
  - Efforts to develop relationships with state & federal regulatory agencies.
  - Processes to review land use plans & efforts to coordinate with land use planning agencies to assess activities that potentially create risks to groundwater quality or quantity.

Functional equivalence:

- Local agencies in high and medium priority groundwater basins that demonstrate that current management or operations activities have been consistent with the sustainable yield of the basin over a period of at least 10 years will be in compliance with the plan requirements. ***Note: additional refinements will be made in the bill to address functional equivalency.***

Coordination of multiple plans for a basin:

- If multiple groundwater sustainability agencies cover a basin, there must be a coordination agreement that covers the entire basin & ensures that the plans utilize the same data for the following assumptions in developing the plan:
  - Groundwater elevation data.
  - Groundwater extraction data.
  - Surface water supply.
  - Total water use.
  - Change in groundwater storage.

- Water budget.
- Sustainable yield.

DWR Review ***Note: additional refinements will be made in the bill to clarify this process***:

- By June 1, 2016, DWRs hall develop guidelines for evaluating groundwater sustainability plans & groundwater sustainability programs.
- The guidelines shall identify the necessary plan components & other information that will assist local agencies in developing & implementing groundwater sustainability plans & groundwater sustainability programs.
- Upon completion of a groundwater sustainability plan, a groundwater sustainability agency shall submit the groundwater sustainability plan to DWR for review.
- DWR shall evaluate the groundwater sustainability plan within two years of its submission by a groundwater sustainability agency & issue an assessment of the plan. The assessment may include recommended corrective actions to address any deficiencies identified by DWR.
- At least every five years after submission, DWR, in consultation with the board, shall review the basin conditions and the progress in implementing a groundwater sustainability plan, or a plan or program deemed to be a functional equivalent for consistency with this part, including achieving the sustainability goal.
- DWR shall adopt a schedule of fees to recover costs incurred in carrying out this chapter.

State Intervention ***Note: additional refinements will be made in the bill to clarify this process:***

- General provisions:
  - Intervention is not mandatory; the state water board always may exercise discretion.
  - The board has discretion to apply pressure incrementally.
  - 2- & 5-year safe havens for governance & plans, respectively.
- The four conditions that would allow state intervention:
  1. When local authorities fail to have subbasin-wide governance in 2 years.
  2. When local authorities fail to adopt a subbasin-wide plan in 5 years.
  3. When DWR determines that a plan is inadequate & the board determines that the basin is in a state of long-term overdraft or has significant depletions of interconnected surface water.
  4. When DWR determines that implementation is inadequate & the board determines that the basin is in a state of long-term overdraft or has significant depletions of interconnected surface water.
- The board will consult with DWR in assessing overdraft or surface water depletions.
- Long term overdraft is defined so that drought won't trigger intervention.
- Process:
  - If any of the four above conditions apply, the board may designate a basin as a probationary basin:
    - The board is required to identify specific deficiencies.
    - Deficiencies are limited to overdraft or surface water problems – not other problems with plans.
    - Designation triggers a 180-day cure period. During the cure period, the board may appoint a mediator to assist local agencies. The board may require extractors to report extractions.

- If the local agency does not cure the deficiency, the state water board may proceed with an interim plan:
  - The interim plan would address the deficiencies identified in the probation designation & are thus limited to overdraft & surface water issues, not other problems.
  - The board may tailor remedies within a subbasin by relying on local groundwater sustainability plans that are working well & focusing on problem areas.
  - The board may stay action or rescind its interim plan if local agencies are making good progress on a groundwater sustainability plan or an adjudication, even if the progress or adjudication is incomplete.
- If it limits extractions, the board must follow water right priorities to the extent feasible.
- The board may impose fees on extractors to pay its costs.

These bills would also:

- Establish that it is the policy of the state that groundwater resources be managed sustainably for long term water supply reliability & multiple economic, social, or environmental benefits for current & future beneficial uses.
- Require a city or county planning agency, before adopting or substantially amending a general plan, to review & consider groundwater sustainability plans.
- DWR may provide technical assistance to any groundwater sustainability agency in response to that agency's request for assistance in the development & implementation of a groundwater sustainability plan. DWR shall use its best efforts to provide the requested assistance.
- A basin's boundaries are those identified in Bulletin 118 unless other basin boundaries are established pursuant to this Act:
  - A local agency may request DWR to revise the boundaries of a basin, including the establishment of new subbasins.
  - A local agency's request shall be supported by information demonstrating that the proposed adjusted basin can be the subject of sustainable groundwater management; technical information regarding the boundaries of, & conditions in, the proposed adjusted basin; & information demonstrating that the entity proposing the basin boundary adjustment consulted with interested local agencies & public water systems in the affected basins before filing the proposal with the department
- DWR shall prioritize basins & subbasins as provided in CASGEM (California State Groundwater Elevation Monitoring).
- DWR, in consultation with California Department of Fish & Wildlife, shall identify & develop criteria to identify groundwater basins & subbasins that should be prioritized based on adverse impacts to habitat & surface water resources. The criteria shall be incorporated into the determination of basin & subbasin prioritization at the department's next update of basin & subbasin prioritizations that occurs after January 1, 2017.
- Nothing in the bill prevents a legal action to adjudicate water rights.

HEMET-SAN JACINTO WATERMASTER
CHANGE ORDER NO. 1
EMWD SUPPORT SERVICES TASK ORDER No. 6

CONTRACTOR: EMWD

PROJECT: 2014 Water Resources Monitoring Program Support

CHANGE ORDER COST: $4,333.80

FINANCIAL SOURCE: 2014 Administrative Assessment

BOARD AUTHORIZATION REQUIRED FOR THIS CHANGE: Yes( ) No (X)

Contractor is hereby directed to provide the extra work necessary to comply with this change order.

DESCRIPTION/JUSTIFICATION OF CHANGE:

There is a need to replace meters at the Pastime Lakes Dairy and the Boersma Dairy. Both are Class B Participants in the Judgment.

The Pastime Lakes Dairy has 3 wells:

1. Pastime Lakes Dairy Middle – New well drilled in 2007, which is when the meter was installed. Meter is a bolt-on saddle, which is considered to be less accurate meter based on manufacturers published data. This is the main production well for the dairy and rarely shuts off. Recommend replacing meter with a 6" flanged top-plate meter.
2. Pastime Lakes Dairy West – Well does not run and has pump stuck in the well. No need to replace the meter.
3. Pastime Lakes Dairy East – Rarely runs and is a back-up well to the "Middle" well. EMWD has a replacement meter in stock for this well, so no need to purchase a new meter but EMWD will refurbish the old meter for future use.

The Boersma Dairy has two wells:

1. Boersma Dairy – Meter and pipe are leaking water and require replacement. This is the main production well for the dairy and rarely shuts off. Recommend replacing meter with a 6" flanged top-plate meter.
2. Boersma Dairy Ag – This well has not run in many years, but has now been refurbished and is back in operation without a meter. Recommend installing a 4" flanged top-plate meter.

EMWD recommends purchase of the following meters to replace those described above:

- 2 – 6" Flanged Tube Meters with Over-run Bearing Assemblies.
- 1 – 4" Flanged Tube Meter with Over-run Bearing Assembly.

Manufacturer's cost is $4,472.75 for the three meters identified above. Also, materials from the EMWD Warehouse in the amount of $477.80 will be required to install the three meters identified above. In addition, a meter was already ordered replaced in April of this year in the amount of $983.25 at the Hettinga Dairy.

The total cost equals $5,933.80 for these meter replacements and materials. However, this amount is much more than the $1,600.00 that was budgeted in Task Order No. 6 for meter replacement requiring this change order for $4,333.80

CHANGE IN CONTRACT TIME: None

CHANGE IN TASK ORDER PRICE:

Original Task Order Amount:	$130,980.00
Change Order Amount:	$ 4,333.80
Amended Contract Total:	$135,313.80

ACCEPTANCE:
Contractor accepts the terms and conditions stated above as full and final statement of any and all claims arising from or related to this Change Order. Contractor agrees to perform the above described work in accordance with terms and in compliance with applicable sections of the Contract Specified. This Change Order is hereby agreed to, accepted and approved, all in accordance with the General Provisions of the Contract Specified.

Hemet-San Jacinto Watermaster

By: _____ Date: _____
Behrooz Mortazavi
Watermaster Advisor

EASTERN MUNICIPAL WATER DISTRICT

By: _____ Date: _____
Paul D. Jones II
General Manager

McCALL'S METER SALES & SERVICE
1498 MESA VIEW STREET
HEMET, CA 92543
PH: 951-654-3799

QUOTATION

DATE	ESTIMATE #
7/1/2014	17450E

CUSTOMER
EASTERN MUNICIPAL WATER DISTRICT P.O. BOX 8300 PERRIS, CA 92572 ATTN: STEVE SHOCKEY

TERMS	REP	FOB
Net 30	DRD	ORIGIN

QTY	ITEM	DESCRIPTION	COST	TOTAL
2	MW506	6" FLANGED TUBE METER, 150 PSI	1,353.75	2,707.50T
2	OT110	OVER-RUN BEARING ASSEMBLY, 4" - 16"	40.50	81.00T
1	MW504	4" FLANGED TUBE METER, 150 PSI	1,167.75	1,167.75T
		SUBTOTAL		3,956.25
1	FRT	FREIGHT APPROX.	200.00	200.00
		TAX	316.50	316.50

THANK YOU FOR THE INQUIRY... DOUG

TOTAL $4,472.75

All Returned Goods Are Subject To 25% Restocking Fee

SIGNATURE _____

Item	Amount Needed	Cost Per Unit	Units	Total Cost
4" Close Nipple	3	$7.26	ea	$21.78
4" Weld Flange	2	$13.63	ea	$27.26
4" Threaded Flange	2	$24.82	ea	$49.64
4" Weld Saddle	1	$43.44	ea	$43.44
6" Weld Saddle	2	$43.45	ea	$86.90
1 1/4" Bushing	3	$5.61	ea	$16.83
6" Long 3/4 Nipple	3	$5.39	ea	$16.17
3/4 Hose Bibs	3	$4.91	ea	$14.73
6" Steel Pipe	6	$14.12	per foot	$84.72
6" Weld Flange	5	$18.44	ea	$92.20
6" Gaskets	5	$1.96	ea	$9.80
6" Nuts and Bolts	5	$1.17	per set	$5.85
4" Nuts and Bolts	4	$0.75	per set	$3.00
4" Gaskets	4	$1.37	ea	$5.48
				$477.80

Invoice

McCALL'S METER SALES & SERVICE
1498 Mesa View Street
Hemet, California 92543
Phone (951) 654-3799

RECEIVED
APR 24 2014
EMWD - MAIL ROOM

DATE	INVOICE #
4/18/2014	25392

BILL TO:

EASTERN MUNICIPAL WATER DISTRICT
P.O. BOX 8300
PERRIS, CA 92572

SHIP TO:

EASTERN MUNICIPAL WATER DISTRICT
2270 TRUMBLE ROAD
PERRIS, CA 92570

P.O. NUMBER	TERMS	REP	SHIP	VIA	F.O.B.	PROJECT
88311	Net 30	DRD	4/18/2014	UPS	ORIGIN	

QUANTITY	ITEM CODE	DESCRIPTION	PRICE EACH	AMOUNT
NR 1	MW503	3" FLANGED TUBE METER, 150 PSI TOT: A.F. IND: GPM NO VANES IN TUBE SN: 14-06851-03	983.25	983.25
		0110-12420-010010 OK		
1	MW508	8" FLANGED TUBE METER, 150 PSI W/OT110, OVERRUN BEARING ASSEMBLY TOT; A.F. IND: GPM NO VANES IN TUBE SN: 14-06852-08	* 1,716.00	1,716.00
		*1675.50 + 40.50 = 1716.00		
NR $40.50				
		SUBTOTAL		2,699.25
	FRT	FREIGHT	101.39	101.39
		TAX	8.00%	215.94

0110-54123-07370

WE APPRECIATE YOUR BUSINESS

TOTAL $3,016.58

OK 5/14
mailed/signed 5/16 - email - 5/20

AGENDA

HEMET – SAN JACINTO WATERMASTER
BOARD OF DIRECTORS

October 27, 2014
4:00 pm
2270 Trumble Road, Perris, CA 92750

CALL TO ORDER

PLEDGE OF ALLEGIANCE

ROLL CALL

I. PUBLIC COMMENTS

Any person may address the Board on any subject within the Watermaster's jurisdiction which is not on the agenda. However, any non-agenda matter that requires action will be referred to staff for a report and action at a subsequent Board meeting. Any person may also address the Board on any agenda matter at the time that matter is discussed, prior to Board action.

II. ADDITIONS/DELETIONS TO THE AGENDA

III. REPORTS

The following agenda items are reports. They are placed on the agenda to provide information to the Board and public. There is no action called for in these items.

A. Board Member Comments/Questions/Reports

B. Advisor Report

C. Legal Counsel Report

D. Treasurer Report

IV. CONSENT CALENDAR

A. Approval of Minutes – August 25, 2014 Regular Board Meeting.
Recommendation: Adopt a motion to approve item A on the Consent Calendar.

Consent Calendar items are expected to be routine and non-controversial and are to be acted upon by the Board at one time without discussion. If any Board member, staff member, or interested person requests that an item be removed from the Consent Calendar, it will be removed from the Consent Calendar for separate action.

V. ACTION ITEMS

The following items call for discussion and possible action by the Board. These items are placed on the Agenda so that the Board may discuss and possibly take action on the items if the Board desires.

A. 2015 Adjusted Base Production Rights– Presentation of different options on how to reduce adjusted base production rights in the coming years.
Recommendation: Adopt a motion to set the Public Agencies Adjusted Base Production Rights reduction rates for May 2015 through April 2018.

B. Change Order No. 2 to EMWD Task Order No. 6 – Requesting replacement of seven non-functioning meters for a not-to-exceed cost of $13,651.24; increasing the total cost of the 2014 Water Resources Monitoring Program Support (Task Order No. 6) to $148,965.04.
Recommendation: Adopt a motion to Approve Change Order No. 2 to EMWD Task Order No. 6.

VI. INFORMATIONAL ITEMS/CORRESPONDENCE

A. In-lieu Delivery of Soboba Settlement Water in 2014 – Review of amendment to June 5, 2014 letter agreement between MWD and EMWD.

B. Drought Impacts on The State Water Project System – Review of severity of water level changes at Lake Oroville between 2011 and 2014.

C. Groundwater Model Update – Status report on the groundwater model update project.

D. Review of Final Expenditures on The Phase I Facilities Construction Cost Agreement – Presentation of reconciled costs for the Phase I Facilities agreement which was jointly funded by EMWD, LHMWD, and Cities of Hemet and San Jacinto.

E. Water Banking Initiative – Presentation by EMWD to review their recent Groundwater Banking activities in the San Jacinto Upper Pressure Basin.

VII. CLOSED SESSION - NONE

VIII. ADJOURNMENT

Next Regular Board of Directors Meeting
December 22, 2014 at 4:00 pm. at:
Eastern Municipal Water District Board Room
2270 Trumble Road, Perris, CA 92750

Upon request, this agenda will be made available in appropriate alternative formats to persons with disabilities, as required by Section 202 of the Americans With Disabilities Act of 1990. Any person with a disability who requires a modification or accommodation in order to participate in a meeting should direct such a request to the Watermaster Executive Assistant at 714-707-4787, at least 48 hours before the meeting, if possible.

Pursuant to Government Code Section 54957.5, any writing that (a) is a public record; (b) relates to an agenda item for an open session of a regular meeting of the Watermaster Board of Directors; and (c) is distributed less than 72 hours prior to that meeting, will be made available for public inspection at the time the writing is distributed to the Board of Directors. Any such writing will be available for public inspection at Watermaster's office located at 2270 Trumble Road, Perris, CA 92750.

Hemet-San Jacinto
Watermaster
c/o EMWD • 2270 Trumble Road, Perris, CA 92570 • Telephone: (951) 928-3777 ext. 4338

Watermaster Board

Chair
Frank D. Gorman

Vice-Chair
Linda Krupa

Secretary-Treasurer
Philip E. Paule

Board Members
Mark Bartel
Bruce Scott

Board Alternates
Rick Hoffman
Scott Miller
Steven A. Pastor
Randy A. Record
Larry Smith

Advisor
Behrooz Mortazavi

Legal Counsel
Lagerlof, Senecal, Gosney & Kruse

To: Hemet-San Jacinto Watermaster Board of Directors

From: Board Treasurer

Date: October 27, 2014

The Board Treasurer has reviewed and approved the following account information:

Total Cash and Investments as of July 31, 2014		***$557,981.71***
Revenues for August 1 – September 30, 2014:		
City of Hemet	$ 46,138.00	
City of San Jacinto	$ 25,508.00	
EMWD	$126,285.00	
LHMWD	$127,568.00	
Total Revenues	$325,499.00	
Payments for August 1 – September 30, 2014:		
LSG & K (Legal Counsel 8/27/2014)	$ 4,395.00	
Water Resources Engineers 9/30/2014	$ 43,126.55	
EMWD 8/27/2014	$ 46,896.00	
Bell Bookkeeping 8/14/2014	$ 130.00	
Total Payments	$ 94,547.55	
Cash Flow for August 1 – September 30, 2014		***$230,951.45***
Other Income/Expense for June 1 – July 31, 2014:		
Savings Interest	$ 110.41	
Other Expense/Fees	$ 0.00	
	$ 110.41	
Total Cash and Investments as of Sept. 30, 2014		***$789,043.57***

Pending Receivables:		***$ 0***
Pending Payments:		
Bell Bookkeeping 8/31/2014	$ 390.00	
Water Resources Engineers 9/30/2014	$18,381.39	
LSG & K (Legal Counsel) 9/17/14	$ 2,100.00	
Total Pending Payments		***$20,871.39***

2013 Budget Items	Allocations	Commitments (As of Sept. 30, 2014)
In-Lieu Program Agreement	152,000.00	158,849.37
Office Supplies and Other Dir. Cost (10% of EMWD/WM Agrmt.)	16,850.00	262.64
Legal Counsel Contract	41,600.00	37,069.00
Advisor Contract	88,000.00	74,966.40
~~Gravel Pit De-Silting~~ (See Board Approved Items for revised allocation)	~~40,000.00~~	
Education and Training	15,000.00	
EMWD/Watermaster Support Agreement:		
Administrative Assistance (EMWD Task Order No. 1)	26,500.00	19,672.53
~~Monitoring Program Support~~ (See Board Approved Items for revised allocation)	~~112,000.00~~	
Financial Assistance (EMWD Task Order No. 3)	30,000.00	12,736.95
Additional/Revised Board Approved Items:		
Monitoring Program Support (EMWD Task Order No. 2)	35,936.00	
Gravel Pit De-Silting (EMWD Task Order No. 4)	54,000.00	47,935.86
Cone Penetrometer Testing Project (EMWD Task Order No. 5)	45,278.00	42,696.00
TOTALS	**505,164.00**	**394,188.75**

2014 Budget Items	Allocations	Commitments (As of Sept. 30, 2014)
In-Lieu Program Agreement	160,000.00	
EMWD/Watermaster Support Services		
~~Monitoring Program Support~~ (See Revised Items)	~~131,000.00~~	
Soboba Gravel Pit Project		
~~Dewatering~~ (Cancelled due to Drought)	~~35,000.00~~	
~~De-silting~~ (Cancelled due to Drought)	~~105,000.00~~	
Organization Operation & Management		
Financial Support Services	18,000.00	1,462.50
Legal Counsel Contract	33,000.00	14,220.00
Advisor Contract	166,000.00	101,454.74
Part-Time Executive Assistant Contract	50,000.00	10,445.40
Insurance; Office Supplies & Other Direct Costs	15,000.00	4,989.12
Education and Training	15,000.00	
Additional Projects/Activities		
Database/Mapping Application Development	20,000.00	11,340.00
Groundwater Model Development	120,000.00	
Additional/Revised Items:		
Monitoring Program Support	135,313.80	
TOTALS	**732,333.80**	**143,911.76**

The Watermaster Board of Directors met in Regular Session in the Board Room at EMWD Headquarters, 2270 Trumble Road, Perris, California, on ***Monday, August 25 2014,*** at ***4:05*** p.m. The meeting was called to order by Chairman Gorman.

Pledge of Allegiance

The Pledge of Allegiance to the Flag of the United States was led by ***Chairman Gorman***

Board Members Present:	Frank Gorman, Chair Linda Krupa, Vice-Chair Phil Paule, Secretary Treasurer Mark Bartel Bruce Scott
Board Member(s) Absent:	None
Board Alternate (s) Present:	Rick Hoffman
Watermaster Staff Present:	Behrooz Mortazavi, Advisor (Water Resources Engineers) Michelle Mayorga, Executive Board Secretary (Water Resources Engineers) Andrew Turner, Legal Counsel (Lagerlof, Senecal, Gosney & Kruse)
EMWD Staff Present:	Charlie Bachmann, Assistant General Manager of Planning, Engineering and Construction; Brian Powell, Director of Planning; Khos Ghaderi, Director of Water Operations Danielle Coats, Legislative Analyst Kevin Pearson, Public Affairs Officer Bonnie Wright, Grants and Loans Administrator
City of Hemet Staff Present:	Kris Jensen, Public Works Director
City of San Jacinto Staff Present:	Lynn Merrill, Public Works Director Dan Mudrovich, Utilities Superintendent
Lake Hemet Staff Present:	Tom Wagoner, General Manager
Others Present:	Frank Coate, Soboba Tribe Greg Kahlen, The Kahlen Group

I. **PUBLIC COMMENTS –*Speakers are requested to limit comments to 3 minutes.***

None

II. **ADDITIONS/DELETIONS TO AGENDA**

None

III. **Reports**

A. Board Member Comments/Questions/ Reports

None

B. Advisor Report

Mr. Mortazavi reported that most of his time involves activities related to the Groundwater Model Development Project and the monitoring program data processing.

The first set of invoices for 25% of the 2014 Administrative Assessments were mailed out on July 16th. The Cities of Hemet and San Jacinto have already paid their invoices. Significant time has been spent intergrading accounting books kept by Bell Bookkeeping at the recommendation of the Auditors who prepared the 2013 Annual Financial Audit Report.

The Technical Advisory Committee (TAC) had one meeting on August 11, 2014. The major topics of discussion were

The 2014 In-lieu Recharge Project status. Will be presented under Item VI-C.

The Groundwater Model Project update. Will be presented under Item VI-B.

The overview of Assembly Bill 1739 and Senate Bill 1168. Will be presented under Item VI-D.

The August TAC meeting was the first meeting conducted without the support of DWR and the Center for Collaborative Policy (Ms. Dale Schafer).

EMWD and RMC (the project consultant for the Groundwater Model Development Project) have conducted two Advisory Panel meetings for this project and have finalized the conceptual model for this project. The 2014 Database Management Project with Spatial Wave has been completed and the groundwater related data collected by EMWD can now be accessed by the Watermaster.

EMWD started using in-lieu delivery approach on June 6, 2014 to recharge the groundwater basins. Since then, EMWD has recharged about 2,300 AF with a goal of delivering 5,800 to 5,900 AF by the end of this year. More information regarding this activity will be provided under Item VI-C.

Pastime Dairy owners were contacted several times and their owners are trying to offset their overproduction during 2013 by reducing production during 2014 and 2015. On August 12, 2014 with the assistance from Vice Chair Krupa and the City of Hemet's Public Works Director, Ms. Kristen Jensen, Mr. Mortazavi provided the City of Hemet council with a briefing on the Watermaster's activities.

On July 22, 2014, with the assistance from Legal Counsel's office, the 2013 Annual Report and Financial Audit were mailed to all the stipulated Judgment participants.

Santa Ana Watershed Authority (SAWPA) submitted a grant application to the State Department of Water Resources in late July. If SAWPA is successful in receiving grand funds, then the Watermaster member agencies have an opportunity to receive some of these funds. The Watermaster's Ad-hoc Committee, Vice Chair Krupa and Mr. Scott are scheduled to meet with the Soboba Trial Council on October 14, 2014 at 10:00am.

EMWD, LHMWD and Soboba Tribe joint Canyon Basin Operation Plan effort is almost complete. A full presentation of this project will be provided to the Watermaster Board once the project is complete. LHMWD reported that Well 16 is complete and in operation. LHMWD and EMWD have completed Well 92 connection to the raw water pipeline that would allow LHMWD to receive water from this well. Well 92 is one of the IRRP wells. The City of Hemet is considering re-starting the two wells that were recently shutdown due to high nitrate by the end of September using in-system blending. The City of San Jacinto water rate surcharge is in effect. The City is observing a decrease in its customer's demand that may be partially attributed to the surcharge. EMWD received the final payment for the San Jacinto Valley Integrated Recharge and Recovery Program (IRRP) from the DWR in June. EMWD is planning to reconcile the final costs on the program and present the final result at a future TAC and Watermaster Board meeting.

Mr. Mortazavi invited Mr. Bachmann to brief the Board on the drought at the state level. Mr. Bachmann informed the Board that approximately 80% of the state of California is in a heavy drought. He reported that EMWD has been concentrating on 2 things:

- Guidelines issued by the Resources Control Board's regulations and to interpret their impact to the District.
- Updating Metropolitan Water District (MWD) Water Shortage Allocation Plan. MWD has been having weekly meetings on how to implement water cutbacks with its member agencies.

Mr. Gorman asked if MWD's new evaluation would conclude a significant reduction? Mr. Bachmann replied that with all the conservation efforts and the new guidelines, there has already been a significant reduction in water demand in Southern California.

Mr. Bachmann pointed out each of the MWD member agencies has an Urban Water Management Plan. These plans, include a Water Shortage Contingency Plan and collectively all agencies should be implementing their plan.

(See Attachment No. 1 for the compete Advisor Report)

C. Legal Counsel Report

Mr. Turner stated that Governor Brown signed legislation to put a $7.545 Billion Water Bond, on the ballot in November. $2.7 Billion of this is allocated to Storage, $900 million is for Groundwater Sustainability, and $1.5 billion is for Watershed Protection; Watershed Ecosystem Restoration and State Settlements. Approximately half a billion is coming from previously authorized bonds that had not been spent. The new fiscal impact will be approximately $7 billion.

(See Attachment No. 2 for Specifics of the Bond Approved by the Legislature)

D. Treasurer Report

Mr. Mortazavi provided a summary of the Treasurer Report.

Ms. Mayorga shared Water 101 Workshop information with the Board. Previously an email had been sent to the Board members in July with this information. If any Board members are interested they should contact Ms. Mayorga by the end of September. Staff will continue to provide information on any educational seminars that maybe of interest to the Board.

(See Attachment No. 3 for complete Treasurer Report)

IV. CONSENT CALENDAR

Accept Motion for approval of Consent Calendar

A. Approval of Minutes – June 23, 2014 Regular Board Meeting -

Recommendation: Adopt a motion to approve item A on the Consent Calendar

Motion:	Ms. Krupa	Noes:	
Seconded:	Mr. Bartel	Abstain:	Mr. Gorman
Ayes:	Mr. Paule, Mr. Scott	Absent:	

(See Attachment No. 4 for the June Meeting minutes)

V. ACTION ITEMS

None

VI. INFORMATIONAL ITEMS/CORRESPONDENCE

A. Grants and Loans Opportunities

Mr. Kahlen stated that to get financing for construction projects on has to "think outside the box".

Mr. Kahlen presented an example of a success story for the community of Enchanted Heights requiring about $15 Million. Prop 84 money, through the California Department of Public Health (DCPH) Drinking Water program, was used. The Kahlen Group (TKG) worked with EMWD to apply for the funds and this is where "thinking outside the box" came in. TKG found information on contaminated wells that supported a successful $9.7 Million grant application and able to supplement the CDPH grant with a $5 Million grant from the Clean Water Program of the State Water Resources Control Board.

However, since EMWD had another Grant from CDPH, and could not have received two grants from CDPH, the city of Perris led one of the grants.

The funding authorization for grants is typically smaller than most loan programs, and not every project is going to receive grant funds. There is no repayment agreement for grants, and no debt ceiling or any of the other requirements typically associated with a loan contract. Grant funds are usually smaller amounts, and may e for only a portion of the total project cost, and may require a local share. Grant funds vary annually subject to availability of funds.

Loans a very different. Proponents can often receive a loan for 100% of the project, and there are usually no application deadlines. Loans can be somewhat competitive, but can also provide grant opportunities. They many have compliance requirements, financial and risk evaluations, and a repayment contract.

Mr. Kahlen stated the American Recovery and Reinvestment Act (ARRA) required projects to be "shovel-ready". At the time, EMWD had an application in process for a State Revolving Fund (SRF) loan for a wastewater treatment plant expansion project, but chose to delay the loan application in order to get the project qualified under ARRA.

The only additional step for a loan vs. grant is "disbursement requests" by the funding agency during construction.

Mr. Kahlen has worked extensively with the State Water Resources Control Board staff that processes the Clean War, and the Drinking Water SRF programs. These two programs have grant and loan funds for water, wastewater, and recycled water projects. These are the two programs that provided funds for EMWD's Enchanted Heights project. The U.S. Bureau of Reclamation also provides grant programs, including Water Conservation and Efficiency, and Water SMART grants. The Infrastructure and Economic Development Bank (Ibank) is expanding their program and can fund most of the project types discussed earlier as well as street, road, storm drain, and other types of public works projects.

The Clean Water SRF is used for wastewater projects, and annually funds about $200 to $400 Million.

As of now, the Drinking Water SRF Program funds projects that involve out-of-compliance water systems, as well as water meter projects, and incentive programs for consolidation of water systems. To be eligible for the Drinking Water SRF Program, you have to have a Public Water System or a legal entity that owns a public water system, and the project must be ranked on their Priority List. Mr. Kahlen stated the Bureau of Reclamation has funds for SCADA systems, canal lining and piping, groundwater banking, leak detection, and irrigation retrofit projects. Mr. Kahlen has prepared a number of applications for this program, and the grants range in size from $200,000 to 1.5 Million.

IBank is providing loans to public agencies, anywhere from $50,000 to $25 Million. They have flexible terms with a discounted interest rate. Mr. Kahlen mentioned that there will be a Funding Fair with representatives from most of the agencies that he talked about, one month from today, on September 25, 2014, at EMWD.

(See Attachment No. 5 for the presentation)

B. Groundwater Model Update – Status Report

Mr. Mortazavi presented a status report on the Groundwater Model. This is a project that the Watermaster is jointly funding with EMWD. The EMWD contract amount is approximately $400,000 and Watermaster is providing $120,000 towards this effort. The presentation outline included an overview of project goals, summary of pervious modeling efforts in the region, project schedule and tasks, and the advisory panel activities.

The Groundwater Model is for the entire San Jacinto Groundwater Basin and includes areas outside the Watermaster area.

There are two different types of groundwater models, one for the projection of flow conditions and the second for water quality projections. The current model is a flow model only; it does not have a water quality element built into it.

The MODFLOW is a Groundwater Modeling Code developed by USGS and is used for this effort. The calibration process compares simulated values to the actual observed groundwater level values. Once the model is calibrated then the consultant will develop a baseline and estimated safe yield of the basins. Mr. Mortazavi will periodically update the Board on this project until its completion.

The advisory panel members include: Mr. Aleksander Vdovichenko (Department of Water resources), Dr. Cindy Li (Regional Water Control Board), Mr. Ralph Phraner (Local Groundwater Expert) and Dr. Tracy Nishikawa (U.S. Geological Survey). At the completion of this project, the consultants will make a full presentation to the Watermaster Board.

Mr. Scott has attended a workshop and commented that the process is very intense and very objective. He also commented that this is a very important project and benefits everyone in the region.

(See Attachment No. 6 for the presentation)

C. 2014 Imported Water In-lieu Program Status

Mr. Ghaderi presented a status update of in-lieu water deliveries from MWD. EMWD has recharged State Project Water since June 2012 for a total over 13,000AF in 2012 and 2013.

Mr. Jones has worked with MWD to make arrangements for in-lieu delivery for 2014.

A map showing the potable water delivery system in the Hemet/San Jacinto management area, the recharge area, and the area affected by in-lieu deliveries was shared with the Board Members.

EMWD has recharged about 2,500 AF of in-lieu water.

(See Attachment No. 7 for the presentation)

D. Assembly Bill 1739 and Senate Bill 1168 overview

Ms. Danielle Coats presented an update on legislative efforts to address Groundwater Sustainability in California.

Ms. Coat stated that the Governor's "California Water Action Plan" calls for actions to expand water storage capacity and improve groundwater management for a successful water supply management. ACWA Groundwater Sustainability Task Force released "Recommendations for Achieving Groundwater Sustainability" and California Water Foundation released "Recommendations for Sustainable Groundwater Management".

AB 1739 was introduced by Assembly man Dickinson. This bill addresses Groundwater sustainability pans and alternative plans.

SB 1168 was introduced by Senator Pavely. This bill outlines the Department of Water Resources/State Board responsibilities, fess authority of DWR/State Board/Local groundwater sustainability agencies; extraction reporting; and State backstop intervention and enforcement authority.

Under the Groundwater Sustainability Act of 2014, all basins within California will have to develop a groundwater sustainability plan for functional equivalent except for; Adjudicate basin (annual reporting will be required). Low and very low priority basins as set by DWR are encouraged to adopt a groundwater sustainability plan.

Bulletin 118 basin boundaries are the foundation but a local agency may petition to revise the boundaries; Local agency/combination of agencies may elect to be the groundwater sustainability agency. Fess may be assessed to develop, administer, and certify the program/plan. Mr. Paule asked who would set the fees? Ms. Coats replied that it would depend on the local sustainability agency.

The Groundwater Sustainability Plan should cover the entire basin. It can be one plan or multiple plans with a single coordination agreement.

Any local agency or combination of local agencies that has water supply, water management, or land use responsibilities overlying a groundwater basin may elect to be a groundwater sustainability agency for that basin. In the event that a basin is not within a groundwater sustainability agency, the county within which the unmanaged basin lies will be presumed to be the groundwater sustainability agency for that basin.

Adjudicated basins do not have to develop a Groundwater Sustainability plan however; they do have to submit a report to the State.

On April 1st of each year following the adoption of a groundwater sustainability plan, annual data is to be transmitted to DWR. The State can intervene if a groundwater sustainability agency has not been formed.

The timeline for implementation begins with the baseline in 2015. By January 2016, DWR/State Board will develop guidelines for evaluation plans and alternatives. In January 2020 all high and medium priority basins as set by DWR will be managed under sustainability plans and all agencies must certify with DWR that their plans meet sustainability requirements. In January 2022 DWR evaluates submitted plans and issues an assessment. In January 2025 the first update of the 2020 Sustainability Plan should be provided.

Both bills are in the third reading in each house. There is the possibility of additional rounds of technical edits.

Chairman Gorman asked how this pertains to the Watermaster. Ms. Coats replied that the Watermaster will have to report to the State and work with local agencies to do so.

Mr. Turner also pointed out that the Watermaster is Adjudicated and in full compliance. The Watermaster will have to report as required for adjudicated basins. Mr. Mortazavi pointed out that Watermaster will have to coordinate with EMWD. Ms. Krupa asked if this also applies to the Cities. Ms. Coats replied that it really depends who is identified as the local Groundwater Sustainability agency.

(See Attachment No. 8 for the presentation)

E. Change Order No. 1 to EMWD Task Order No. 6

Mr. Mortazavi presented Change Order No. 1 to EMWD Task Order No. 6 and stated it was needed to replace 3 flow meters in the Management Area. Mr. Mortazavi approved this Change Order for a not-to-exceed fee of $4,333.80

(Change Order No. 1 to Task Order No. 6 included as Attachment No. 9)

VII. CLOSED SESSION

None

VIII. ADJOURNMENT

There being no further business to come before the Board; Chairman Gorman adjourned the meeting at *5:35 p.m.*, to be reconvened on *Monday, October 27, 2014* at *4:00 p.m.* (Adjourned Regular Meeting).

2015 Adjusted Base Production Rights

Watermaster Board Meeting
October 27, 2013

Stipulated Judgment Requirements

Section 3.1.5:

- The Base Production Rights of Hemet and San Jacinto each include 900 acre-feet per year…[t]hese…amounts…shall not be subject to reduction…as provided in Sections 3.2 to 3.2.2…

Section 3.2:

- …each Public Agency's Base Production Right shall be subject to …a 10% reduction…in the first full year after entry of…Judgment.

Section 3.2.2:

- Watermaster shall determine the required reductions in Adjusted Production Rights…to achieve Safe Yield…[t]he goal is to achieve Safe Yield over a six (6) year period assuming an annual overdraft of 10,000 acre feet…[I]n no event shall any reduction be more than 10% of the Adjusted Production Rights of the prior year.

Public Agencies Water Rights Based on Section 3 of The Judgment

	EMWD	LHMWD	City of Hemet	City of San Jacinto
Base Production Rights	10,869	11,063	6,320	4,031
Total Reductions in 6 years	3,566	3,629	1,778	1,027
Ultimate Adjusted Base Production Rights in 6 Years	7,303	7,434	4,542	3,004

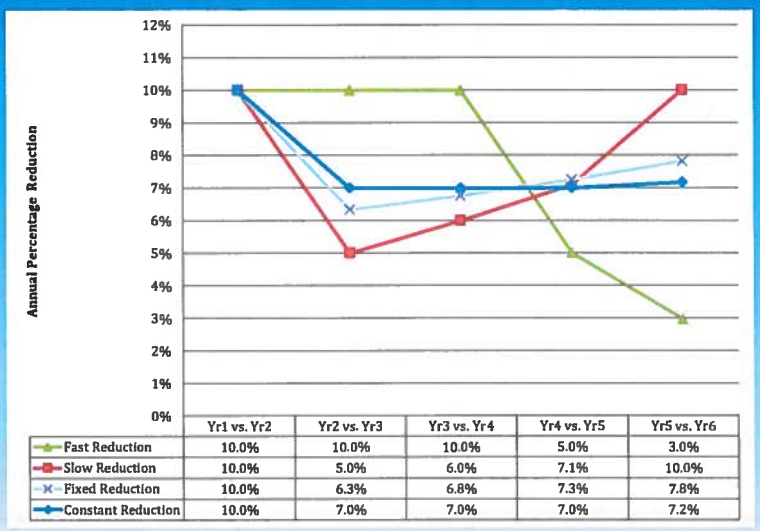
All values are in acre-feet per year (AFY)

Production Rights Adjustment Options

Achieve the 10,000 AF reduction goal by:

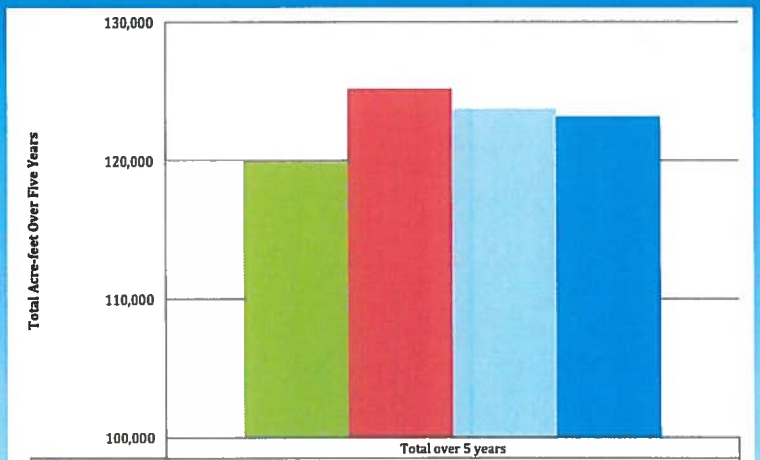
- **Maximizing reduction in the early years.**
  - Most beneficial option for the groundwater basins.
  - Most expensive for the public agencies.
- **Minimizing reductions in the early years.**
  - Least beneficial option for the groundwater basins.
  - Least expensive for the public agencies.
- **Fixed reduction volumes for all the years.**
  - Sets a constant volume as required annual reduction.
- **Constant reduction rates for all the years.**
  - Sets a constant reduction percentage.

Adjusted Base Production Rights Reduction Rate Options



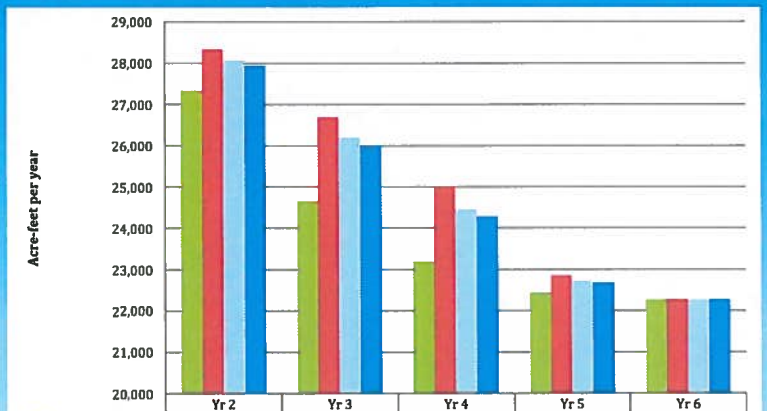
	Yr1 vs. Yr2	Yr2 vs. Yr3	Yr3 vs. Yr4	Yr4 vs. Yr5	Yr5 vs. Yr6
Fast Reduction	10.0%	10.0%	10.0%	5.0%	3.0%
Slow Reduction	10.0%	5.0%	6.0%	7.1%	10.0%
Fixed Reduction	10.0%	6.3%	6.8%	7.3%	7.8%
Constant Reduction	10.0%	7.0%	7.0%	7.0%	7.2%

Total Public Agencies Rights with Different Reduction Rates



	Total over 5 years
Fast Reduction	119,915
Slow Reduction	125,212
Fixed Reduction	123,767
Constant Reduction	123,200

Annual Adjusted Base Production Rights with Different Reduction Rates



	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6
Fast Reduction	27,332	24,658	23,197	22,445	22,283
Slow Reduction	28,351	26,702	25,008	22,869	22,283
Fixed Reduction	28,079	26,206	24,468	22,730	22,283
Constant Reduction	27,944	25,988	24,295	22,691	22,283

Recommendation

Set the reduction rates for the Public Agencies Adjusted Production Rights between May 2015 and April 2018 at 7% per year.

HEMET-SAN JACINTO WATERMASTER
CHANGE ORDER NO. 2
EMWD SUPPORT SERVICES TASK ORDER No. 6

CONTRACTOR: EMWD

PROJECT: 2014 Water Resources Monitoring Program Support

CHANGE ORDER COST: $13,651.24

FINANCIAL SOURCE: 2014 Administrative Assessment

BOARD AUTHORIZATION REQUIRED FOR THIS CHANGE: Yes(X) No ( )

Contractor is hereby directed to provide the extra work necessary to comply with this change order.

DESCRIPTION/JUSTIFICATION OF CHANGE:

There is a need to replace the following seven meters that are no longer functioning properly in the Hemet/San Jacinto Groundwater Management Area.

Rancho Casa Loma (Lauda) – Class B Participant:

1. Lauda 12 Well. Current meter is a 10" Flange installed by the owner prior to the implementation of the monitoring program in 2004. This meter was determined to be broken in September 2014, and no production has been measured since August 2014. Recommend replacing meter with a 10" flanged top-plate meter so that just the top-plate assembly can be replaced in the future for less cost.

DeAnza Ranch (Record) – Class A Participant:

1. Record Doe Canyon Well. Current meter is a 2" Precision installed on 8/1/2007. This meter was determined to be broken in September 2014, and no production has been measured since August 2014. There is concern regarding the accuracy of this type of meter. Recommend replacing meter with a more accurate 2" McCrometer flanged top-plate meter so that just the top-plate assembly can be replaced in the future for less cost.

2. Record Doe Canyon West Well. Current meter is a 2" Precision installed prior to the implementation of the monitoring program in 2004. This meter was determined to be broken in September 2014, no production has been measured since August 2014. There is concern regarding the accuracy of this type of meter. Recommend replacing meter with a more accurate 2" McCrometer flanged top-plate meter so that just the top-plate assembly can be replaced in the future for less cost.

Oostdam Dairy – Class A Participant:

1. Oostdam Dairy South Well. Current meter is a 3" flanged top-plate installed on 1/1/2007. This meter was determined to be broken in September 2014, and no production has been measured since January 2014. Recommend replacing the top-plate assembly.

Marvo Holsteins II (Sybrandy) – Class A Participant:

1. Marvo Holsteins II Well. Current meter is a 6" Bolt-on Saddle installed on 7/25/2006. This meter was determined to be broken in September 2014, and no production has been measured since July 2014. This type of meter is considered to be a less accurate meter based on manufacturers published data. Recommend replacing meter with a more accurate 6" flanged top-plate meter so that just the top-plate assembly can be replaced in the future for less cost.

Hollandia Farms – Non-participant:

1. Hollandia Farms North Well. Current meter is a 4" Bolt-on Saddle installed on 3/12/2012. This meter was determined to be broken in September 2014, and no production has been measured since July 2014. This type of meter is considered to be a less accurate meter based on manufacturers published data. Recommend replacing meter with a more accurate 4" flanged top-plate meter so that just the top-plate assembly can be replaced in the future for less cost.

Agri Empire – Non-participant:

1. Agri Park Hill Well. Current meter is a 6" flanged top-plate installed on 10/2/2012. This meter was determined to be broken in September 2014, and no production has been measured since January 2014. Recommend replacing the top-plate assembly.

EMWD recommends purchase of the following meters to replace those described above:

- 2 – 2" Flanged Tube Top Plate Meters.
- 1 – 4" Flanged Tube Top Plate Meter.
- 1 – 6" Flanged Tube Top Plate Meter with Over-run Bearing Assembly.
- 1 – 10" Flanged Tube Top Plate Meter with Over-run Bearing Assembly.
- 1 – 3" Top Plate Assembly.
- 1 – 6" Top Plate Assembly with Over-run Bearing Assembly.

Manufacturer's cost is $8,612.22 for the seven meters identified above. Also, materials from the EMWD Warehouse in the amount of $881.02, and labor from EMWD staff in the amount of $4,158, will be required to install the seven meters identified above. The total cost equals $13,651.24 for these meter replacements, materials, and labor.

CHANGE IN CONTRACT TIME: None

CHANGE IN TASK ORDER PRICE:

Original Task Order Amount:	$130,980.00
Change Order #1 Amount:	$ 4,333.80
Amended Contract Total:	$135,313.80
Change Order #2 Amount:	$ 13,651.24
Amended Contract Total:	$148,965.04

ACCEPTANCE:
Contractor accepts the terms and conditions stated above as full and final statement of any and all claims arising from or related to this Change Order. Contractor agrees to perform the above described work in accordance with terms and in compliance with applicable sections of the Contract Specified. This Change Order is hereby agreed to, accepted and approved, all in accordance with the General Provisions of the Contract Specified.

Hemet-San Jacinto Watermaster

By: _____ Date: _____
Frank Gorman
Chairman

EASTERN MUNICIPAL WATER DISTRICT

By: _____ Date: _____
Paul D. Jones II
General Manager

McCALL'S METER SALES & SERVICE

1498 MESA VIEW STREET
HEMET, CA 92543
PH: 951-654-3799

QUOTATION

DATE	ESTIMATE #
9/24/2014	17722E

CUSTOMER
EASTERN MUNICIPAL WATER DISTRICT P.O. BOX 8300 PERRIS, CA 92572 ATTN: STEVE SHOCKEY

TERMS	REP	FOB
Net 30	DRD	ORIGIN

QTY	ITEM	DESCRIPTION	COST	TOTAL
2	MW502	2" FLANGED TUBE METER, 150 PSI	983.25	1,966.50T
1	L0232-10	3" TOP PLATE ASSEMBLY	663.00	663.00T
1	MW504	4" FLANGED TUBE METER, 150 PSI	1,167.75	1,167.75T
1	MG904	4" GBE MAIN LINE TUBE METER, 150 PSI	991.50	991.50T
1	L0234-10	6" TOP PLATE ASSEMBLY, 150 PSI	753.75	753.75T
1	OT110	OVER-RUN BEARING ASSEMBLY, 4" - 16"	40.50	40.50T
1	MW510	10" FLANGED TUBE METER, 150 PSI	2,073.00	2,073.00T
1	OT110	OVER-RUN BEARING ASSEMBLY, 4" - 16"	40.50	40.50T
		SUBTOTAL		7,696.50
1	FRT	FREIGHT APPROX.	300.00	300.00
		TAX	615.72	615.72

THANK YOU FOR THE INQUIRY... DOUG

TOTAL $8,612.22

All Returned Goods Are Subject To 25% Restocking Fee

SIGNATURE _____

Warehouse Item	No.	Units	Cost/Unit	Total Cost
4" Pipe	20	ft	$9.38	$187.60
4" Vic Weld Nipple	2	ea	$117.65	$235.30
4" Vic Coupling	2	ea	$44.00	$88.00
4" Flange Weld On	2	ea	$13.00	$26.00
4" Gasket	2	ea	$1.38	$2.76
4" Bolts & Nuts	16	ea	$0.75	$12.00
10" Flange Weld On	2	ea	$39.00	$78.00
10" Gasket	2	ea	$4.68	$9.36
10" Nuts & Bolts	24	ea	$1.75	$42.00
2" Misc Meter Parts	1	ea	$200.00	$200.00
Total Cost				$881.02

Labor	No.	Units	Cost/Unit	Total Cost
Demo And Install New Meter	5	4 hrs for 2	$792.00	$3,960.00
Swap Top-Plate Assembly	2	1 hr	$99.00	$198.00
Total Cost				$4,158.00

EXHIBIT A
EASTERN MUNICIPAL WATER DISTRICT
FEE SCHEDULE 2014-15
(This fee schedule is subject to annual revisions due to labor adjustments.)

	Hourly Rate
MANAGERIAL	
Deputy General Manager (02002-DGM)	$ 291.00
Assistant General Manager (02005-AGM)	271.00
Director (02030-97)	176.00
ENGINEERS/TECHNICAL	
Senior Civil Engineer (22007-96)	164.00
Senior Engineering Geologist (28011-96)	164.00
Civil Engineer I/II (22027-94)	142.00
Water Res Planning Manager (28007-93)	132.00
Civil Engineering Associate I/II (22010-91)	114.00
Water Resources Supervisor (28010-90)	106.00
Water Resources Technician III (28018-89)	99.00
Sr. Engineering Technician (22013-88)	92.00
FINANCIAL	
Accounting Supervisor (06003-91)	114.00
Senior Accountant (06004-89)	99.00
Accountant (06005-88)	92.00
Accounting Operations Spvr (06007-86)	80.00
Accounting Technician I/II (06009-83)	69.00
ADMINISTRATIVE	
Executive Assistant (18005-86)	80.00
Administrative Assistant I/II (18006-84)	72.00
DIRECT EXPENSES	
Direct Costs	at cost

Legend: Position Title (Job Code-Salary Range)
Hourly Rate = (Annual Salary[max range]) * (2.0 fully burdened) / (1,700 hrs/yr)

P. Jones signed 10/14/14. Forwarded to
J. Kightlinger 10/15/14 via USPS for final execution.
(T. Martinez 10/14/14)

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

October 7, 2014

Mr. Paul D. Jones, II, P. E.
General Manager
Eastern Municipal Water District
P. O. Box 8300
Perris, CA 92572-8300

Dear Mr. Jones:

Soboba Settlement Water Delivery Agreement
Operating Plan for In-lieu Delivery of Soboba Settlement Water

This letter agreement amends and restates the letter agreement dated June 5, 2014 between The Metropolitan Water District of Southern California (Metropolitan) and Eastern Municipal Water District (Eastern) regarding the purchase and in-lieu delivery of Soboba Settlement water for groundwater recharge. The purpose of this amended and restated letter agreement is to establish a new operating plan and baseline for the in-lieu deliveries that simplifies the methodology for calculating and certifying in-lieu deliveries. These deliveries will help fulfill delivery obligations specified in the *Soboba Band of Luiseño Indians Settlement Agreement* (Soboba Agreement) and *Contract for Delivery of Water Pursuant to Settlement* (Delivery Agreement) to which Metropolitan and Eastern are parties.

Pursuant to the Soboba Agreement and the Delivery Agreement, Metropolitan shall use its best efforts to deliver an average of 7,500 acre-feet (AF) per year of water to Eastern for the direct recharge of the groundwater basin. Metropolitan must deliver this water at the EM-14 service connection, which typically conveys untreated State Water Project (SWP) water to Eastern via the Lakeview Pipeline. However, this year's shortage of SWP water has required Metropolitan to minimize deliveries of SWP water for recharge purposes.

While the intent of the Soboba Agreement and Delivery Agreement is to deliver Soboba Settlement Water for groundwater spreading, Metropolitan can accommodate Eastern's request for temporary in-lieu water through October 10, 2014. Eastern has developed a methodology for quantifying in-lieu deliveries based on operations in their East Valley area, and will certify in-lieu deliveries based on this methodology (enclosed).

700 N. Alameda Street, Los Angeles, California 90012 • Mailing Address: Box 54153, Los Angeles, California 90054-0153 • Telephone (213) 217-6000

Although not expressly disallowed by the Delivery Agreement, it should be noted that this in-lieu operation is not intended to set a precedent for future Soboba Settlement Water deliveries. Future in-lieu deliveries will be contingent on an operating plan acceptable to Metropolitan and Eastern. Metropolitan will work with Eastern to prepare an imported water delivery schedule for Calendar Year 2015.

Nothing in this letter agreement shall be construed to waive, amend, or terminate any right or obligation created by the Delivery Agreement and the Soboba Agreement except as specifically set forth and for the time periods provided herein. If you agree with the terms described above, please acknowledge your agreement by signing and returning a copy of this letter.

Metropolitan is looking forward to our agencies' continued cooperation in meeting obligations under the Soboba Agreement.

Very truly yours,

Jeffrey Kightlinger
General Manager

CL:dp
O:\opsexec\contraadm\Soboba Agreement\Soboba In-lieu 2014 final III.doc

AGREED:

EASTERN MUNICIPAL WATER DISTRICT

By: _____
Paul D. Jones, II, P. E., General Manager

Date: 10·14·14

2014 IN-LIEU PLAN

	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
DEMAND [A]	1390.6	1882.5	1673.4	1355.4				6301.9
HWFP PRODUCTION [B]	827.4	833.8	898.6	879.3				3439.1
WELL PRODUCTION [C]*	290.6	553.6	505.3	408.0				1757.5
Flow from Simpson to EV [D]*	272.6	495.1	269.5	68.1				1105.3
Flow from EV to West via Simpson [E]*	0.0	0.0	0.0	0.0				0.0
Flow from Homeland to EV [F]*	0.0	0.0	0.0	0.0				0.0
Flow from EV to West via Homeland [G]*	0.0	0.0	0.0	0.0				0.0
QUALIFYING IN-LIEU [H]	827.4	833.8	898.6	879.3	0.0	0.0	0.0	3439.1

Notes:

[A] = [B] + [C] + [D] + [F] - [E] - [G]

[H] = [B]

*** Water passing through these flow meters does not qualify as "in-lieu" water.**

The numbers provided in the table are for sample purposes only.

Groundwater Model Update Status Report

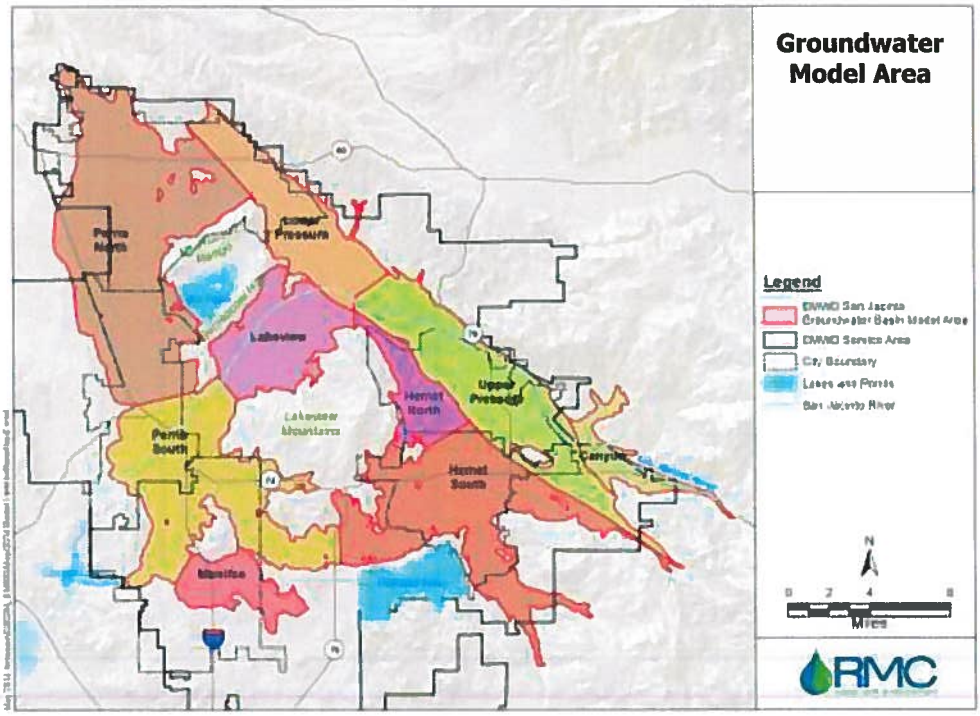
Hemet - San Jacinto Watermaster Board Meeting

October 27, 2014

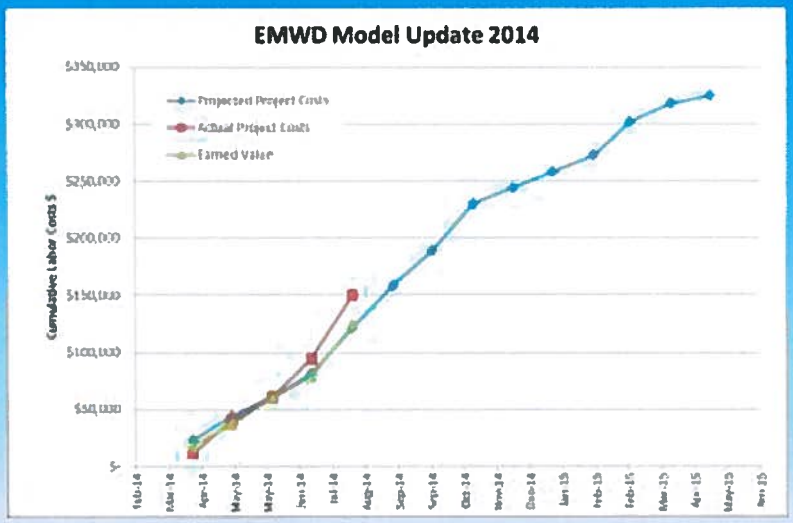
Presentation Outline

- Administrative Activities
  - Project Budget (prior to revisions)
  - Revised Schedule & Scope of Work
- Advisory Panel Activities
- Selected Information Used/Created by The Model
  - Type of data used
    - Lithological data
    - Groundwater Production
  - Historic water level changes in Canyon & Upper Pressure Basins
- What is Next
  - Calibration Process
  - Water Budget Overview

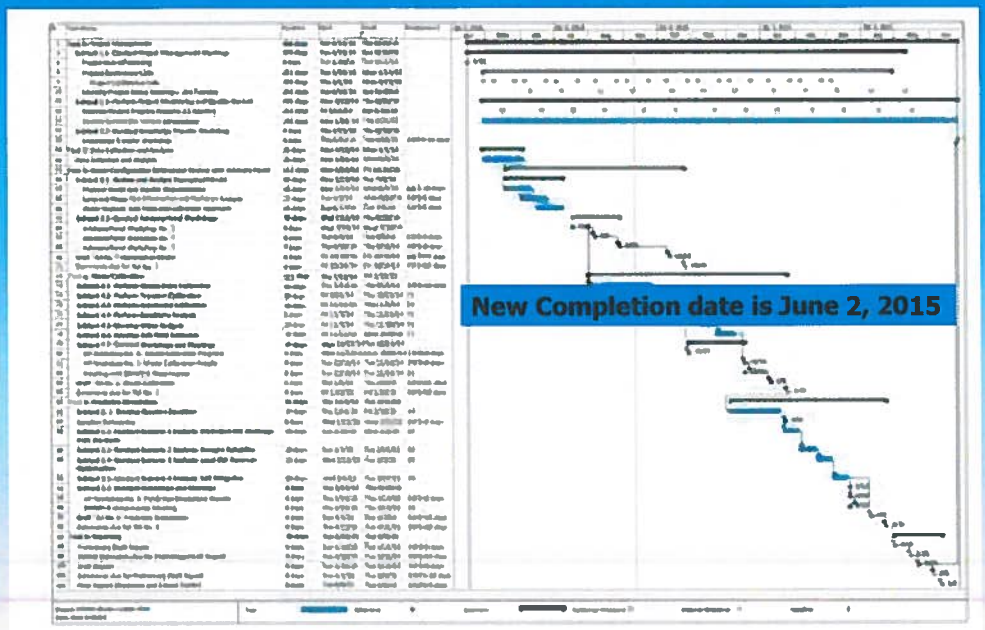
Recognition: Significant amount of information used in this presentation was developed by RMC (project consultants) as part of the Advisory Panel Workshop presentations.



PROJECT BUDGET
(AS OF AUGUST 2014)



Revised Schedule



Revised Scope of Work

- Update Canyon Basin Conceptual Geology and Implement in Numerical Model
- Implement the Canyon Updated Hydrogeology in Numerical Model
- Implement 4-Layer Geology in Numerical Model

Cost of above scope changes	$ 29,335
Initial EMWD contract amount	$329,867
Revised EMWD contract amount	$359,202

Presentation Outline

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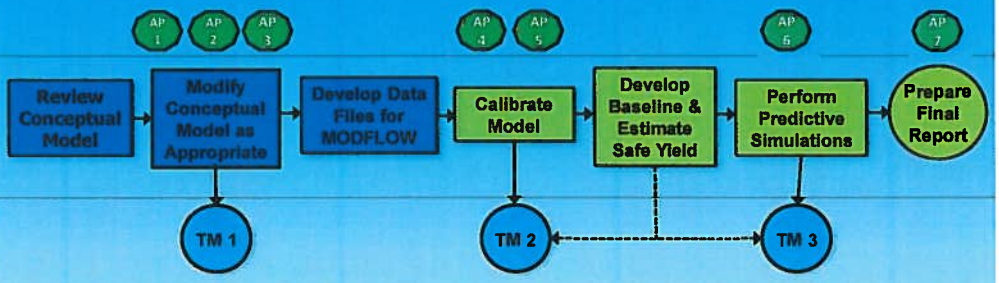
Recognition: Significant amount of information used in this presentation was developed by RMC (project consultants) as part of the Advisory Panel Workshop presentations.

Advisory Panel Members and Workshop Schedule

- Mr. Aleksander Vdovichenko (Department of Water Resources)
- Dr. Cindy Li (Regional Water Quality Control Board)
- Mr. Ralph Phraner (Local Groundwater Expert)
- Dr. Tracy Nishikawa (U.S. Geological Survey)

Workshop	Purpose	Approx. Date
1	Review proposed conceptual model	July 16, 2014
2	Review proposed landuse and water recharge components of the model	August 5, 2014
3	Review proposed approach for water balance, safe yield and model calibration	August 28, 2014
4	Review model calibration process	December 2014
5	Review model calibration results	December 2014/January 2015
6	Review simulation scenarios results	First Quarter 2015
7	Comment/review of Draft Report (Optional)	TBD

PROJECT TASKS



Apr – Aug 2014 | Aug – Jan 2015 | Dec – April 2015 | Apr-June 2015

AP = Advisory Panel
TM = Technical Memorandum

Presentation Outline

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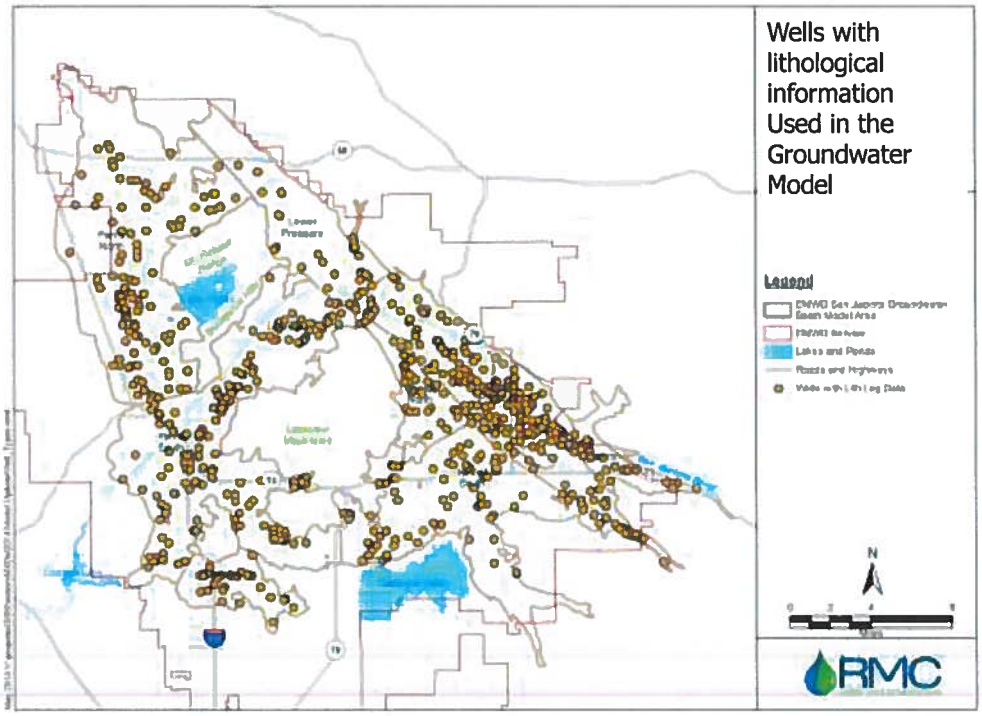
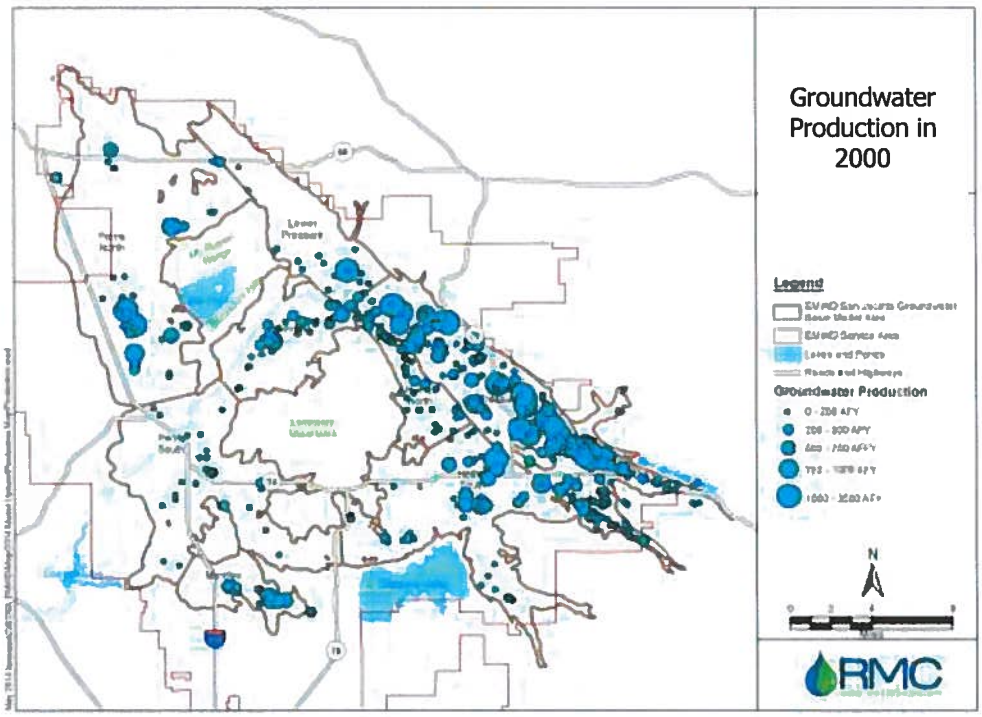
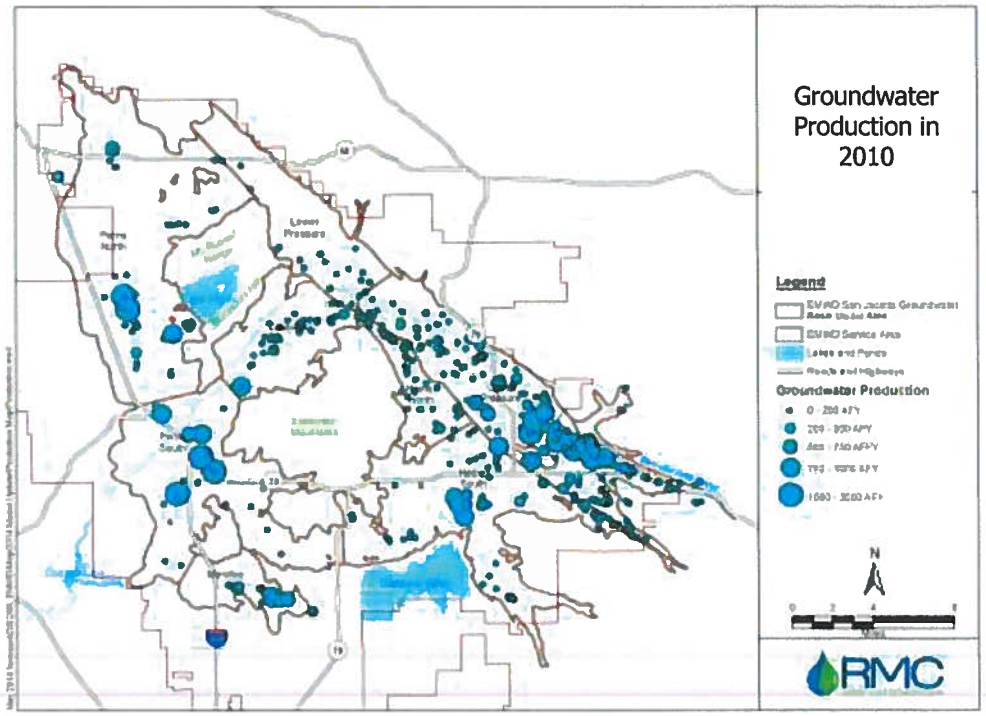
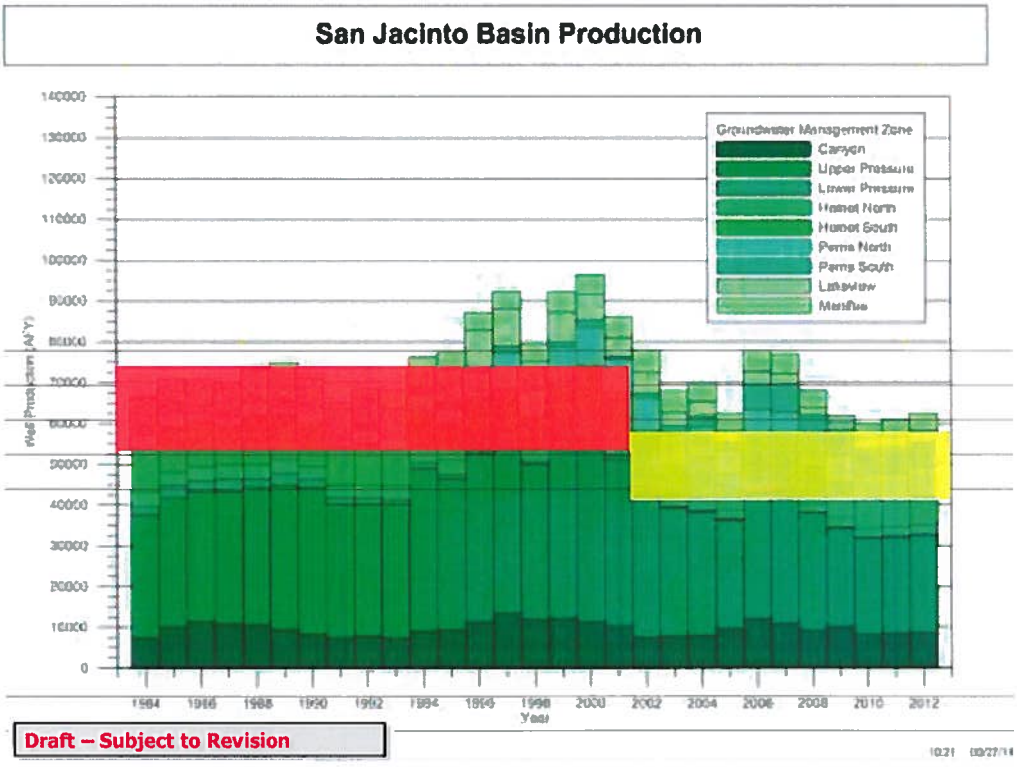
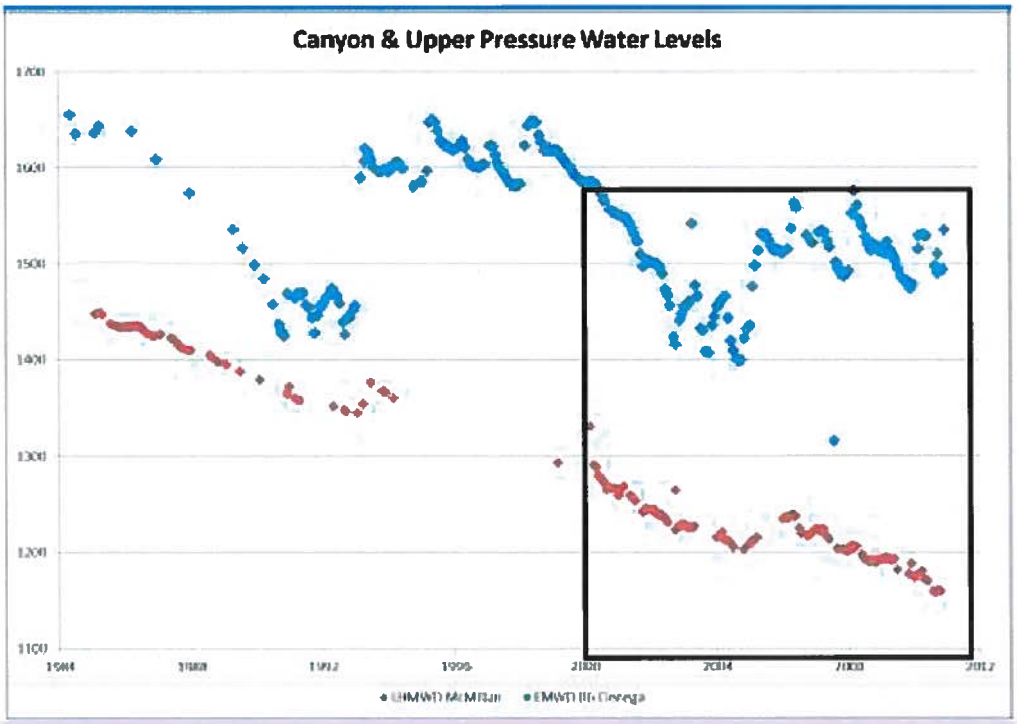

Wells with lithological information Used in the Groundwater Model
Legend
RMC


Groundwater Production in 2000
Legend
Groundwater Production
RMC


Groundwater Production in 2010
Legend
Groundwater Production
N
RMC


San Jacinto Basin Production
Groundwater Management Zone
Canyon
Upper Pressure
Lower Pressure
Hemet North
Hemet South
Perris North
Perris South
Lakeview
Menifee
Year
Draft – Subject to Revision



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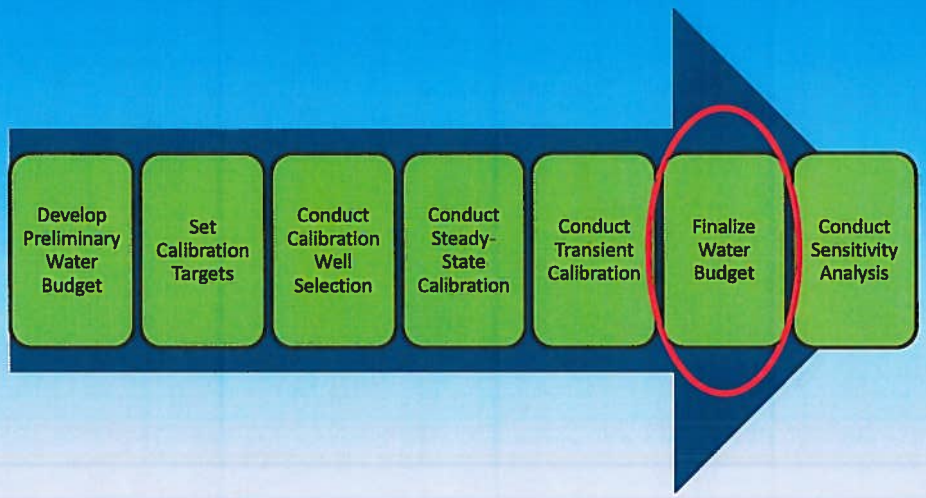
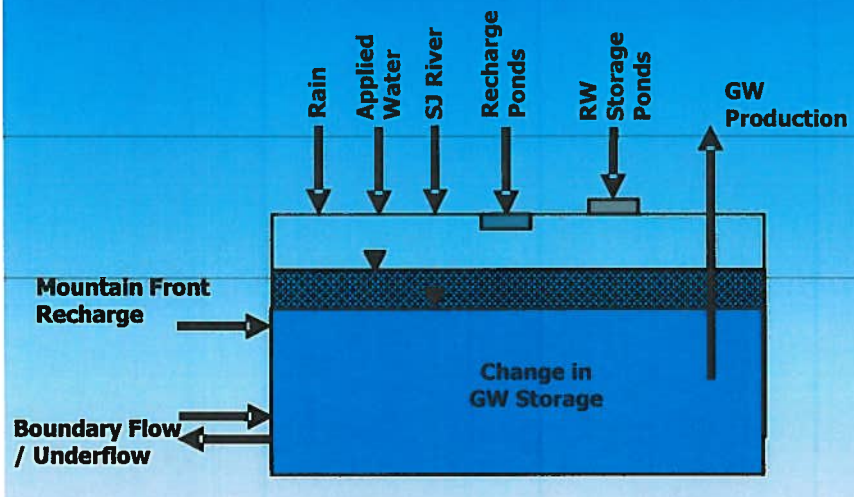
Groundwater Model Calibration Process

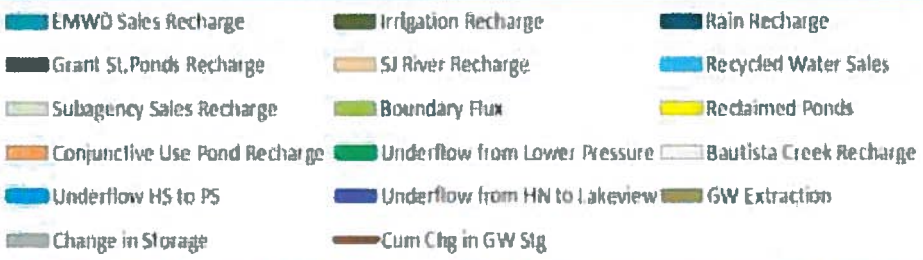


Groundwater Budget Components



Annual GW budgets to be developed for 1984-2012 (29 years)

Hemet/San Jacinto Management Area Groundwater Budget (2002 Model)



Model Year	Total inflow (AF)	Total Outflow (AF)	Change in Storage (AF)
1984-1999 Avg.	43,823	60,240	-16,417

Questions/Comments?

EASTERN MUNICIPAL WATER DISTRICT

SINCE 1950

EASTERN MUNICIPAL WATER DISTRICT

Review of Final Expenditures on the Phase 1 Facilities Construction Cost Agreement

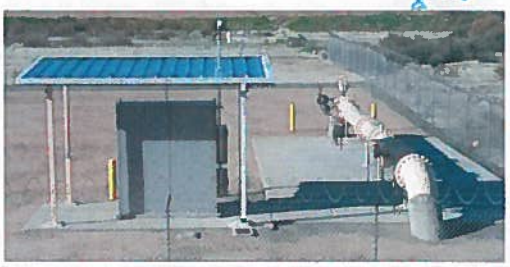
Brian Powell, P.E.
Director of Planning
October 27, 2014

Presentation Overview

- Phase 1 Agreement Requirements
- Phase 1 Facilities - Construction
- Phase 1 Facilities - Environmental
- Phase 1 Facilities - Budget Summary
- Construction Costs Summary
- Environmental Mitigation Costs Summary
- Phase 1 Facilities Status Summary
- Environmental Mitigation Status Summary

Phase 1 Agreement Requirements

- The Agreement shall remain in effect for the duration of the useful life of the Phase 1 facilities, currently estimated to be thirty (30) years, and continue in full force and in effect while the facilities are maintained



- EMWD assumed responsibility for the construction of the additional facilities through the issuance and sale of bonds

Phase 1 Agreement Requirements

- EMWD to increase capacity in the facilities to accommodate a flow rate of 42 cfs (30,000 afy) for recharge of the Soboba Settlement water delivered by MWD

- The Agreement includes EMWD's Grant Street Ponds and raw water pipeline component of the recharge project. These facilities are available for use by the Watermaster

Phase 1 Agreement Requirements

- Participating Agencies will pay their prorata share of the water purchases from MWD as Required by the Soboba Settlement Agreement
- The Watermaster will invoice each Party for its prorata share of operational, maintenance, repair and replacement costs
- EMWD shall maintain a separate account for the portions of payments received that are attributable to repair and replacement of the facilities

Phase 1 Facilities - Construction

The existing EMWD facilities, as expanded and increased in capacity to accommodate a flow rate of 42 cfs, and the recharge and recovery facilities to be constructed for recharge of the MWD water, are known as the "Phase 1 Facilities"; the cost of the expansions, additions and construction is currently estimated to be $21,504,000.00

- Budget for Construction of Phase 1 Facilities = $21,504,000

Source: Phase 1 Facilities Agreement, Page 6, Item 6

Phase 1 Facilities - Environmental

In addition to these capital costs, and additional $3,302,000.00 will be required to fund environmental related activities to obtain the Clean Water Act's Section 404 Permit from the Army Corps of Engineers, necessary to construct and operate the Phase 1 Facilities, including the recharge ponds. Specifically, $2,084,000.00 will be required to create an endowment fund to be held by the Riverside County Habitat Conservation Authority; and $1,218,000.00 to fund the environmental mitigation costs beyond the endowment held by the Riverside County Habitat Conservation Authority.

- Budget for Environmental Mitigation = $3,302,000

Source: Phase 1 Facilities Agreement, Page 6-7, Item 6

Phase 1 Facilities - Budget Summary

Budget	
Construction Costs	$ 21,504,000
Environmental	$ 3,302,000
Total Project Budget	$ 24,806,000
Grants	
Prop 50-Feasibility Study	$ 200,000
Prop 13-Facilities Construction	$ 5,000,000
Total Grant Funds	$ 5,200,000
Net Budget after Grants	**$ 19,606,000**

Construction Costs Summary

Planning, Design and Construction	Estimated Cost	Actual Cost Before Grant	Grants Received	Actual Cost After Grant	Variance (under)/over
Feasibility, CEQA/NEPA, Land Purchase and Permits Subtotal	$2,470,000	$2,469,421	$200,000	$2,269,421	($579)
Facilities Design Subtotal	$3,054,000	$3,568,995	None	$3,568,995	$514,995
Facilities Construction Subtotal	$15,980,000	$15,085,781	$5,000,000	$10,085,781	($894,219)
Facilities Total	**$21,504,000**	**$21,124,197**	**$5,200,000**	**$15,924,197**	**($379,803)**

Final Construction Costs are $379,803 Under Budget

Environmental Mitigation Costs Summary

Environmental	Estimated Cost	Actual Cost	Ongoing Cost Est.	Est. Cost to Complete	Variance
Endowment with Riverside County Conservation Authority, RCA Subtotal	$2,084,000	$2,084,378	$0	$2,084,378	$378
Habitat Mitigation Per 2011 BO Subtotal	$1,218,000	$1,070,316	$0	$1,070,316	($147,684)
Ongoing Environmental Subtotal	N/A	$137,710	$318,606	$456,316	$456,316
Environmental Total to Date	**$3,302,000**	**$3,292,404**	**$318,606**	**$3,611,010**	**$309,010**

Environmental Costs To Date are $309,010 Over Budget with Additional Work Remaining

Phase 1 Facilities Status Summary

- Construction of All Facilities is Complete
- Construction was Completed Slightly Under Budget
- Environmental Activities to Date are Slightly Over Budget
- Environmental Activities are Ongoing
- Environmental Obligations Remain Active for at least 5 years
- Net Project Costs are currently $ 70,793 under budget

Environmental Mitigation Status Summary

- EMWD has Two Ongoing Contracts related to Environmental Mitigation for the IRRP Program

Endangered San Bernardino Kangaroo Rat
(Dipodomys Merriami Parvus)

- The Zoological Society of San Diego was hired to Translocate the endangered SBKR from the Recharge Site to the Restoration Area
- Dudek/HRS was hired to perform a Five (5) Year Monitoring and Mitigation effort to Restore SBKR Habitat in two locations

SBKR Translocation

Status of Zoological Society's Work

- Translocated 65 SBKR in July 2012
- Monitoring of the SBKR has been ongoing since
- Submitted a Draft Annual Report
  - Covers monitoring period Jan 2013-Dec 2013
- Results of the Translocation are unclear
  - Burrow count data indicated that SBKR are thriving
  - Trapping results suggest a low number persist at the site
- Likely that SBKR are there but were Not Captured
- Recommendations provided to Improve Future Trapping
- Work is Ongoing

Status of Dudek/HRS Work

- Performing Monitoring & Maintenance of Habitat
  - Effort: Initiated in February 2014
  - Monitoring: 4 to 8 visits per year
  - Maintenance: Removal of Invasive Species & Planting Native Species
  - Reporting: Annual Reports Required
- Current Status
  - Draft Annual Report is under review
  - Results indicate that Habitat is meeting the Year 3 Criteria, which is very good
  - Work is Ongoing

EASTERN MUNICIPAL WATER DISTRICT
SINCE 1950

EASTERN MUNICIPAL WATER DISTRICT

Contact Information

Brian Powell, P.E.
Director of Planning
(951) 928-3777 ext. 4278
powellb@emwd.org

AGENDA

HEMET – SAN JACINTO WATERMASTER
BOARD OF DIRECTORS

December 22, 2014
4:00 pm
2270 Trumble Road, Perris, CA 92750

CALL TO ORDER

PLEDGE OF ALLEGIANCE

ROLL CALL

I. PUBLIC COMMENTS

Any person may address the Board on any subject within the Watermaster's jurisdiction which is not on the agenda. However, any non-agenda matter that requires action will be referred to staff for a report and action at a subsequent Board meeting. Any person may also address the Board on any agenda matter at the time that matter is discussed, prior to Board action.

II. ADDITIONS/DELETIONS TO THE AGENDA

III. REPORTS

The following agenda items are reports. They are placed on the agenda to provide information to the Board and public. There is no action called for in these items.

A. Board Member Comments/Questions/Reports

B. Advisor Report

C. Legal Counsel Report

D. Treasurer Report

IV. CONSENT CALENDAR

A. Approval of Minutes – October 27, 2014 Regular Board Meeting.
Recommendation: Adopt a motion to approve item A on the Consent Calendar.

Consent Calendar items are expected to be routine and non-controversial and are to be acted upon by the Board at one time without discussion. If any Board member, staff member, or interested person requests that an item be removed from the Consent Calendar, it will be removed from the Consent Calendar for separate action.

V. ACTION ITEMS

The following items call for discussion and possible action by the Board. These items are placed on the Agenda so that the Board may discuss and possibly take action on the items if the Board desires.

A. 2015 Annual Budget - 2015 Budget presentation and schedule for Administrative and Replenishment Assessments Invoicing.
Recommendation: Adopt a motion to Approve Proposed 2015 Annual Budget and Authorize Advisor to initiate proposed activities and invoice participating agencies in accordance with the proposed payment schedule.

B. 2015 Monitoring Program Options – Review of different options for 2015 Monitoring Program.
Recommendation: Adopt a motion authorizing Advisor to sign necessary contracts to implement 2015 Monitoring Program.

C. Financial Audit Contract - Advisor is requesting for Board authorization to select a financial auditor that is familiar with Watermaster operations.
Recommendation: Authorize a three year contract with Hosaka, Rotherham & Company to conduct annual financial audits for 2014-2016 at a not-to-exceed cost of $4,500 per year.

D. Consideration to Adopt Resolution 1.2 Changing The Regular Meetings to Four Per Year and Permitting Temporary Changes - Summary of the Resolution 1.2 and proposed changes.
Recommendation: Adopt a motion to Approve Resolution 1.2.

VI. INFORMATIONAL ITEMS/CORRESPONDENCE

A. 2014 Database Management Project – Demonstration of the database management system functions.

B. Groundwater Model Update – Status report by EMWD on the current status of the groundwater model update project.

C. Monitoring Program Enhancement – Review of recently approved financial assistance from Department of Water Resources to enhance existing groundwater monitoring program.

D. Recharge Ponds Status – Report by EMWD on physical conditions of the recharge ponds.

VII. CLOSED SESSION - NONE

VIII. ADJOURNMENT

Next Regular Board of Directors Meeting
February 23, 2015 at 4:00 pm. at:
Eastern Municipal Water District Board Room

2270 Trumble Road, Perris, CA 92750

Upon request, this agenda will be made available in appropriate alternative formats to persons with disabilities, as required by Section 202 of the Americans With Disabilities Act of 1990. Any person with a disability who requires a modification or accommodation in order to participate in a meeting should direct such a request to the Watermaster Executive Assistant at 714-707-4787, at least 48 hours before the meeting, if possible.

Pursuant to Government Code Section 54957.5, any writing that (a) is a public record; (b) relates to an agenda item for an open session of a regular meeting of the Watermaster Board of Directors; and (c) is distributed less than 72 hours prior to that meeting, will be made available for public inspection at the time the writing is distributed to the Board of Directors. Any such writing will be available for public inspection at Watermaster's office located at 2270 Trumble Road, Perris, CA 92750.

Watermaster Advisor Report
October 27, 2014

EMWD Related Coordination/Activities:

- On-going coordination with EMWD for Watermaster related tasks.
- Most of the coordination activities with EMWD have been related to the Groundwater Model Development project, review of different potential projects for 2015, and database related issues.

Budget/Accounting Related Activities:

- Have contacted two firms regarding 2014 financial audit process. For 2014, it is recommended to solicit services from a firm that is more familiar with Watermaster operations. More information is provided under Item V-C.
- All Public Agencies have paid for 25% of the 2014 Administrative Assessments. The second set of invoices for 50% of the 2014 Assessments were mailed in mid-October. City of Hemet, LHMWD and EMWD have already paid their second invoice.
- The Treasurer Report is provided under Item III-D.

Board & TAC Coordination/Activities:

- Technical Advisory Committee (TAC) met on December 8, 2014. Major discussion items were review of different agenda items for Watermaster's December 22, 2014 meeting. The draft 2015 budget was discussed extensively, and TAC's recommendation is included under Item V-A. TAC requested some of the budget items be determined directly at the Board meeting.

Special Projects:

- EMWD and RMC (project consultant for the Groundwater modelling project) have conducted their fourth Advisory Panel meeting for this project. TAC representatives from San Jacinto, and Private Pumpers attended this meeting. RMC has developed preliminary water budget estimates. The final water budget estimates will help Watermaster to refine the current yield estimates, and determine the potential changes to the future Adjusted Base Production Rights. The next Advisory Panel meeting is expected to be scheduled in January/February of 2015. EMWD will provide a Groundwater Model Update status report under Item VI-B
- RMC has drafted Technical Memorandum 1 (TM 1) for the Groundwater Modelling work, which has already been reviewed by Advisor, and comments were provided to RMC and EMWD. The final TM 1 will be included as an appendix to the Final Report.
- The 2014 Database Management project with Spatial Wave has been completed, and a demonstration of the system will be provided under Item VI-A.

- Watermaster has been successful in acquiring assistance from California Department of Water Resources for improving the current monitoring program. The value of this assistance is over $96,000. More information regarding this activity will be provided under Item VI-C.

Municipal/Private Pumpers Coordination/Activity:

- Have had couple of communications with LHMWD, Cities of Hemet and San Jacinto regarding transfer of Carry-over Credits between Public Agencies.
- Had a communication with Mr. Eric Boersma, a Class B participant, regarding potential of monitoring groundwater production at a non-participating property in the management area.

Outreach/Grant Activity:

- Attended the Association of California Water Agencies (ACWA) Groundwater Committee meeting on December 2, 2014. The Sustainable Groundwater Management Act (SGMA) was the main discussion item with over 150 representatives from different water agencies and Watermasters attending this meeting. SGMA requires significant changes to the current way groundwater resources are managed in the State. There are many activities at the State level regarding this Act, including:
    - Development of the SGMA implementation structure and strategic plan by DWR;
    - Development of a Storage Policy for future storage needs by ACWA;
    - Formation of a SGMA Implementation Subcommittee by ACWA to assist DWR on the SGMA implementation; and
    - Development of a groundwater monitoring guideline by ACWA.

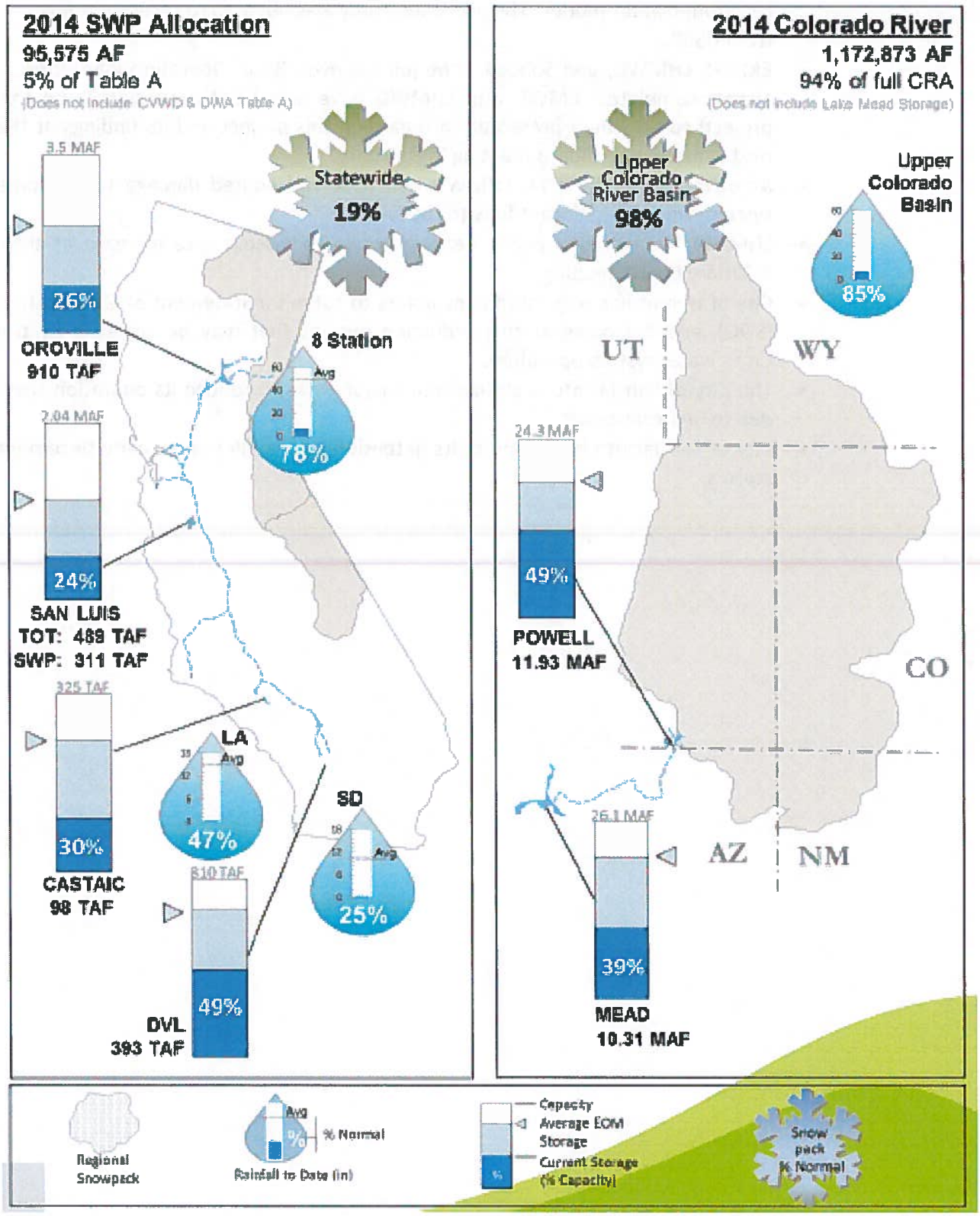
  Generally speaking, Adjudicated Basins (including Hemet-San Jacinto Stipulated Judgment) are exempt from most of the requirements under SGMA, but there are still components of the SGMA that may impact Watermasters.

Miscellaneous Activity:

- On December 1, 2014 DWR set the State Water Project delivery allocations at 10 percent. In comparison, December 2013 allocations were set at zero percent, which was increased to 5 percent in April of 2013. A summary of water resources conditions prepared as part of the MWD General Manager's November 2014 Report to MWD Board is attached.
- The first major storm of the season arrived in the management area on the evening of December 3, 2014. Management area received over 4" of rain over a 3-4 hour period.
- In June, I reported that U.S. Bureau of Reclamation (USBR) may provide funding to Dr. Shamir for a study to assess natural variability of flow and its linkage with

the groundwater model. The proposed study was not able to secure funding from USBR.

- EMWD, LHMWD, and Soboba Tribe joint Canyon Basin Operation Plan effort is almost complete. EMWD and LHMWD have asked RMC (consultant on this project) to provide a presentation regarding this project and its findings at the next Watermaster Board meeting in February.
- As of December 8, 2014, LHMWD had observed limited damage to its flume system, with no significant flow to the lake.
- LHMWD has issued a public hearing notice to discuss rate increase at their February Board meeting.
- City of Hemet has requested consultants to submit a Statement of Qualification (SOQ), and is looking at cost reduction options that may be achieved by the City's water system operation.
- The City of San Jacinto is closing four major parks to reduce its operation costs due to financial issues.
- City of San Jacinto had many of its detention basins filled after early December storms.


2014 SWP Allocation
95,575 AF
5% of Table A
(Does not include CVWD & DWA Table A)
Statewide
19%
3.5 MAF
26%
OROVILLE
910 TAF
8 Station
Avg
78%
2.04 MAF
24%
SAN LUIS
TOT: 489 TAF
SWP: 311 TAF
325 TAF
30%
CASTAIC
98 TAF
LA
Avg
47%
SD
Avg
25%
810 TAF
49%
DVL
393 TAF
2014 Colorado River
1,172,873 AF
94% of full CRA
(Does not include Lake Mead Storage)
Upper Colorado River Basin
98%
Upper Colorado Basin
85%
UT
WY
24.3 MAF
49%
POWELL
11.93 MAF
CO
26.1 MAF
AZ
NM
39%
MEAD
10.31 MAF
Regional Snowpack
Avg
%
% Normal
Rainfall to Date (in)
Capacity
Average EOM Storage
Current Storage (% Capacity)
Snow pack % Normal

Hemet-San Jacinto
Watermaster
c/o EMWD • 2270 Trumble Road, Perris, CA 92570 • Telephone: (951) 928-3777 ext. 4338

Watermaster Board

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Bruce Scott

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Scott Miller
Steven A. Pastor
Randy A. Record
Larry Smith

Advisor
Behrooz Mortazavi

Legal Counsel
Lagerlof, Senecal, Gosney & Kruse

To: Hemet-San Jacinto Watermaster Board of Directors

From: Board Treasurer

Date: December 22, 2014

The Board Treasurer has reviewed and approved the following account information:

Total Cash and Investments as of September 30, 2014		***$789,043.57***
Revenues for October 1 – November 30, 2014:		
Payments for October 1 – November 30, 2014:		
LSG & K (Legal Counsel 10/02/2014 & 11/10/2014)	$ 3,255.00	
Water Resources Engineers 10/29/2014	$ 18,281.39	
EMWD 10/29/2014	$ 260.00	
Bell Bookkeeping 10/2/2014	$ 910.00	
Total Payments	$ 22,706.39	
Cash Flow for October 1 – November 30, 2014		***$22,706.39***
Other Income/Expense for June 1 – July 31, 2014:		
Savings Interest	$ 174.10	
Other Expense/Fees	$ 0.00	
	$ 174.10	
Total Cash and Investments as of Nov. 30, 2014		***$766,511.28***

Pending Receivables:		
City of Hemet	$ 92,275.00	
City of San Jacinto	$ 51,015.00	
EMWD	$ 252,569.00	
Lake Hemet MWD	$ 255,137.00	
Total Pending Receivables		***$650,996.00***
Pending Payments:		
Bell Bookkeeping 10/31/2014 &11/30/2014	$ 422.50	
Water Resources Engineers 11/3/2014	$ 20,943.11	
LSG & K (Legal Counsel) 11/12/14	$ 2,475.00	
Total Pending Payments		***$23,840.61***

Treasurer Report
December 22, 2014

2014 Budget Items	Allocations	Commitments (As of Nov. 30, 2014)
In-Lieu Program Agreement	$160,000.00	
EMWD/Watermaster Support Services		
~~Monitoring Program Support~~ (See Revised Items)	~~$131,000.00~~	
Soboba Gravel Pit Project		
~~Dewatering~~ (Cancelled due to Drought)	~~$ 35,000.00~~	
~~De-silting~~ (Cancelled due to Drought)	~~$105,000.00~~	
Organization Operation & Management		
Financial Support Services	$ 18,000.00	$ 2,015.00
Legal Counsel Contract	$ 33,000.00	$ 17,580.00
Advisor Contract	$166,000.00	$ 138,190.34
Part-Time Executive Assistant Contract	$ 50,000.00	$ 12,483.80
Insurance; Office Supplies & Other Direct Costs	$ 15,000.00	$ 5,539.62
Education and Training	$ 15,000.00	
Additional Projects/Activities		
Database/Mapping Application Development	$ 20,000.00	$ 11,340.00
Groundwater Model Development	$120,000.00	
Additional/Revised Items:		
Monitoring Program Support	$148,965.04	
TOTALS	**$745,965.04**	**$187,148.76**

Minutes
Hemet-San Jacinto Watermaster Board of Directors Meeting
Eastern Municipal Water District
October 27, 2014

The Watermaster Board of Directors met in Regular Session in the Board Room at EMWD Headquarters, 2270 Trumble Road, Perris, California, on *Monday, October 27, 2014* at *4:03* p.m. The meeting was called to order by Chairman Gorman.

Pledge of Allegiance

The Pledge of Allegiance to the Flag of the United States was led by *Chairman Gorman*

Board Members Present:	Frank Gorman, Chair Linda Krupa, Vice-Chair Phil Paule, Secretary Treasurer Mark Bartel Bruce Scott
Board Member(s) Absent:	None
Board Alternate (s) Present:	Rick Hoffman, Alternate
Watermaster Staff Present:	Thomas Bunn, Legal Counsel (Lagerlof, Senecal, Gosney & Kruse) Behrooz Mortazavi, Advisor (Water Resources Engineers) Michelle Mayorga, Executive Board Secretary (Water Resources Engineers)
EMWD Staff Present:	Paul D. Jones, General Manager Charlie Bachmann, Assistant General Manager of Planning, Engineering and Construction; Nick Kanetis, Deputy General Manager Brian Powell, Director of Planning; Khos Ghaderi, Director of Water Operations Kevin Pearson, Public Affairs Officer
City of Hemet Staff Present:	Kris Jensen, Public Works Director
City of San Jacinto Staff Present:	Lynn Merrill, Public Works Director Mike Emberton, City Manger Dan Mudrovich, Utilities Superintendent
Lake Hemet Staff Present:	Tom Wagoner, General Manager
Others Present:	

I. PUBLIC COMMENTS –*Speakers are requested to limit comments to 3 minutes.*

Mr. Tom Wagoner, General Manager of Lake Hemet Municipal Water District addressed the Board with regard to the purchase of recharge water from other entities, such as the Cities of Hemet and San Jacinto. Mr. Wagoner reminded the Board that Carry over Credits can be transferred and that maybe the Cities of Hemet and San Jacinto would possibly be able to share some of their banked water with Lake Hemet Municipal Water District. Mr. Gorman asked what would need to be done to move forward with this request. Mr. Mortazavi answered that it would need to go to the Technical Advisory Committee for discussion and recommendation.

II. ADDITIONS/DELETIONS TO AGENDA

None

III. Reports

A. Board Member Comments/Questions/ Reports

None

B. Advisor Report

Mr. Mortazavi reported that he has been spending most of his time working on the Groundwater Model Development project and also with the review of potential projects for 2015. In the past EWMD has been able to provide help with Gravel Pit Cleanup. At this time EMWD does not have equipment operators, and will not be able to provide this help and therefore, the Soboba Tribal Council has been asked to take on a more active role with this project.

All member agencies have paid 25% share of the Administrative Assessments. The second set of invoices for 50% of the 2014 Assessments were mailed out in mid-October. At this time, negotiations with an Audit Firm are in the works. The goal is to find a firm that is more familiar with similar Watermaster operations.

The Technical Advisory Committee (TAC) met once on October 20, 2014. The major discussion items were the 2015 Adjusted Base Production Rights; 2014 Soboba imported water in-lieu recharge project; the Groundwater Model Update Project; and review of final expenditures on the Phase I Facilities Construction Cost Agreement. Presentations will be made on each of those projects later in this meeting.

EMWD and RMC have conducted their third Advisory Panel meeting for the Groundwater Model Update Project. Significant progress has been made. The 2014 Database Management Project with Spatial Wave has been completed. However, some data in the EMWD Regional Water Resources Database System needs to be updated and EMWD is in the process of updating this data. EMWD's in-lieu delivery of Soboba Imported Water ended on October 10, 2014 due to MWD's stoppage of deliveries to perform maintenance work.

On October 7, 2014, with the assistance of Mr. Bartel, Mr. Merrill and Mr. Emberton, Mr. Mortazavi provided an overview of the Watermaster activities to the San Jacinto Council. Also, on October 15, 2015 with the Assistance of Secretary Treasure Paule and Mr. Jones, Mr. Mortazavi provided an overview of the Watermaster activities to the EMWD Board.

Ms. Krupa, Mr. Scott and Mr. Mortazavi had a meeting with the Soboba Tribal Council on October 21, 2014. Watermaster activities during 2014 and a potential joint project were reviewed at this meeting. A request for technical assistance from the California Department of Water Resources (DWR) for a $100,000 Grant looks promising. If received, this Grant could be used to better definite the Groundwater Monitoring Program in the Management Area. Santa Ana Watershed Project Authority (SAWPA) has been selected to receive a grant from DWR in the amount of approximately $12 Million. Member agencies are encouraged to communicate with EMWD and SAWPA.

On September 16, 2014 Governor Brown signed the Sustainable Groundwater Management Act. Adjudicated basins (including Hemet-San Jacinto Watermaster) are exempt from most of the requirements under this new Act. Mr. Mortazavi reported on the following items from member agencies:

- EMWD is pursuing an Indirect Potable Reuse (IPR) Planning Study. More information on this project will be available at a later date.
- EMWD, LHMWD, and Soboba Tribe joint Canyon Basin Operation Plan effort is almost complete. A full presentation of this project will be provided to the Watermaster Board once the project is complete.
- LHMWD customers are required to use water on an alternating day schedule for their outside irrigation needs.
- Lake Hemet is about half full with approximately 6,500 AF in Storage.
- LHMWD is receiving water from EMWD through Well 92.
- The City of Hemet is working on re-starting the two wells that were recently shutdown due to high nitrate.
- The City of Hemet has issued an RFP for a water rate study, and if required, is sending notices to their customers on water use efficiency.
- The City of San Jacinto water rate surcharge is in effect. In addition, the City has shutoff water deliveries to some of its parks for the last two months to reduce its maintenance cost. This has caused approximately 10-12% reduction in the City's water consumption.
- EMWD is in its Mandatory Water Waste Reduction phase as a result of the drought.

The draft Bay Delta Conservation Plan (BDCP) is being re-circulated at the State level to incorporate changes to the plan due to public comment.

C. Legal Counsel Report

Mr. Bunn reported that the Sustainable Groundwater Management Act was designed for local control of groundwater basins. The State will only intervene when an agency is not performing as required. The Watermaster is exempt from this Act; however the Annual Report must be submitted to be in compliance.

Mr. Bunn explained that Administrative Assessments could be used for Administrative Expenses. However, if the expenses are covered then the Assessments could be used for supplemental water. The funds could be used for a project involving recycled water. Mr. Bunn will provide more information at a later date.

D. Treasurer Report

Secretary Treasurer Paule and Mr. Mortazavi provided an overview of the Treasurers Report.

IV. CONSENT CALENDAR

Accept Motion for approval of Consent Calendar

A. Approval of Minutes – *August 25, 2014 Regular Board Meeting*

Recommendation: Adopt a motion to approve Item A on the Consent Calendar.

Motion:	Mr. Paule	Noes:
Seconded:	Mr. Bartel	Abstain:
Ayes:	Mr. Gorman, Ms. Krupa, Mr. Scott	Absent:

V. ACTION ITEMS

A. 2014 Adjusted Base Production Rights

Mr. Mortazavi made a presentation. The stipulated judgment requirements state that the Base Production Rights of Hemet and San Jacinto each include 900 acre-feet per year and shall not be subject to reduction. Section 3.2 of the judgment states that each Public Agency's Base Production Rights shall be subject to a 10% reduction for the first year. Currently this reduction is in place from May 2014 thru April 2015. Section 3.2.2 sets the goal stating that the Watermaster shall determine the required reductions in Adjusted Production Rights to achieve Safe Yield. The goal to achieve Safe Yield over a six (6) year period based on an annual overdraft of 10,000 acre feet was presented. In no event shall any reduction be more than 10% of the Adjusted Production Rights of the prior year. At this time, it is up to the Watermaster to determine what the amount of reduction should be for the second through the sixth year. The Ultimate Adjusted Base Production Rights for each member agency in 6 years was presented.

Production rights adjustment options to achieve the 10,000 AF reduction goal include maximizing reduction in the early years, minimizing reductions in the early years, fixed reduction volumes for all the years and constant reduction rates for all the years. The ending result for all options will achieve the 10,000 AF reduction goal. It is recommended for budgeting purposes to set the Adjusted Base Production Right reduction for May 2015 to April 2016 at 7%. The Watermaster will then finalize the May 2015 to April 2016 reduction rate by February 2015 after local agencies evaluate impacts of MWD supplies to the region. The amounts for the Adjusted Base Production Rights for May 2016 to April 2017 will be finalized by October 2015.

Mr. Bunn explained that the Judgment stipulates that there is flexibility in deciding how accomplish this reduction. The Judgment does not stipulate how to do the reductions but give some suggestions. For example, the reduction could be based on periodic demand, hydrology, recharge, the communities' ability to pay for supplemental water, and protection of the Tribal Water Rights. Mr. Bunn also suggested that the recommendation presented is consistent with what is in the Judgment. Mr. Paule asked Mr. Bunn if the Watermaster has to address this in the annual report. Mr. Bunn answered that yes however, at this time, the Watermaster only needs to report how the reduction amount was calculated for the first year.

Recommendation: Adopt a motion to reduce the Adjusted Base Production Rights for the 2015 Budget by 7%

Motion:	Mr. Bartel	Noes:
Seconded:	Ms. Krupa	Abstain:
Ayes:	Mr. Gorman, Mr. Paule, Mr. Scott	Absent:

B. Change Order No. 2 to EMWD Task Order No. 6

Mr. Mortazavi provided Change Order No. 2 to EWMD Task Order No. 6. It is requested that an additional $13,651 be approved for the replacement of seven meters that are no longer functioning properly in the Hemet/San Jacinto Groundwater Management Area. Mr. Scott inquired if the old meters are being replaced with smart meters that can be read by the landowner. Mr.Ghaderi clarified that they are being replaced with regular meters. President Gorman asked if more meters will need to be replaced. Mr. Mortazavi answered that it is unknown at this time. It depends on the water quality and the amount of water that goes through the meter. Mr. Powell also noted that at times, meters fail due to the landowner's error and not District error.

Recommendation: Adopt a motion to Approve Change Order No. 2 to EMWD Task Order No. 6

Motion:	Mr. Bartel	Noes:
Seconded:	Ms. Krupa	Abstain:
Ayes:	Mr. Gorman, Mr. Paule, Mr. Scott	Absent:

VI. INFORMATIONAL ITEMS/CORRESPONDENCE

A. In-Lieu Delivery of Soboba Settlement Water in 2014

Mr. Mortazavi presented a letter dated October 7, 2014 from Metropolitan Water District to Mr. Jones at EMWD with regard to the Operating Plan for in-lieu delivery of Soboba Settlement Water. This letter states that as of October 10, 2014, MWD has to stop in-lieu delivery of Soboba Settlement water for groundwater recharge. EMWD has been able to recharge approximately 4,000 AF between June and October 2014. The balance of the 7,500 AF Soboba Settlement Water will be carried over for future deliveries by MWD.

B. Drought Impacts on The State Water Project System

Mr. Mortazavi presented some pictures of the drought impacts at Lake Oroville. These pictures showed changes between 2011 and 2014 due to drought conditions.

C. Groundwater Model Update

Mr. Mortazavi gave a presentation on the Groundwater Model Update Status Report. The schedule has been revised and may change again. The revised scope of work includes a $29,335 change order for out of scope work, which revises the EMWD contract amount to $359,202.00. There have been 3 Advisory Panel meetings so far with a tentative 4th meeting scheduled for December 2014. Currently, the model is being calibrated to develop a Baseline and Estimated Safe Yield. As soon as the model is complete, a final report will be available.

D. Review of Final Expenditures on The Phase I Facilities Construction Cost Agreement

Mr. Powell gave a presentation on the Final Expenditures on the Phase I Facilities Construction Cost Agreement. The Agreement shall remain in effect for the duration of the useful life of the Phase I Facilities, currently estimated to be thirty years and continue in full force and in effect while the facilities are maintained. EMWD is working on increasing capacity in the facilities to accommodate a flow rate of 42 cfs (30,000 AFY) for recharge. The cost of the expansions, additions and construction is currently estimated to be $21,504,000.00 Phase I budget for Environment Mitigation is $3,302,000. The total project budget was $24,806,000. The project received $5,200,000 of Grants for Prop 50, Feasibility Study and Prop 13, Facilities Construction. Final Construction Cost is $379,803 under Budget and Environmental Costs to date are $309,010 over budget with additional work remaining. Net Project Costs are currently $70,793 under budget. A final presentation will be made to the Board in 2015.

E. Water Banking Initiative

Mr. Bachmann gave a presentation regarding EMWD's East Valley Water Supply Overview. Hemet-San Jacinto Judgment provides for gradual reduction in Groundwater pumping rights. The demands in East Valley are projected to increase over time. Supplemental water supplies need to be developed. The options for addressing the shortfall include Groundwater Storage Carryover Usage, increased Hemet Water Filtration Plant Production and supplemental Groundwater Recharge and Extraction. The challenges include storage carryover credits limits, limited raw water supply capacity to Hemet Water Filtration Plant and limited Groundwater recharge capability. RMC will evaluate options for EMWD and make recommendations to initiate the application for a new MWD connection.

VII. CLOSED SESSION

A. None

VIII. ADJOURNMENT

There being no further business to come before the Board; Chairman Gorman adjourned the meeting at *6:06 p.m.*, to be reconvened on *Monday, December 22, 2014* at *4:00 p.m.* (Adjourned Regular Meeting).

2015 Proposed Budget

Watermaster Board Meeting
December 22, 2014

2015 Budget Assumptions

- Carry-over accounts are used to offset any excess production in 2015 and no Replenishment Assessments will be collected in 2015.
- Administrative Assessment Revenues are estimated based on $50/acre-foot.
  - Productions are estimated based on actual 2013/2014 data.
- The In-lieu Agreement budget includes EMWD's proposed 10% recycled water rate increase.
- Coordinated efforts with EMWD:
  - Groundwater Modeling Effort (funded under 2014 budget)
  - Potential in-lieu project for the Soboba Golf Course

2015 Budget Assumptions (Cont.)

- Watermaster will continue its operation out of the Corona office.
- For budgeting purpose, May 2015 to April 2016 Public Agencies Adjusted Production Rights is reduced by 7%.
  - By February 2015, finalize the May 2015 to April 2016 reduction rate. After local agencies evaluate impacts of MWD supplies to the region.
  - By October 2015, determine the Adjusted Base Production Rights for May 2016 to April 2017.

Potential 2015 Projects

- Completion of the Groundwater Model (funded in 2014).
- Monitoring Program Enhancement Project (funded by DWR).
- Data mapping/evaluation system enhancement.
- Development of a webpage for the Watermaster.

Estimated 2015 Administrative Assessments

Agency	2015 Adjusted BPR (AFY)	Projected 2015 Production (AF) *	Est. Prod. Subject to Admin. Assmt. (AF) **	2015 Budget Admin. Assmt. ($)
City of Hemet	5,590	4,545	3,645	$182,271
City of San Jacinto	3,637	2,963	2,063	$103,170
EMWD	9,300	13,827	9,300	$464,980
LHMWD	9,417	13,071	9,417	$470,834
Totals	27,944	34,406	24,425	$1,221,256

AF = Acre-feet
Assmt. = Assessment
Est. = Estimated

AFY = Acre-feet per year
BPR = Base Production Rights
Prod. = Production

- 2015 Production Projections are based on Jan-Aug 2014 and Sept-Dec 2013 productions.

** The Cities of Hemet and San Jacinto can produce 900 AFY without any Admin. Assessment payment.

Estimated Replenishment for 2015

Agency	Modified BPR for 2015 (AFY)	Estimated 2015 Production	Estimated 2015 Prod. Above/Below Adjusted BPR	Estimated 2015 Repl. (AF)
City of Hemet	5,590	4,545	(1,045)	0
City of San Jacinto	3,637	2,963	(674)	0
EMWD	9,300	13,827	4,527	0
LHMWD	9,417	13,071	3654	0
Totals	27,944	34,406	6,463	0

AF = Acre-feet
Assmt. = Assessment
Est. = Estimated
Repl. = Replenishment

AFY = Acre-feet per year
BPR = Base Production Rights
Prod. = Production

- The Cities of Hemet and San Jacinto can produce 900 AFY without any Admin. Assessment payment.

Proposed Payment Schedule

- Administrative Assessment Invoicing:
  - 25% of total by July 15, 2015.
  - 50% of total by October 15, 2015.
  - The remaining balance will be reconciled and invoiced by March 1, 2016.
- Replenishment Assessment Invoicing (if any):
  - Full 100% invoiced by August 1, 2016.

2015 Budget Options

Budget Items	2014 Budget	Option 1	Option 2	Option 3	Option 4	TAC Option
Agreements						
In-Lieu Program Agreement	$160,000	$182,000	$182,000	$182,000	$182,000	$182,000
Groundwater Monitoring Program						
EMWD Leading Program	$148,965	$146,100	$146,100			
Babcock Lab leading Program				$140,600		TBD
Advisor leading Program					$124,000	
Gravel Pit Cleanup Project						
Dewatering	~~$35,000~~	$35,000	$35,000	$35,000	$35,000	$35,000
De-silting	~~$105,000~~	$112,500	$112,500	$112,500	$112,500	$112,500
Organization Operations & Management						
Financial Support Services	$18,000	$12,000	$12,000	$12,000	$12,000	$12,000
Legal Counsel Services	$33,000	$33,000	$33,000	$33,000	$33,000	$33,000
Advisor Services	$166,000	$160,000	$160,000	$160,000	$160,000	$160,000
Insurance; Office Supplies; and Other Direct Costs	$15,000	$10,000	$10,000	$10,000	$10,000	$10,000
Administrative Support Services	$50,000	$21,500	$21,500	$21,500	$21,500	$21,500
Education and Training	$15,000	$15,000	$15,000	$15,000	$15,000	TBD
Database/Mapping Application Maintenance		$5,250	$5,250	$5,250	$5,250	$5,250
Additional Projects/Activities						
Database/Mapping Application Development	$20,000					
Groundwater Model Development	$120,000					
Monitoring Program Enhancement Project			DWR	DWR	DWR	DWR
Database/Mapping Application Report Enhancement			$8,000	$8,000	$8,000	TBD
Website Application Development			$5,000	$5,000	$5,000	TBD
TOTALS	~~$745,965~~	$732,350	$745,350	$739,850	$723,250	$571,250

Recommendation

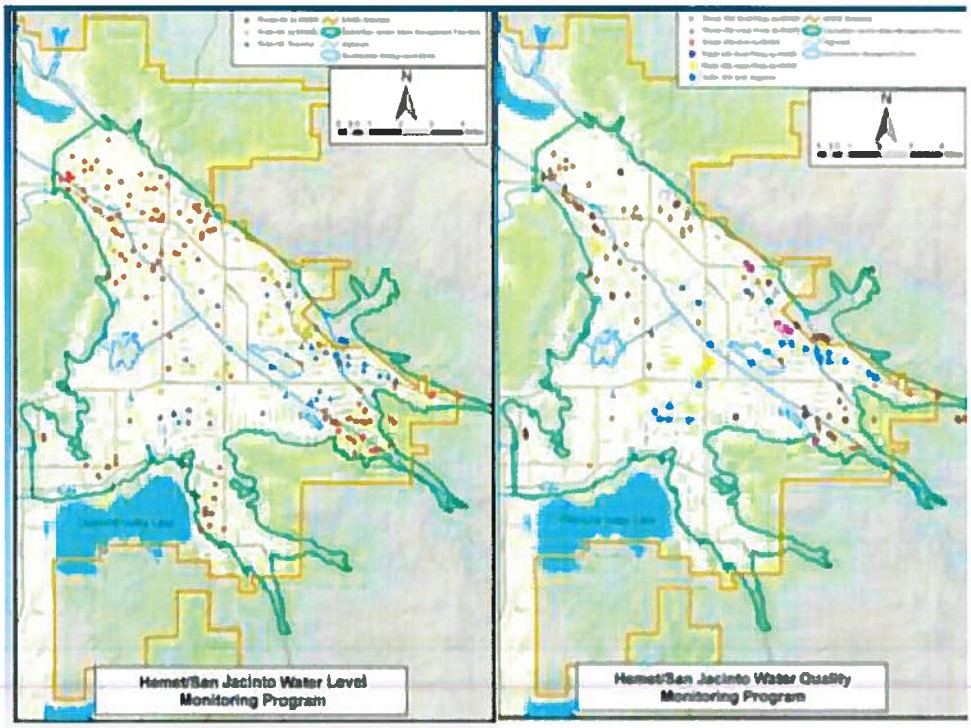
- Approve the Board Preferred Option as 2015 Watermaster Budget.
- Authorize Advisor to:
  - Initiate the proposed activities/projects.
  - Invoice participating agencies in accordance with the proposed schedule.

2015 Monitoring Program Options

Watermaster Board Meeting
December 22, 2014

2015 Monitoring Program Options (Comparison Basis)

- Extraction Monitoring:
  - 62 Wells Per Month
  - 34 Wells Estimated Annually
- Level Monitoring - 186 Wells Twice Per Year
- Water Quality Monitoring:
  - 75 Grab Samples Per Year
  - 39 Mobile Pump Samples Per Year
- Inactive Well Capping/Sealing - 5 Wells Per Year
- Meter Replacement/Repair - 5 Wells Per Year
- Documentation and Annual Report Preparation



Cost Comparisons by Activities

Description	EMWD Conducts the Monitoring Program (Current Condition)	Babcock Conducts the Field Work *	WRE Conducts the Monitoring Program *
Extraction Monitoring	$ 22,684	$ 28,800	$ 17,200
GW Level Monitoring	$ 22,620	$ 15,345	$ 15,840
Water Quality Monitoring (Grab Sampling)	$ 26,545	$ 19,939	$ 23,133
Water Quality Monitoring (Mobile Sampling)	$ 22,395	$ 22,395	$ 22,395
Inactive Well Capping/Sealing	$ 9,660	$ 9,660	$ 6,600
Meter Replacement/Repair	$ 12,450	$ 12,450	$ 10,750
Documentation and Annual Report Preparation	$ 18,729	$ 18,729	$ 22,020
Other Direct Costs (ODC)	$ 10,975	$ 6,070	$ 6,070
WRE Coordination		$ 7,200	
Totals	$ 146,058	$ 140,588	$ 124,007

* Tasks to be conducted by EMWD under this option are shaded in gray

Recommendation

Adopt a motion authorizing Advisor to sign necessary contracts to implement 2015 Monitoring Program.

Hosaka, Rotherham & Company
Certified Public Accountants

hrccpa.com

James A. Rotherham, CPA
CEO & Managing Partner

Roy T. Hosaka, CPA
Retired

James C. Nagel, CPA
Retired

HOSAKA, ROTHERHAM & COMPANY
CERTIFIED PUBLIC ACCOUNTANTS

PROPOSAL FOR FINANCIAL AUDIT

HEMET-SAN JACINTO WATERMASTER

FOR THE YEARS ENDED
DECEMBER 31, 2014
DECEMBER 31, 2015
AND
DECEMBER 31, 2016

1011 Camino Del Rio South, Suite 410, San Diego, CA 92108 / T: 619.543.9702 / F: 619.543.0116

Hosaka, Rotherham & Company
Certified Public Accountants

hrccpa.com

James A. Rotherham, CPA
CEO & Managing Partner

Roy T. Hosaka, CPA
Retired

James C. Nagel, CPA
Retired

October 7, 2014

Behrooz Mortazavi, Watermaster Advisor
Hemet-San Jacinto Watermaster
Water Resources Engineers, Inc.
1295 Corona Pointe Court, Suite 104
Corona, CA 92879

Dear Mr. Mortazavi:

We are pleased to confirm our understanding of the services we are to provide for the Hemet-San Jacinto Watermaster for the years ending December 31, 2014, 2015, and 2016.

We will audit the statement(s) of net position of Hemet-San Jacinto Watermaster ("Watermaster") as of December 31, 2014, 2015, and 2016, and the related statements of revenues, expenses and changes in net assets, and cash flows for the years ended. Also, the following supplementary information accompanying the financial statements will be subjected to the auditing procedures applied in our audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America, and our auditor's report will provide an opinion on it in relation to the financial statements as a whole:

1. Any compliance that State and Federal Districts require, if applicable

Audit Objective

The objective of our audit is the expression of an opinion about whether your financial statements are fairly presented, in all material respects, in conformity with U.S. generally accepted accounting principles. Our audit will be conducted in accordance with auditing standards generally accepted in the United States of America and will include tests of your accounting records and other procedures we consider necessary to enable us to express such an opinion. If our opinion is other than unqualified, we will discuss the reasons with you in advance. If, for any reason, we are unable to complete the audit or are unable to form or have not formed an opinion, we may decline to express an opinion or to issue a report as a result of this engagement.

Audit Procedures

Our procedures will include tests of documentary evidence supporting the transactions recorded in the accounts, tests of the physical existence of inventories, and direct confirmation of receivables and certain assets and liabilities by correspondence with selected individuals, funding sources, creditors, and financial institutions. We will also request written representations from the Watermaster's attorneys as part of the engagement, and they may bill you for responding to this inquiry. At the conclusion of our audit, we will require certain written representations from you about the financial statements and related matters. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements; therefore, our audit will involve judgment about the number of transactions to be examined and the areas to be tested. We will plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether from (1) errors, (2) fraudulent financial reporting, (3) misappropriation of assets, or (4) violations of laws or governmental regulations that are attributable to the Watermaster or to acts by management or employees acting on behalf of the Watermaster.

1011 Camino Del Rio South, Suite 410, San Diego, CA 92108 / T: 619.543.9702 / F: 619.543.0116

Because an audit is designed to provide reasonable, but not absolute, assurance and because we will not perform a detailed examination of all transactions, there is a risk that material misstatements may exist and not be detected by us. In addition, an audit is not designed to detect immaterial misstatements or violations of laws or governmental regulations that do not have a direct and material effect on the financial statements. However, we will inform you of any material errors and any fraudulent financial reporting or misappropriation of assets that come to our attention. We will also inform you of any violations of laws or governmental regulations that come to our attention, unless clearly inconsequential. Our responsibility as an auditor is limited to the period covered by our audit and does not extend to any later periods for which we are not engaged as auditors.

Our audit will include obtaining an understanding of the Watermaster and its environment, including internal control, sufficient to assess the risks of material misstatement of the financial statements and to design the nature, timing, and extent of further audit procedures. An audit is not designed to provide assurance on internal control or to identify deficiencies in internal control. However, during the audit, we will communicate to you and those charged with governance internal control related matters that are required to be communicated under professional standards.

We may from time to time, and depending on the circumstances, use third-party service providers in serving your account. We may share confidential information about you with these service providers, but remain committed to maintaining the confidentiality and security of your information. Accordingly, we maintain internal policies, procedures, and safeguards to protect the confidentiality of your personal information. In addition, we will secure confidentiality agreements with all service providers to maintain the confidentiality of your information and we will take reasonable precautions to determine that they have appropriate procedures in place to prevent the unauthorized release of your confidential information to others. In the event that we are unable to secure an appropriate confidentiality agreement, you will be asked to provide your consent prior to the sharing of your confidential information with the third-party service provider. Furthermore, we will remain responsible for the work provided by any such third-party service providers.

Management Responsibilities

You are responsible for making all management decisions and performing all management functions; for designating an individual with suitable skill, knowledge, or experience to oversee the tax services and any other nonattest services we provide; and for evaluating the adequacy and results of those services and accepting responsibility for them.

You are responsible for establishing and maintaining internal controls, including monitoring ongoing activities; for the selection and application of accounting principles; and for the fair presentation in the financial statements of financial position, changes in net assets, and cash flows in conformity with U.S. generally accepted accounting principles. You are also responsible for making all financial records and related information available to us and for the accuracy and completeness of that information. Your responsibilities include adjusting the financial statements to correct material misstatements and confirming to us in the management representation letter that the effects of any uncorrected misstatements aggregated by us during the current engagement and pertaining to the latest period presented are immaterial, both individually and in the aggregate, to the financial statements taken as a whole.

You are responsible for the design and implementation of programs and controls to prevent and detect fraud, and for informing us about all known or suspected fraud affecting the Watermaster involving (1) management, (2) employees who have significant roles in internal control, and (3) others where the fraud could have a material effect on the financial statements. Your responsibilities include informing us of your knowledge of any allegations of fraud or suspected fraud affecting the Watermaster received in communications from employees, former employees, grantors, regulators, or others. In addition, you are responsible for identifying and ensuring the Watermaster complies with applicable laws and regulations and for taking timely and appropriate steps to remedy any fraud, illegal acts, or violations of contracts or grant agreements that we may report.

Maximum Audit Fees

Our fees for the services will be based on the actual time spent at our standard hourly rates and out-of-pocket costs. Our standard hourly rates vary according to the degree of responsibility involved and the experience level of the personnel assigned to your audit. These fees presented including all expenses, such as travel expenses, etc. Our professional fee for the audit of the financial statements is:

1. $6,900 for the period January 1, 2014 through December 31, 2014 (ONE YEAR CONTRACT); or,

2. $5,600 per year for the periods January 1, 2014 through December 31, 2014 and January 1, 2015 through December 31, 2015 (TWO YEAR CONTRACT); or,

3. $4,500 per year for the periods January 1, 2014 through December 31, 2014, January 1, 2015 through December 31, 2015, and January 1, 2016 through December 31, 2016 (THREE YEAR CONTRACT).

The fee estimate is based on anticipated cooperation from your personnel and the assumption that all records needed to complete the audit are at the school site, and that unexpected circumstances will not be encountered during the audit. If significant additional time is necessary, we will discuss it with you and arrive at a new fee estimate before we incur the additional costs.

For multi-year contracts, if significant additional time is required to perform the audit of the contract year due to unforeseen circumstance, we will discuss with you whether a new fee estimate is warranted, before we incur the additional costs.

The billing will be staggered for three different payments in the amount of:

1. 1/3 of the total yearly contract amount upon the start of preliminary audit fieldwork.
2. 1/3 of the total yearly contract amount upon the start of financial audit fieldwork.
3. 1/3 of the total yearly contract amount upon release of final audit report.

If the Watermaster signs an engagement for more than one year and later decides to select another auditing firm for the subsequent year after completion of the current year audit, the fees will be adjusted based on the number of years that our firm has completed the audit(s).

Engagement Administration and Other

We understand that your employees will prepare all cash, accounts receivable, and other confirmations we request and will locate any documents selected by us for testing.

The audit documentation for this engagement is the property of Hosaka, Rotherham & Company and constitutes confidential information. However, pursuant to authority given by law or regulation, we may be requested to make certain audit documentation available to any State and Federal agencies or its designee, a federal agency providing direct or indirect funding, or the U.S. Government Accountability Office for purposes of a quality review of the audit, to resolve audit findings, or to carry out oversight responsibilities. We will notify you of any such request. If requested, access to such audit documentation will be provided under the supervision of Hosaka, Rotherham & Company personnel. Furthermore, upon request, we may provide copies of selected audit documentation to the aforementioned parties. These parties may intend, or decide, to distribute the copies or information contained therein to others, including other governmental agencies.

The audit documentation for this engagement will be retained for a minimum of five years after the report release date or for any additional period requested by the any authorized agencies. If we are aware that a federal awarding agency, pass-through entity, or auditee is contesting an audit finding, we will contact the party(ies) contesting the audit finding for guidance prior to destroying the audit documentation.

We appreciate the opportunity to be of service to Watermaster of the Santa Margarita River Watershed and believe this letter accurately summarizes the significant terms of our engagement. If you have any questions regarding this engagement letter, please do not hesitate to contact us.

Sincerely,

James A. Rotherham, CPA

James A. Rotherham, CPA
CEO & Managing Partner
Hosaka, Rotherham & Company

To indicate your approval of the engagement letter, please sign the original copy of this letter in the space provided and return it to our office.

ENGAGEMENT ACCEPTED - **ONE YEAR CONTRACT**

By: _____

Title: _____

Date: _____

ENGAGEMENT ACCEPTED - **TWO YEAR CONTRACT**

By: _____

Title: _____

Date: _____

ENGAGEMENT ACCEPTED - **THREE YEAR CONTRACT**

By: _____

Title: _____

Date: _____

HEMET-SAN JACINTO WATERMASTER

RESOLUTION NO. 1.2

RESOLUTION OF THE WATERMASTER BOARD AMENDING DESIGNATION OF DATE, TIME, AND LOCATION OF REGULAR MEETINGS

WHEREAS, the Watermaster Board, by Resolution No. 1.1 designated the fourth Monday of alternating month at 4:00 P. M. at the Eastern Municipal Water District Board Room as the date, time and place for the Watermaster's regular meetings; and

WHEREAS, the volume of business or other matters requiring discussion and possible action by the Watermaster varies periodically.

NOW, THEREFORE, BE IT RESOLVED, that the Watermaster Board designates the fourth Monday of February, May, August, and November at 4:00 P. M. at the Eastern Municipal Water District Board Room as the date, time and place for the Watermaster's regular meetings, subject, however, to the Watermaster's right to approve a temporary change in the date, time and/or place for a subsequent meeting adopted by motion at a regular Watermaster meeting.

ADOPTED on 22nd day of December, 2014

_____
Frank D. Gorman, Chairperson

ATTEST:

_____
Philip E. Paule, Secretary and Treasurer

EASTERN MUNICIPAL WATER DISTRICT

San Jacinto Watershed Groundwater Model Update

Brian Powell, P.E.
Director of Planning
December 22, 2014

San Jacinto Watershed Groundwater Model - Project Status

- RMC Consulting retained for Model Update
- April 2014 – Project Kick-off
- Technical Advisory Panel (AP) participants include
  - DWR
  - USGS
  - RWQCB
  - Local Hydrogeologic Expert

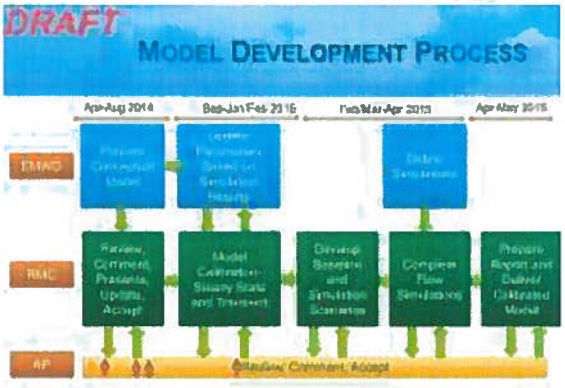
DRAFT

PROJECT STATUS

Task	Status	Comments
1 – Project Management	On-going	• Project Meetings • Conference Calls • Monthly Progress Reports • Weekly Progress Emails
2 – Data Collection & Analysis	Completed	• All Data QA/QC'd
3 – Conceptual Model & AP	Completed	• 3 AP Workshops Held To-Date • Draft TM delivered to EMWD/WM for review
4 – Calibration	On-going	• AP meeting #4 Dec 1st • AP meeting #5 TBD
5 – Predictive Simulations	None	• AP meeting #5 TBD
6 – Reporting	None	• Outline & Draft Graphics

San Jacinto Watershed Groundwater Model - Model Development Process

- 3 AP meetings - Conceptual Model
- Calibration commenced in July 2014
- First mid-calibration AP meeting held on December 1, 2014:
  - AP comments generally good
  - Modeling effort needs refinements in select sub-basins



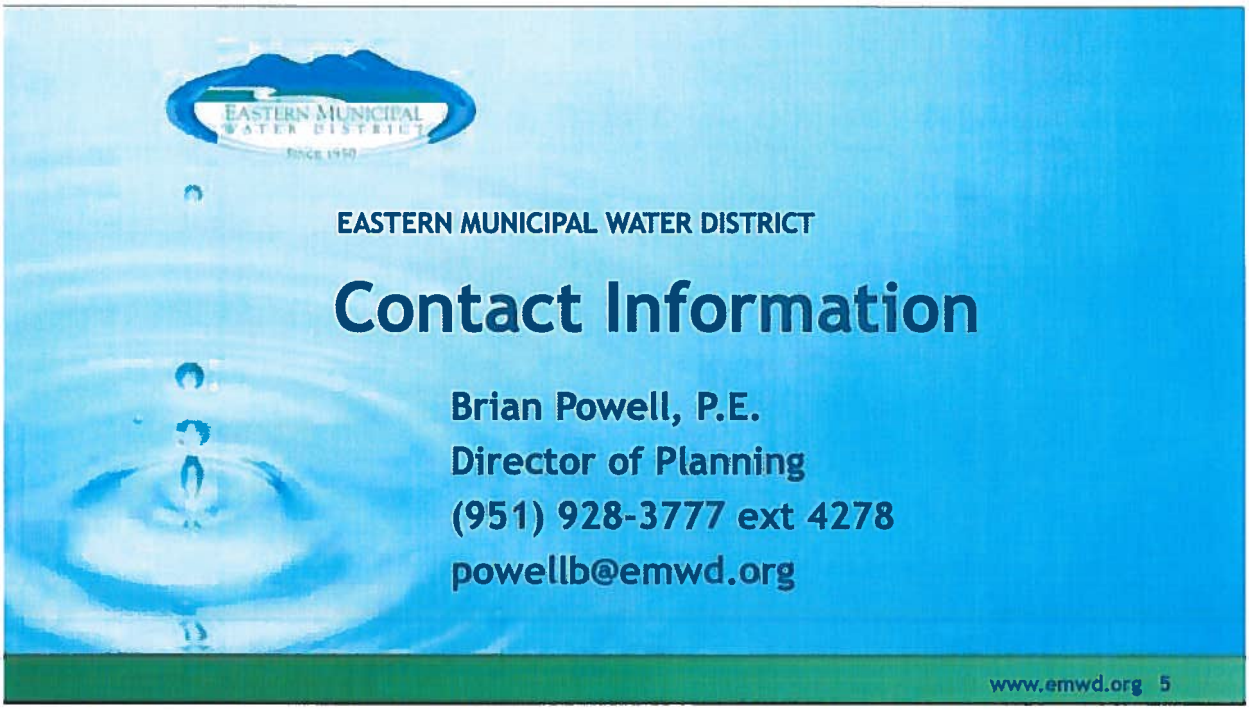
San Jacinto Watershed Groundwater Model - Next Steps

- Complete Calibration Feb 2015
- Predictive Simulations Apr 2015
- Final Report Jun 2015

DRAFT

PROJECT STATUS

Task	Status	Comments
1 – Project Management	On-going	• Project Meetings • Conference Calls • Monthly Progress Reports • Weekly Progress Emails
2 – Data Collection & Analysis	Completed	• All Data QA/QC'd
3 – Conceptual Model & AP	Completed	• 3 AP Workshops Held To-Date • Draft TM delivered to EMWD/WM for review
4 – Calibration	On-going	• AP meeting #4 Dec 1st • AP meeting #5 TBD
5 – Predictive Simulations	None	• AP meeting #6 TBD
6 – Reporting	None	• Outline & Draft Graphics


EASTERN MUNICIPAL WATER DISTRICT
EASTERN MUNICIPAL WATER DISTRICT
Contact Information
Brian Powell, P.E.
Director of Planning
(951) 928-3777 ext 4278
powellb@emwd.org
www.emwd.org 5

Groundwater Monitoring Program Enhancement

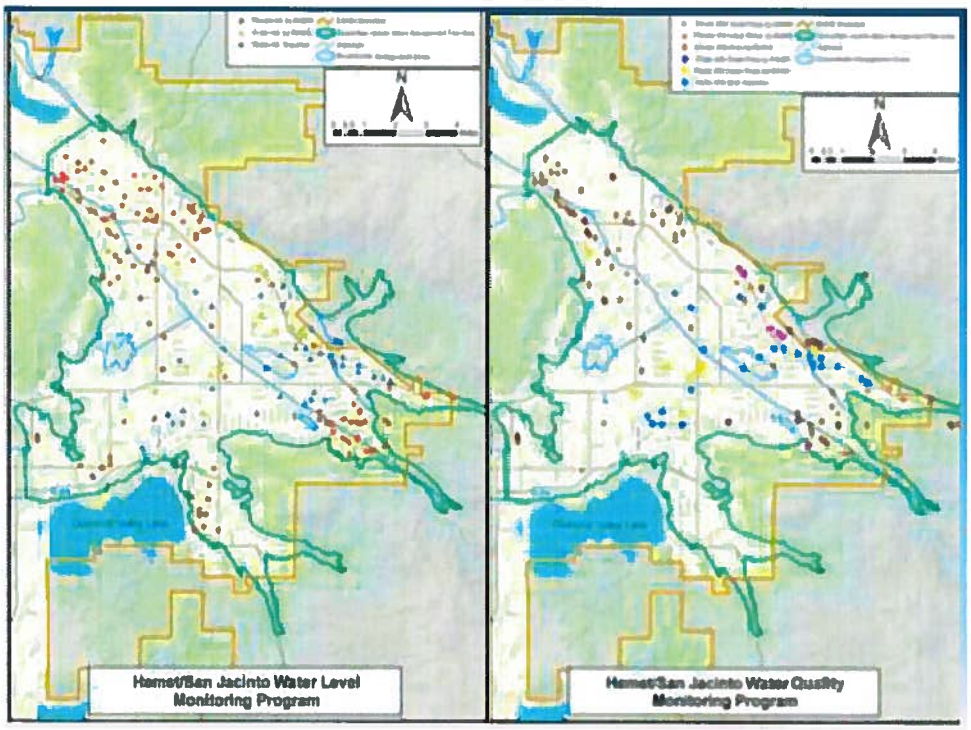
Watermaster Board Meeting
December 22, 2014

Presentation Overview

- Project Objectives
- Scope of Work
- Project Schedule

Project Objectives

- Prepare an enhanced groundwater monitoring program that would provide necessary information for the next safe yield assessment at a cost effective manner.



Scope of Work

- Task 1 – Develop the Enhanced Groundwater Monitoring Program (EGMP)
  - 1a – Develop goals, objectives for the (EGMP)
  - 1b – Collect and review data
  - 1c – Update monitoring protocols and plans
  - 1d – Assess and document the gaps
  - 1e – Develop the enhanced groundwater monitoring program
- Task 2 – Prepare Draft and Final Reports
  - Maps identifying the key wells for monitoring
  - Monitoring protocols
  - Updated field forms for data collection for agencies involved
- Task 3 – Project Management, Project Coordination and Project Meetings
  - Project Management and Coordination
  - Meetings
- Deliverables (Electronic format)
  - Draft Hemet-San Jacinto Groundwater Monitoring Program Report
  - Final Hemet-San Jacinto Groundwater Monitoring Program Report

Project Schedule

Task	Description	2015 Jan	Feb	Mar	Apr	May	Jun
1	Develop Enhanced Groundwater Monitoring Program (EGMP)						
1a	Develop Goals, Objectives for the EGMP						
1b	Collect and Review Data						
1c	Update Monitoring Protocols						
1d	Assess and Document the Gaps						
1e	Develop EGMP						
2	Prepare Draft and Final Reports Draft Report Final Report					★	★
3a	Project Management & Coordination						
3b	Project Meetings – Tech Advisory Committee Project Meeting - Watermaster Board					□ □	

Questions?

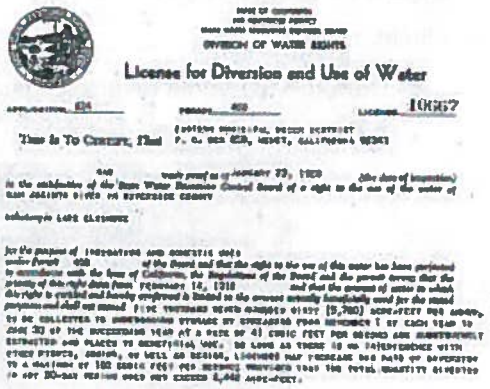
EASTERN MUNICIPAL WATER DISTRICT

San Jacinto River Diversion at Grant Avenue Ponds and Impacts from Recent Rains

Brian Powell, P.E.
Director of Planning
December 22, 2014

San Jacinto River Diversions - Background

- Permit to divert water from the San Jacinto River for Recharge and Subsequently Extracted and placed to Beneficial Use:
  - Diversions allowed from November 1 through June 30 each year when available
  - Maximum diversions of 5,760 AFY
  - Peak flow of 100 cfs
  - SBKR Bridge from July 1 through October 31 each year



DIVISION OF WATER RIGHTS

License for Diversion and Use of Water

LICENSE 10857

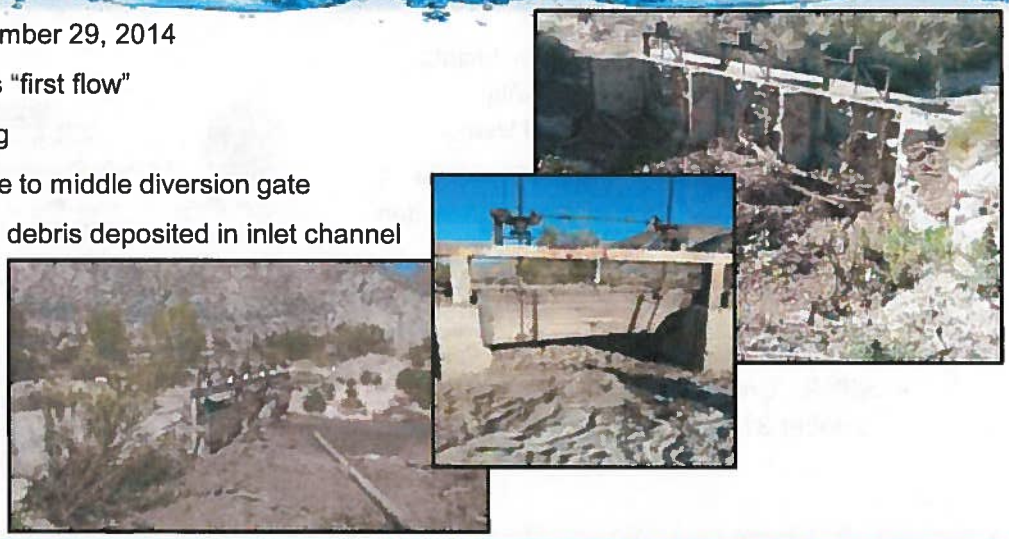
This Is To Certify, That

San Jacinto River Diversions - Grant Ave Ponds

- Grant Ave Ponds – Phase 1 Facilities
  - River Flows Diverted into Pond 12
  - Ponds 12 & 21 are primarily for Desilting
  - Ponds Overflow toward Northwest Ponds
  - Pond 11 Overflows back into San Jacinto River
- River Flows that are Not Diverted, or that Overflow back into the San Jacinto River, will flow into the Soboba Pit

Diversion at Grant Ave Ponds

- Storm September 29, 2014
- Bypassed as "first flow"
- Flashflooding
  - Damage to middle diversion gate
  - Silt and debris deposited in inlet channel



Diversion at Grant Ave Ponds

- Middle diversion gate repaired
- Silt and debris removed from inlet channel
- De-sedimentation pond cleaned
- Started diverting water December 2, 2014

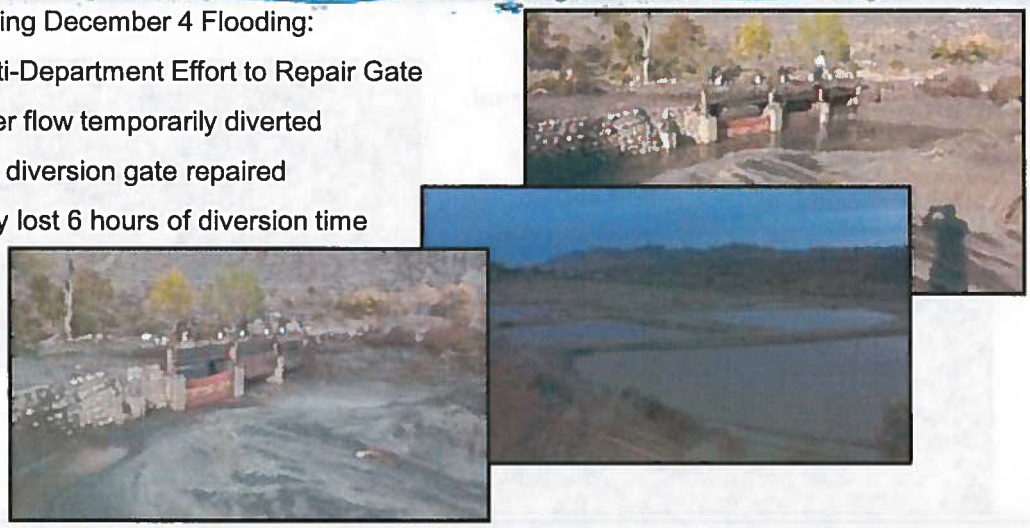
Diversion at Grant Ave Ponds

- Flash Flooding on December 4, 2014
  - Evidence of flow over the bridge
  - Damage to left diversion gate
  - Silt deposited in the inlet channel

Diversion at Grant Ave Ponds

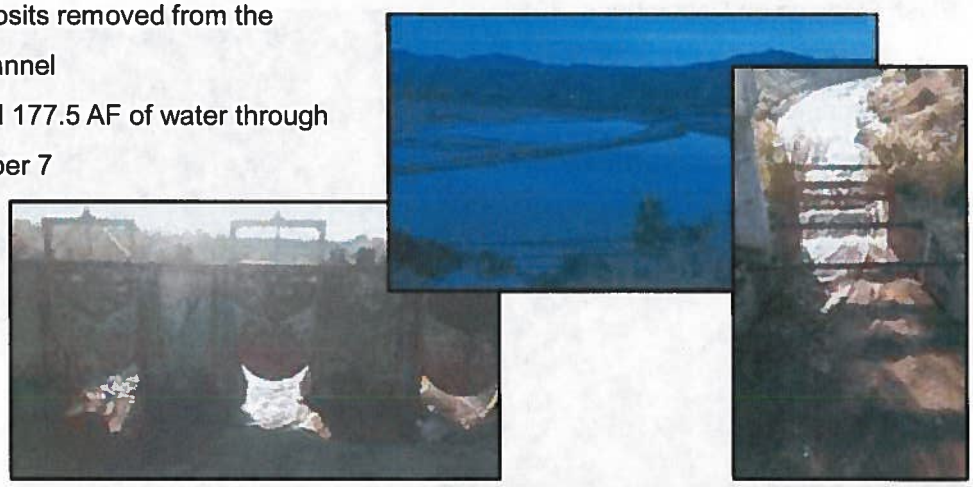
Following December 4 Flooding:

- Multi-Department Effort to Repair Gate
- River flow temporarily diverted
- Left diversion gate repaired
- Only lost 6 hours of diversion time



Diversion at Grant Ave Ponds

- Silt deposits removed from the inlet channel
- Diverted 177.5 AF of water through December 7



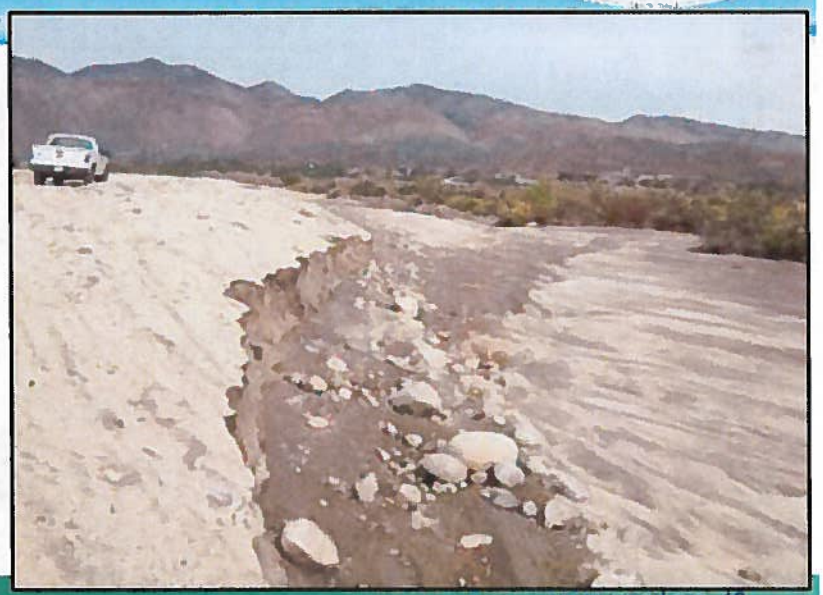
IRRP Ponds

- Field Investigation on December 5 indicated that some Relatively Minor Erosion Damage to the IRRP Ponds occurred due to the December 4, 2014 Rain Event
- Additional Erosion caused by Surface Runoff was observed along the interior of the berms

IRRP Ponds

Photo # 1

- East Berm Looking North reflecting some Erosion on the Outside of the Berm

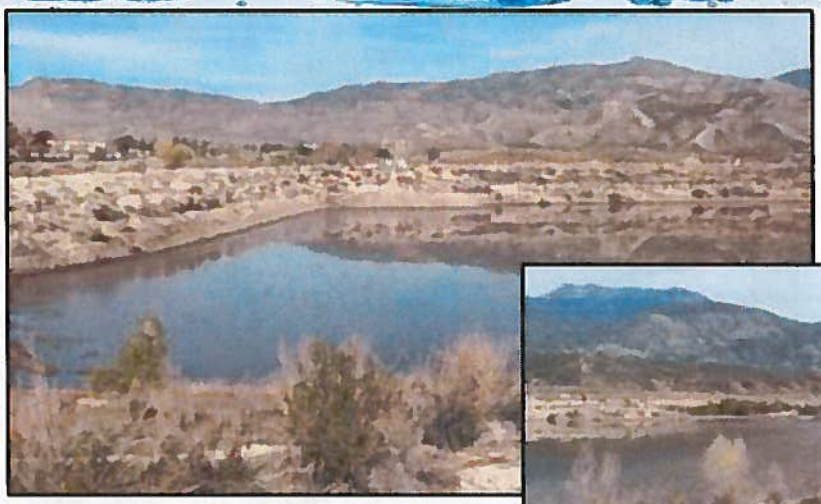


IRRP Ponds

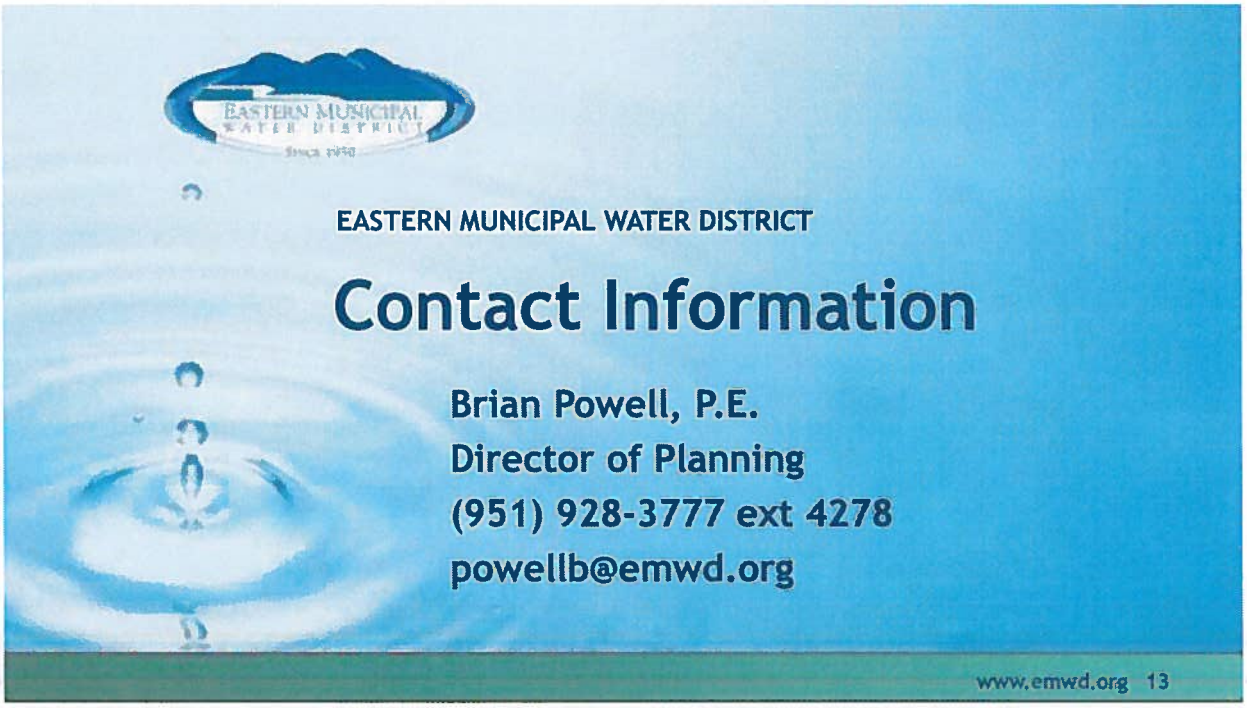
Photo # 2

- Northeast Berm Looking Southeast reflecting some Erosion of the Outside Berm

Soboba Pit



The Soboba Pit was nearly full following the rain event of December 4, 2014


EASTERN MUNICIPAL WATER DISTRICT
Contact Information
Brian Powell, P.E.
Director of Planning
(951) 928-3777 ext 4278
powellb@emwd.org
www.emwd.org 13

11 Appendices

11.1 Watermaster Board Meeting Minutes

11.2 Technical Advisory Committee Meeting Notes

11.3 Agreements

11.4 Resolutions

11.5 Task Orders

11.6 Independent Auditor's Report

11.7 References

MEMORANDUM

March 26, 2014

TO: TAC MEMBERS

FROM: Dale Schafer

RE: TAC Meeting Notes, February 10. 2014

Members in attendance: Behrooz Mortazavi, Watermaster Advisor; Charlie Bachmann, EMWD; Brian Powell, EMWD; Tom Wagoner, LHMWD; Kris Jensen, Hemet; Ron Proze, Hemet; Dan Mudrovich, San Jacinto; Steve Pastor, Private Pumper, Alex Vdovichenko, DWR.

Handouts: Hemet-San Jacinto Watermaster Agenda February 24, 2014; 2013 Groundwater Productions; Data Management Project, Sole-Source Justification

I.Agency Reports

- EMWD Project Report

  Charlie Bachmann reported:

  There is no recharge water available for the near future. The DWR's SWP is at Zero percent. MWD is encouraging its member agencies to take more Colorado River Water. EMWD may be asked to take water from the Lake Skinner Plant for agricultural use, the source of which is the Colorado River. Quagga mussels have been found in Lake Skinner. A permit from Ca. Dept. of Fish and Wildlife is necessary, in order to put Colorado River water into any impoundment. Behrooz noted that Colorado River water does not meet the water quality basin objective for San Jacinto basin. Charlie replied that EMWD will not accept Colorado River water for recharge.

  Behrooz reminded TAC members that MWD was committed to deliver 7500 AF per year over a 15 year average. With drought conditions, the agencies should anticipate that they may not get a delivery every year, which would result in taking more than 7500 AF during wet years.

- LHMWD project report

  Tom Wagoner reported:

- Well no. 16 in Canyon basin is being plumbed into the system and will yield approximately 600 gallons per minute.
- Bautista Ponds Recharge Project – Riverside County Flood Control has begun the initial environmental work for the project.
- Lake Hemet – Typically the main delivery pipe outlet and meter from Lake Hemet is closed in November or December each year and is not reopened until the following spring/summer depending on the demand. This is called "winterizing" the lake. Presently, deliveries from the lake have been shut off since October 2012 because the lake is only half full. The LHMWD Board has ordered that the Lake can no longer be drawn down when it is half full or less regardless of demand. The remaining water is saved in case of a catastrophic event. This will cause LHMWD to purchase water to meet its demands.

- <u>Hemet project report</u>
  Ron Proze reported:
  - Well no. 7 is back online
  - The Hemet City Council needs to approve the rehabilitation of well no. 16.
  - Well no. 13 – research continues to identify sources of fluoride in that well.

- <u>San Jacinto project report</u>
  Dan Mudrovich reported:
  - The City Council is expected to give final approval to imposing a surcharge on water rates in March.
  - Grand well was pulled back in October 2013 for rehabilitation for pump failure. The vendor did not size the new pump correctly and had to reinstall the correctly sized pump in the beginning of 2014. Two more stages have been added to the pump to increase the yield from 800-1200 gpm.

Behrooz asked if San Jacinto had considered a tiered rate as a demand reduction measure. Dan responded that San Jacinto did not consider a tiered rate; a flat rate is being imposed to recover costs of the recharge project.

Behrooz pointed out that EMWD had realized increased conservation due to a tiered rate implementation and asked if the cities would be interested in getting more information about tiered rates.

Dan answered that San Jacinto was trying to recover what has been spent on the groundwater management plan so it did not have to take money from the general fund. Possibly next year San Jacinto would be interested in exploring a tiered rate billing structure.

Kris explained that Hemet is considering imposing a surcharge on water rates and is now in the beginning stages of analyzing the fee. She noted that Hemet would be open to explore a different rating system in the future.

Behrooz is of the opinion that a tiered rate would be beneficial for the Hemet/San Jacinto valley. He noted that a tiered rate can be implemented more cost effectively for smaller agencies than what EMWD has done. EMWD is a big agency and may not be a good cost comparison example the cities and LHMWD. Behrooz is planning another presentation to the Watermaster from an agency smaller than EMWD that more closely resembles the cities and LHMWD that has successfully implemented a tiered rate. In addition, because the two cities are not using their allocation, every 10 AF saved by the cities translates into approximately $5,000.

EMWD established its tiered rate structure by determining the amount of water for the size of each customer's lot. Inside water use is determined by the number of people. Based on EMWD's study done by UCR, in order to conserve the same amount of water, a flat rate would have to be raised by 30%.

II. Watermaster advisor updates

Behrooz reported:

- Draft Agenda
  - V. Action items
    - V.A. Monitoring — if the task order is completed by EMWD by Thurs. (2-13), Behrooz can send it to Secretary Phil Paule for review. If not, Behrooz will remove from this meeting's agenda.

    - V.B. (*see 2013 Groundwater Productions)* Behrooz will use this document to put together a presentation for the Watermaster meeting. The first column shows the base production rights of the agencies, May through December 2013. The data was compiled by EMWD based on data received from agencies. Behrooz requested that the agencies review the numbers – every 10 AF mistake will translate to $5,000.The third column shows agencies whose production is more than their base production rights (EMWD and LHMWD).Column four shows agencies with unused adjusted base production rights (Hemet and San Jacinto) which gives them carry over credit. EMWD and LHMWD have pre 2012 recharge credit which has a sunset clause. Those agencies need to indicate in a letter that they want to use their pre 2012 account first to pay for their excess production in 2013.

    - V.C. Approve Groundwater Simulation Model Development cost sharing 2014 with EMWD– EMWD has received proposals which are being reviewed. The selected proposal and status of the project will be presented to the Watermaster at the next meeting.

    - V.D. Data Management Project (*see Data Management Project, Sole-Source Justification)* – Behrooz will recommend that the Watermaster approve Spatial Wave Inc. to set up and maintain a groundwater database management system and perform annual maintenance on the system. Spatial Wave has worked with EMWD to develop the agency's data base and they are familiar with EMWD's GIS data. Spatial Wave has the authorization to access EMWD hardware. If another consultant is utilized, it would increase the cost.

If the TAC approves, Behrooz will propose that the Watermaster sole-source with Spatial Wave. Behrooz has a draft scope of work he can distribute to different consulting firms if requested. The cost estimate is approximately $15,000, not to exceed $20,000. The extra $5,000 would be for annual maintenance. Behrooz will request that the data be stored on Cloud server. **TAC approved the proposal to Sole-Source Spatial Wave by consensus.**

- VI. Information items

  - VI.A. Insurance Agreement with Edgewood Partners Insurance Center – general liability, public officials liability and excess liability coverage not to exceed $3,200 per year.
  - VI.B. Bookkeeping Agreement with Bell Bookkeeping Services – not to exceed $6,000 per year.
  - VI. C. Education and Training Budget – Overview of the 2014 education and training budget - $15,000 for Watermaster education. Behrooz explained that this budget item would allow Watermaster members to attend conferences such as ACWA or Water Foundation. This would be especially helpful for the cities.

VII. Closed Session

  - VII. A. General Counsel Agreement
  - VII. B. Advisor Agreement
  - VII.C. Administrative Assistant Hiring Options – Behrooz will discuss options with the Board. He hopes to hire someone by the end of March. There were seven applicants; Behrooz interviewed five. One of the requirements is that the person hired understands that it is a part-time position without benefits (16 hours per week). Duties would include helping with the minutes and planning the Watermaster agendas and over time, be responsible for the invoices and billing. Behrooz noted that there are a couple of qualified candidates.

- 2013 Administrative Assessment Final Invoices

  Behrooz told the agencies to expect invoices soon. This payment will be the third and final installment for 2013.

- Financial Audit Status – EMWD has issued an RFP for a firm to do the audit and has received proposals. Behrooz will inform TAC when more information is available.

III. 2013 Groundwater Data Accuracy Issues

Behrooz met with Paul, Charlie and Brian concerning some of the data collected for spring 2013 water level that is not accurate and/or not collected. EMWD collects water level data in spring and fall. As work began on the annual report, it was observed that the data is inaccurate. Spring data is collected after the winter rainy season when the wells are shut off. A good data set for 2013 for the northern part of upper San Jacinto basin is missing. EMWD has taken corrective action to fix the problem.

IV. Recharge Deliveries from MWD for 2014

(*See EMWD project report above)*

Behrooz requested a presentation on drought for the Watermaster meeting.

V. Data Sharing and Revision Protocol

Behrooz requested that data from each agency to be validated and certified within a month from the time it is collected. Once all the data is collected for a year, (January – December), Behrooz would like any corrections related to the data base to be reflected before Feb. 1of the following year.

The protocol is: **By Feb. 1, certify that data is correct for the previous calendar year.**

VI. DWR Report

Alex Vdovichenko reported:

- Integrated Regional Water Management Grant Program
  - On February 4th DWR announced the final awards for the 2nd Implementation Grant Round
  - $131 million has been awarded from the current appropriation and additional $21.8 million has been awarded from the future appropriation
  - SAWPA IRWM region was fully awarded for the amount of $16.7 million.
  - 50% of the grant funding is coming from the current appropriation and another 50% depends on the future appropriation

    - Next, DWR will send the commitment letters and will start working with IRWM regions to develop grant agreements
- In January DWR released the Plan Review Process.
    - The Plan Review Process is used to review IRWM plans for consistency with the 16 plan standards contained in the grant program guidelines.
    - The review of IRWM plans is need to determine eligibility for the 3rd Implementation grant rounds
- The schedule on the DWR website for the 3rd Implementation grant round is still a good estimate. DWR plans to start the 3rd round this summer if we have funding appropriation.
    - The deadline for the application is expected to be set for the winter 2015.
    - At the end of February DWR will conduct Process Improvement workshops
        - Three workshops, one in Redding on Feb.18th, one in Sacramento on the Feb. 25th, and one in Irvine on the Feb. 27th.
        - The Sacramento workshop will be webcasted
        - These workshops will provide an opportunity to change or improve the process for the IRWM grant program
        - If you are interested to participate you can find more information about these workshops on the DWR website.

Next Meetings:

- **March 10, 2014 – TAC Meeting**
- **April 14, 2014 – TAC Meeting**

MEMORANDUM

May 13, 2014

TO: TAC MEMBERS

FROM: Dale Schafer

RE: TAC Meeting Notes, April 14, 2014

Members in attendance: Behrooz Mortazavi, Watermaster Advisor; Paul Jones, EMWD; Nick Kanetis, EMWD; Charlie Bachmann, EMWD; Brian Powell, EMWD; Khos Ghaderi, EMWD; Tom Wagoner, LHMWD; Ron Proze, Hemet; Dan Mudrovich, San Jacinto; Lynn Merrill, San Jacinto; Steve Pastor, Private Pumper, Frank Coates, Soboba representative; Alex Vdovichenko, DWR.

Handouts: Hemet-San Jacinto Watermaster Agenda, April 28, 2014; San Jacinto Groundwater Basin Regional Numerical Flow Model Update,2014;Geotechnical Evaluation of Integrated Recharge and Recovery Program (IRRP) Ponds; Hemet/San Jacinto Groundwater Management Area 2013 Annual Report; Revised Carry-Over Credits as of December 2013.

I.Agency Reports

- EMWD Project Report

  Brian and Charlie reported:

  EMWD will not receive recharge water from SWP in the near future, therefore the management area will not recharge 7500 AF from MWD this year. EMWD presented an in-lieu proposal. EMWD would reduce groundwater pumping by 7500 AF and leave that water in the basin for the benefit of the management area participants. EMWD would make up the 7500 AF by ramping up the amount of water going through the Hemet water filtration plant and supplement that water with water from the Perris valley. The cost to the agencies would be close to equal the cost of purchasing the SWP water from MWD. The purchase price of settlement water is $468 AF plus $78 AF to transport the water to the recharge basin. The cost to pump the water out of basin is $147 AF. The two year average amount to treat water at the Hemet filtration plan is $225 AF.

  EMWD is seeking approval from the TAC for this in-lieu process. If approved, EMWD will take the proposal to MWD.

Discussion:

- Paul noted that this process would avoid the recharge of higher TDS water (Colorado River water) into the basin.
- Behrooz noted that this process would recharge water directly into the saturated zone of the groundwater basin. This is beneficial as it can take years for water that is recharged into the basin to reach the saturated zone.
- Tom requested the time table for the in-lieu process.
- Charlie answered that EMWD believes that close to 7500 AF can be recharged into the basin in 2014.
- Steve asked if the operation would cease if there is abundant rain in the fall/winter months of 2014.
- Charlie noted that if MWD offers water for direct recharge, EMWD would stop the in-lieu process and recharge water from MWD at the ponds.
- Behrooz indicated that the agencies need to communicate to their boards/councils that the charges for the in-lieu process are necessary to offset EMWD's expenses.
- Steve asked if the water quality would affect the growers.
- Khos answered that the all the water delivered to the growers would be Colorado River water and therefore, have a higher TDS.

All the TAC representatives agree that EMWD should take the proposal to MWD for approval.

- Paul noted that MWD can consider the proposal without having to take it to their board.

- <u>LHMWD project report</u>

  Tom Wagoner reported:

  - Well no. 16 in Canyon basin is complete -meters were installed last week.
  - Bautista Ponds Recharge Project – Riverside County Flood Control has begun the initial environmental work for the project.
  - Little Lake Retention Basin –the project is to lower the existing basin five feet for recharge and is in conjunction with RC Flood Control who will fund one-half the cost. CEQA is

complete. Construction bids for this work will take place in the spring.

- Joint project w/ EMWD – This project is an interconnection between EMWD well 92 and the Reach 5 raw water pipeline. This allows LHMWD to use previously recharged water either in its agriculture system or its domestic system via the existing EMWD Reach 5 pipeline or the Booster Plant LHMWD purchased from EMWD. This would provide more options to LHMWD instead of just a single option of putting water only into its domestic water system.

- Hemet project report
  Ron Proze reported:
  - Well no. 4 is back online.
  - The Hemet City Council needs to approve the rehabilitation of well no. 16 which will be back on line this week producing 1500 – 1700 GPM.
  - Interagency Connection with EMWD – The City is looking to establish a second interagency connection with EMWD which would allow for emergency delivery of recharge water in the event Hemet needed it. The current connection at Fruitvale with EMWD has a capacity of 750 GPM. The second connection would allow additional capacity.

- San Jacinto project report
  Dan Mudrovich reported:
  - The City Council is gave final approval to imposing a surcharge on water rates which will begin May 1, 2014.
  - The Grand well rehabilitation has been completed and is producing 1250 GPM.

II. Watermaster Advisor Update

- CPT Study Report

(*Refer to Geotechnical Evaluation of Integrated Recharge and Recover Program(IRRP) Ponds)*

- 13,500 AF for 2 years – the percolation rates in northern ponds have reduced overtime - especially after rain events. It is anticipated that MWD will require high recharge rates after the drought to catch up on recharge requirement
- Goals of the Project
  - Set baseline understanding of local geology
  - Determine depth and thickness of fine grained geology, if present
  - Identify viability of remedial actions to increase recharge rates

- Cone Penetrometer Testing (CPT)
  - 18 sites were tested to approximately 100 feet below the ground surface using CPT investigation
  - Determined types of soil layers – clay, silt, sand, etc.

- Analyses show the relative recharge potential of a given area
  - Single coarse grained layer results in high, deep percolation
  - Increased no. of clay and or silt layers results in significantly lower percolation rates
- Results
  - Existence of fine-grained units in localized lenses rather than in extensive continuous layers
  - Few lenses are present on the south side of the ponds resulting in greater deep percolation potential
  - More fine-grained lenses exist on north side of ponds – still high percolation rates, but lower than southern ponds
  - Susceptible to reduced percolation due to storm events

- Actions and Recommendations
  - Remove some very shallow clay layer from under some of the northern ponds
  - Continue to optimize configuration of ponds – ponds yield 15,000 GPM which is near the target of 18,000 GPM

- Continue to monitor percolation rate of each pond under various operation conditions
- Re-evaluate the percolation rates after next recharge season

III. Revised Carry-Over Credits as of December 2013 (*Refer to handout)*

Behrooz will make this presentation to the Watermaster on April 28, 2014.

- In 2013, 7500 AF was accredited as part of Soboba water. Soboba production decreased to1674 AF so the amount of unused water increased for sharing among the agencies.
- Behrooz advised TAC members to save the charts to show how much water can be used in future without having to purchase replenishment water.
- Class A and B participants
  - Behrooz has saved Class A data in case a Class A participant decides to join as a Class B by the end of the allotted three year time period.
  - Note that Class B participants Lauda and Scott take recycled water and are subsidized. The recycled water used by these participants is counted as part of their allocation but it can't be more than their allocation.
  - Behrooz noted that two Class B participants are subject to replenishment assessment as their 2013 production exceeded their allocation. Watermaster advisor will meet with the pumpers to discuss these numbers in more detail.
  - Behrooz is going to recommend to the Watermaster that they wait for the 3 years sunset clause expiration for Class A before assessing the two Class B pumpers for replenishment of their overproduction in 2013.

IV. Hemet/San Jacinto Groundwater Management Area 2013 Annual Report (*See handout)*

Behrooz noted that the annual report documents the groundwater production and other information related to water resources in basin. The annual report will be filed with the court.

- 2013 Demands – highest demands during summer months
- 2013 Annual demands – the most important slide in presentation which shows by entity the groundwater production

and additional sources of supplies to meet demands. The Watermaster is keeping track of the groundwater production. The safe yield is estimated at 40,000- 45,000AFY; based on the 2013 production date of 49,697 AFY, there is still overproduction. Of note is the 6,100 recycled water in-lieu of groundwater production that could have amplified the overproduction.

- Growth projections by 5 year intervals – shows that the area will need additional 15,000 AFY – Stage of Development chart – active construction and planning phase also shows demand for additional 15,000 AFY.
- 2013 Monitoring program results - shows the wells that were measured in spring and fall and minimum and maximum depth to water and water quality data (TDS and Nitrates)
- 2013 monitoring program –includes imported water, river diversion and rainfall monitoring.
- 2013 Budget and Revenues – budget $505,164
    - Assessments collected about $1 million – about $500,000 in reserve - Watermaster has to decide how to use the funds which can be used to purchase water or can be used also for improvement (ex. a recycled water pipeline to be used for golf courses)
- 2013 Unused Soboba Water and Carry-over Credits – already discussed above
- Recycled and In-Lieu program Information
    - Information on the amount of recycled water delivered, the subsidy and the cost
- Class A and B Participants Carry-Over Credits (see above discussion)
- 2013 Watermaster related meetings
    - A record of CAM, TAC and Watermaster meeting
- 2013 Watermaster Agreements – list of agreements

Behrooz noted that the financial audit has not yet been completed. There is a place holder for it on the Watermaster budget section of the report if it is received in time for the Watermaster meeting.

Behrooz asked the TAC to review the draft report and provide comments which he will address before preparing the final report.

Replenishment Assessment

Behrooz needs to set the replenishment rate with the Watermaster. The current amount is $586AF plus $80AF for delivery for next year. Behrooz will have a discussion about the rate with Watermaster in April and will finalize the numbers in June.

Ground Water Model Cost Sharing Agreement

(S*ee San Jacinto Groundwater Basin Regional Numerical Flow Model Update 2014)*

Brian reported:

- EMWD has developed several groundwater models of San Jacinto basin

- 2002 Techlink model – basinwide
    - Based on hydrology information from 1984 – 1997 with a 2 year verification period from 1997-1999
    - Changes since the Techlink model are important for a better understanding of the basin
    - A conceptual model update initiated in 2011 resulted in a revised model configuration that now needs to be calibrated.
  - Groundwater Model Project Goals
    - Consistency by having one regional model
    - Evaluation of groundwater banking
    - Project specific models for potential projects as proposed by EMWD
    - Comply with regulatory requirements
  - Project Tasks
    - Form an advisory panel to peer review the model development
    - Update the model's physical construction based on conceptual model update
    - Calibrate the updated physical model
    - Prepare water balances and safe yield estimates
    - Complete five predictive simulation runs
    - Document the results in a final report

Consultant selected – RMC Water and Environment

Project Schedule – estimate to be completed Mid April 2015

EMWD Board appropriated $478,200 for the project

- Will work out agreement with the Watermaster to fund $120,000 of project costs

2014 Monitoring Program Task Order - to be presented to the Watermaster

V. Soboba Meeting

The Watermaster ad hoc committee will meet with the Soboba Tribal Council April 15, 2014.

VI. Decentralized Water Recharge Basins – San Jacinto

Lynn informed TAC that Dr. Matt Yeagar, who works with SAWPA, came out to review some of the San Jacinto stormwater basins which are in EMWD's service area. Lynn noted that currently, the way the city disposes of water from its detention/retention basins after a rain event is by pumping it out of the basin.The basin continually contain water and the pumping system causes excessive pavement wear and in a rain event, the park is frequently flooded.

Lynn is exploring whether or not turning stormwater detention/retention basins into a recharge facility would be a feasible project to be funded under prop 84.

TAC members questioned whether the Prop 84 drought solicitation grant would be appropriate for the San Jacinto project as the main criteria for the drought is to reduce water demand. An example would be in landscaping – reducing the amount of turf by a replacement program and installing irrigation controllers.

Alex noted that the Prop 84 drought solicitation grant application will be due in July. SAWPA deadline for project submittal is May 22. Paul reported that SAWPA is not going to do a standard call for projects for the drought solicitation because there is not enough time to provide necessary details and cost/benefit analysis. Instead SAWPA plans to put together a regional application for water use efficiency funding – a conservation tool box which SAWPA thinks could be completed in a few weeks.

Plans for the Prop 84 2015 round could include the San Jacinto project. EMWD is currently working with other agencies (Western and San Bernardino) in the SAWPA watershed on developing a project that would

combine groundwater and conjunctive use in a collective watershed use approach. Lynn noted that he could provide necessary data to SAWPA.

Charlie informed Lynn that EMWD could provide San Jacinto with irrigation controllers.

Behrooz reminded the TAC that the drought solicitation projects will compete statewide and that Southern California is not in extreme drought conditions as are other areas within the State. It is not clear how much money will come into this watershed. Demand reduction and water use efficiency are the focus for this round -smart controllers and devices, tiered rates. Behrooz informed the TAC that an EBMUD water smart program provides feedback to customers to let them know how their water consumption compares to their peers. This program has caused 5% conservation.

Brian – watershed wide aerial with sufficient detail to estimate irrigable areas to avoid using man power in this field to do this work can also help the local agencies.

VI. DWR Report

Alex Vdovichenko reported:

- Drought Emergency declared by the governor March 1, 2014. It provides 687.4 million to support grant relief.
- Prop. 84 IRWM funding will provide $472.5 million
- Expedite $200 million for projects that:
    - Provide immediate regional drought preparedness
    - Increase local water supply reliability and the delivery of safe drinking water
    - Assist water suppliers and regions to implement conservation programs and measures that are not locally cost effective
    - Reduce water quality conflicts or ecosystem conflicts created by the drought
- Drought guidelines and PSP for the 2014 drought solicitation are available on the DWR website. The public comment period closes May 15.
- The application review process for this solicitation has been streamlined.
- Public workshops will be held in May: Ventura - May 7, Fresno - May 9, Sacramento - May 12 will be webcasted.
- IRWMPs will have to go through the plan review process to be eligible for the drought solicitation. SAWPA IRWMP is eligible.

- There will be a follow up round 3 grant solicitation in 2015

Dale noted that the drought solicitation has a less complicated application and the economic analysis is not as complicated.

Next Meetings:

- **May 16, 2014 – Class A and B Private Pumpers meeting**
- **June 9, 2014 – TAC Meeting**
- **June 23, 2014 – Watermaster Meeting**

MEMORANDUM

August 15, 2014

TO: TAC MEMBERS

FROM: Dale Schafer

RE: TAC Meeting Notes, June 9, 2014

Members in attendance: Behrooz Mortazavi, Watermaster; Michelle Mayorga, Watermaster; Paul Jones, EMWD; Nick Kanetis, EMWD; Charlie Bachmann, EMWD; Brian Powell, EMWD; Khos Ghaderi, EMWD; Tom Wagoner, LHMWD; Ron Proze, Hemet; Chris Jensen, Hemet; Dan Mudrovich, San Jacinto; Lynn Merrill, San Jacinto; Steve Pastor, Private Pumper, Frank Coates, Soboba; Alex Vdovichenko, DWR.

Handouts: Hemet-San Jacinto Watermaster Agenda, June 23, 2014; letter from MWD to EMWD entitled "Soboba Settlement Water Delivery Agreement Response to EMWD's Request for in-Lieu Delivery"

I. Agency Reports

- EMWD Project Report
  Brian reported:
  - Groundwater Monitoring Program –currently, EMWD is measuring spring water levels, taking water quality samples and reading water meters.
  - Regional Water Resources Data base – EMWD is working with Behrooz and progress is being made.
  - Canyon Operating Plan – EMWD continues to work with LHMWD and the Sobobas on the Plan. There are still some minor issues to resolve. The plan will probably be completed in July. Behrooz asked Brian to present an update on the Plan at the Watermaster meeting on June 23. It is on the agenda as an information item.
  - Groundwater Model Update – The first workshop was held with consultant, RMC. The consultant will convert the conceptual model for the groundwater basin into numerical model.

- MWD agreed with EMWD's in-lieu proposal for temporary in-lieu water through December 31, 2014. *(See MWD letter referenced above)*. EMWD would reduce groundwater pumping by 7500 AF and leave that water in the basin for the benefit of the management area participants. EMWD would make up the 7500 AF by ramping up the amount of water going through the Hemet water filtration plant. The cost to the agencies would be close to equal the cost of purchasing the SWP water from MWD. The purchase price of settlement water is $468 AF plus $78/AF to transport the water to the recharge basin. EMWD's cost to pump groundwater is $147/AF. The two year average cost to treat water at the Hemet filtration plan is $225/AF. Difference between groundwater production and using Hemet filtration water for EMWD is $78/AF. Agencies will pay this cost difference as part of the in-lieu water deliveries.

- <u>LHMWD project report</u>

  Tom reported:
  - Canyon Operating Plan
    As reported above, the details of the Plan are almost complete. The interests of all parties are being considered.
  - LHMWD may request that their portion of the settlement water be recharged at the Grant ponds in the canyon basin rather than in the recharge ponds in upper pressure basin.
  - Well No. 16 in canyon basin should be on line within a couple weeks.
  - Bautista Ponds Recharge Project – This is the proposed project between LHMWD and Riverside County Flood Control whose legal council is now reviewing the project. Flood Control is proposed to be the lead agency for CEQA.
  - Joint project w/ EMWD – This project is an interconnection between EMWD Well 92 and the Reach 5 raw water pipeline. It would allow LHMWD to use previously recharged water either in its agriculture system or its domestic system via the existing EMWD Reach 5 pipeline or the Booster Plant LHMWD purchased from EMWD. This would provide more options to LHMWD instead of the single option of putting water into its domestic water system. The project is underway.

- Hemet project report
  Ron Proze reported:
    - Hemet is experiencing water quality problems – currently, two wells exceeded 45 mg/L Maximum Contaminant Level (MCL) for nitrates.
    - Ron noted the need for recharge in Hemet basin due to the water quality changes. Behrooz commented that in the past EMWD considered developing recycled water storage ponds on the east side of Diamond Valley Lake for storage for Hemet. He also noted that Hemet can receive some of its demand from the three IRRP wells in upper pressure basin.
    - Interagency Connection with EMWD – The City is working to establish a second interagency connection with EMWD which would allow for emergency delivery of recharge water in the event Hemet needed it. The current connection at Fruitvale with EMWD has a capacity of 750 GPM. The second connection would allow additional capacity.

    - San Jacinto project report:
      Dan Mudrovich reported:
        - Groundwater well meter readings are in process. The City observed a 10 percent increase in water usage in May due to the hot weather.

II. Soboba Tribal Council Meeting – April 14, 2014

Behrooz reported that Ms. Kruppa and Mr. Scott were present at the meeting representing the Watermaster. Behrooz presented information from the Watermaster annual report. The group discussed productions in 2013 and also talked about the Canyon Operating Plan. The Tribal Council has requested a meeting with the Watermaster every 6 months, the next meeting is scheduled for October 14, 2014.

III. Class A and Class B Pumpers Meeting – May 16, 2014

Steve reported that about half a dozen pumpers attended the meeting. Behrooz presented information concerning Watermaster activities during 2013 and the pumpers' groundwater production. He noted that two Class B participants were over their allocation in 2013. At the next Watermaster meeting, Behrooz will propose the deferral of replenishment assessment for the two pumpers for another two years. Since Class A participants have three years to decide whether to become Class B participants and would not have to pay replenishment unless and until they decide to become Class B participants, it would not be equitable to require the two Class B pumpers to pay replenishment assessment this year. The two pumpers will have 2 years to reduce their pumping to offset their overproduction to meet the total amount of their allocation.

The TAC suggested that since Bruce Scott, the private pumper Watermaster representative, is one of the pumpers who pumped over his allotment, he should recuse himself from the Watermaster vote on this matter.

III. Watermaster Advisor Update

Watermaster Agenda

- Action Items
  - Approve the 2013 Financial Audit – Nigro and Nigro Accounting Firm will make a presentation.
  - Consideration to Adopt Resolution No. 7 RE Addition of Base Production Rights to the Van Dam Family trust –a new parcel was added to the Van Dam property.
  - Replenishment Assessment Proposal – deferral of the replenishment for the two pumpers who pumped over their allotment (see above).
- Informational Items
  - Canyon Operating Plan (see above).
  - Letter from MWD (see above).

VI. DWR Report

Alex Vdovichenko reported:

- Final guidelines and PSP for the 2014 Prop. 84 drought solicitations were released on June 2, 2014.

- $200 million will be expedited for projects that:
  - Provide immediate regional drought preparedness.
  - Increase local water supply reliability and the delivery of safe drinking water.
  - Assist water suppliers and regions to implement conservation programs and measures that are not locally cost effective.
  - Reduce water quality conflicts or ecosystem conflicts created by the drought.
- Applications are due on July 2, 2014
- Workshops will be held in Bakersfield on July 18, 2014 and in Sacramento on July 20, 2014 which will be webcasted.
- The application review process for this solicitation has been streamlined and less information will have to be submitted.
- The grants will be awarded statewide – therefore, all regions will be competing against one another.
- Maximum grant award will be limited to 75% of the allocation for the region.

Dale noted that the majority of the submitted comments asked DWR to extend the deadline to August 1, to cap the allocation for the region at 50%, and to make the competition regional.

TAC members questioned what SAWPA was going to submit. Behrooz noted that because this funding round is on such a fast track that SAWPA region's agencies won't have the time to compete internally for their projects to be included. Instead, SAWPA will submit a regional application for about $10 million with four elements.

Elements:

- Aerial imagery for watershed

- Conservation based water rate – Workshops would be held in each county by SAWPA to go over this project in more detail. Interested agencies could apply to EMWD as the lead agency for SAWPA. Agencies will receive funding to examine water efficiencies. If an

agency decides to continue, the next step would be a conservation based water rate feasibility study followed by conservation rate pricing planning, then implementation.

- Landscape conversion incentive – MWD is currently offering $2 per square foot and SAWPA will include another dollar to raise the amount to $3 per square foot for large commercial areas or city parks, etc. not individual homes to remove grass and replace with water use efficiency landscape. Behrooz requested that TAC members let EMWD know if their agencies are interested in this project and have landscaping to convert.
- Technically based water use reduction – An outreach approach where notices are sent to customers telling them how their water use compares with their neighbors is the main objective of this project. Behrooz noted that it has been found that just the awareness makes people conserve more.

Behrooz informed TAC members that none of the Southern California regions are considered to be in exceptional drought, so it is hard to predict how DWR will distribute the $200 million grant funds within the State.

Hemet-San Jacinto Watermaster
Technical Advisory Committee (TAC) AGENDA, August 11, 2014
EMWD – 12:30 p.m.

- Agency Reports:

  1. EMWD
     a. In-lieu Recharge – Status
     b. Groundwater Model Project - Status
     c. Canyon Operating Plan Study - Status
     d. Assembly Bill 1739 and Senate Bill 1168 - Overview
     e. Other activities
  2. LHMWD
  3. City of Hemet
  4. City of San Jacinto

- Watermaster advisor update
  - Draft August 25, 2014 Watermaster Agenda
  - Groundwater Model Project – Presentation

- Next Meeting October 13, 2014.

MEETING MINUTES
August 11, 2014
TAC Members

EMWD Staff Present:	Paul D. Jones, General Manager, Nick Kanetis, Deputy General Manager Charlie Bachmann, Assistant General Manager of Planning, Engineering and Construction; Brian Powell, Director of Planning; Khos Ghaderi, Director of Water Operations Danielle Coats, Legislative Analyst
City of Hemet Staff Present:	Ron Proze, Water/Wastewater Superintendent
City of San Jacinto Staff Present:	Lynn Merrill, Public Works Director; Dan Maudrovich, Water Utilities Superintendent
Lake Hemet Staff Present:	Mike Gow, City Engineer
Private Producers	Steve Pastor, Private Pumpers Representative
Watermaster Staff Present:	Behrooz Mortazavi, Michelle Mayorga (Water Resources Engineers),
Others Present:	George Corden, C&R Farms

I. Agency Reports

EMWD Project Report

A. Assembly Bill 1739 and Senate Bill 1168 Overview
Attachment 1

Ms. Danielle Coats presented an update on the Legislative Bills that are moving through Legislation that address ground water in California. These bills are a work in progress and are changing daily.

Ms. Coat's explained how the Governor releases the "California Water Action Plan" which calls for actions to expand water storage capacity and improve groundwater management to be developed for a successful water supply management.

AB 1739 was introduced by Assemblyman Dickinson. SB 1168 was introduced by Senator Pavely. Both of these bills are identified as a work in progress and both authors became the principal co-author on the other's bill.

Draft language for both bills emerged on July 29th and has been amended as of August 7th. The requirement to develop a Groundwater Sustainability Plan under both bills does not apply to: Adjudicated basins or low and very low priority basins as set by DWR, although the low and very low basins are encouraged to adopt a plan.

2015 will serve as the baseline for developing a sustainable groundwater plan. By January 2016, DWR/State Board will develop guidelines for evaluation plans and alternatives. January 2017 DWR will prioritize each basin as high, medium, low or very low. January 2020 all high and medium priority basins will be managed under a plan and all agencies must certify with DWR that its plan meets sustainability. January 2022 DWR evaluates plans and issues an assessment. In January 2025 the first update of the 2020 Sustainability Plan. January 2030 sustainability plan updated. January 2035 Sustainability Plan will be updated. January 2040 achieve sustainability objectives established in 2020. DWR can grant 5 year extension for a total of 10 years for showing good cause. Bulletin 118 basin boundaries will serve as the foundation; however a local agency may petition DWR for a revised boundary. A local agency or a combination of local agencies may develop a Groundwater Sustainability Plan together with an MOU or through a JPA. Agencies may adopt a fee to implement the program.

Groundwater Sustainability Plans are required to be submitted to DWR following the adoption of the plan, and every five years after that; Sate Board and DWR will be developing a fee schedule to recover costs of oversight and implementation. Currently the drought is not a trigger for state intervention.

The State backstop may occur in 3 situations: 1) If after January 1, 2017 a groundwater sustainability agency has not been conformed 2) After January 31, 2020 a Groundwater Sustainability Plan/alternate plan has not been adopted by the local agency(s) and 3) DWR/State Board has determined that the Groundwater Sustainability Plan is inadequate or is not being

implemented, and the basin is in a condition of long-term overdraft or extractions result in significant depletions.

There are areas within legislation that are unclear or not defined. The annual data that is required to be submitted to DWR is a little unclear; what information would DWR want to see for adjudicated basins and how will the public be involved; clarifications on the process and timeline for DWR's review of the groundwater sustainability plan; how and when will CEQA apply to the sustainability plans; what happens when there are conflicts within the same basin and what happens when a jurisdiction encompasses multiple basins; and how will basins not currently identified as high or medium priority basin be incorporated if DWR reprioritizes them.

Ms. Coats was asked what the position of EMWD was on these Bills. She replied that EWMD is watching closely and commented that there are areas of concern. As of today, EMWD does not have a formal position. The question was asked if the responsibility could be moved to the Regional Board or would it stay with the state. Ms. Coats replied that as of now, DWR is in charge of reviewing the planning and the State Board is in charge of intervening. The question was asked how this applies to the Watermaster. Mr. Jones answered that the Watermaster would be exempt. Mr. Mortazavi asked it Metropolitan Water District will be getting involved. Ms. Coat's replied that they have actively been involved with the Bills but have not commented. The question was asked how low and very low basins are defined. Mr. Mortazavi answered that all of the basins in our area are defined as high priority by DWR. There are areas in Imperial County and Mojave that are classified as low priority. Ms. Coat's will also be making this presentation at the Watermaster Board meeting on August 25, 2014

B. In-lieu Recharge - Status
Attachment 2

Mr. Ghaderi presented a status update on In-Lieu Water Deliveries and the methodology of tracking this water. The goal for this year is close and looks promising.

Mr. Bachman mentioned that the in-lieu deliveries started in July. So as demand increases, August should show demands of about 1,000 acre feet. Mr. Mortazavi asked if EMWD had increased its target and Mr. Ghaderi confirmed that target number had increase to approximately 5,800-6,000. Mr. Ghaderi also confirmed that public agencies have not yet been invoiced for the delivered water.

C. Groundwater Model Project – Status

Mr. Powell reported that EMWD has had its second meeting with the advisory panel. USGS was satisfied with the progress. Another advisory panel meeting is scheduled for later in August. The timeline for completion is about a year with a completion date of April 2015.

D. Canyon Operating Plan Study – Status

Mr. Powell reported that the District is putting together its final comments and will submit to the consultant who will finalize the report. After the report is finalized, the report will be distributed.

E. Other Activities - None

LHMWD Status Report – Mike Gow

It was reported that LHMWD wanted to thank EMWD for their help with the interconnection of Well 92. Mr. Mortazavi asked if Well 16 was up and running. Mr. Gow confirmed that it is.

Hemet Status Report – Ron Proze

It was reported that the City of Hemet would like to thank EMWD for their help with the tie in for emergency water. The city is continuing to work with the state to get their Nitrate Blend Plan for their wells. Mr. Mortazavi asked about the City's Nitrate plan and Mr. Proze responded that the City will be blending system water with wells 14 and 4 using a booster pump. The City is expecting Wells 14 and 4 to come online by the end of September.

San Jacinto Status Report – Dan Mudrovich

Mr. Mudrovich reported that there has been an overall decrease in water usage over the last two months. This could be in part because of conservation efforts or the new fee increase.

II. Watermaster Advisor Updates
Attachment 3

Mr. Mortazavi presented the draft agenda for the August 25th Hemet – San Jacinto Watermaster Board meeting. There are no action items on the agenda for the next Board Meeting.

Groundwater Model Update Status Report
Attachment 4

Mr. Mortazavi presented an update on the Groundwater Model. The modeling that is underway includes the whole groundwater basin. There have been several modeling efforts within the San Jacinto Groundwater Basin beginning in 1975. The 2014 San Jacinto Groundwater Basin model will have approximately 50,000 cells in each layer. The model will have 3 and/or 4 layers in different regions. This project is scheduled to be complete by April 2015. There are 6 tasks for this project. They include project management, data collection and analysis, model configuration refinement, model calibration, predictive simulations and reporting. There are 6 advisory panel meetings with an option for a 7th. There have already been 2 advisory panel meetings with a 3rd meeting scheduled for August 28th. There will also be technical memorandums that will be generated by the consultant. The Watermaster's interest in the Model is in the calculation of the safe yield which determines how much production needs to be cut back. The advisory panel include: representatives from Department of Water Resources, Regional Water Quality Control Board, a Local Groundwater Expert and U.S. Geological Survey. The consultant has developed landuse maps which identifies type of soil , runoff, and amount of percolation. The average applied water from 1984 – 2010 was approximately 300,000 acre feet per year. However, out of that only 21% is estimated to have returned into the groundwater basin. At the conclusion of the project, the consultant is scheduled to make 2 presentations, one to the TAC Members and one to the Watermaster Board. Mr. Merrill commented that aerial mapping of agriculture has recently been done of Riverside County and if that this information could be used. Mr. Mortazavi answered the model period is 1984 through 2012, and the information that is used in the Model is the data from the corresponding years. Mr. Merrill shared that there is a gauge at Ramona Expressway that measures the flow downstream of Mystic Lake. This information has been used on the Comprehensive Nutrient Reduction Plan (CNRP) for water quality issues. Mr. Merrill will be sending Mr. Mortazavi and Mr. Powell a copy of the CNRP and the flow data for downstream of Mystic Lake.

Next Meetings:

- **October 20, 2014 – TAC Meeting**

Status of In-Lieu Water Deliveries

Khos Ghaderi, P.E.
Director of Water Operations
August 11, 2014

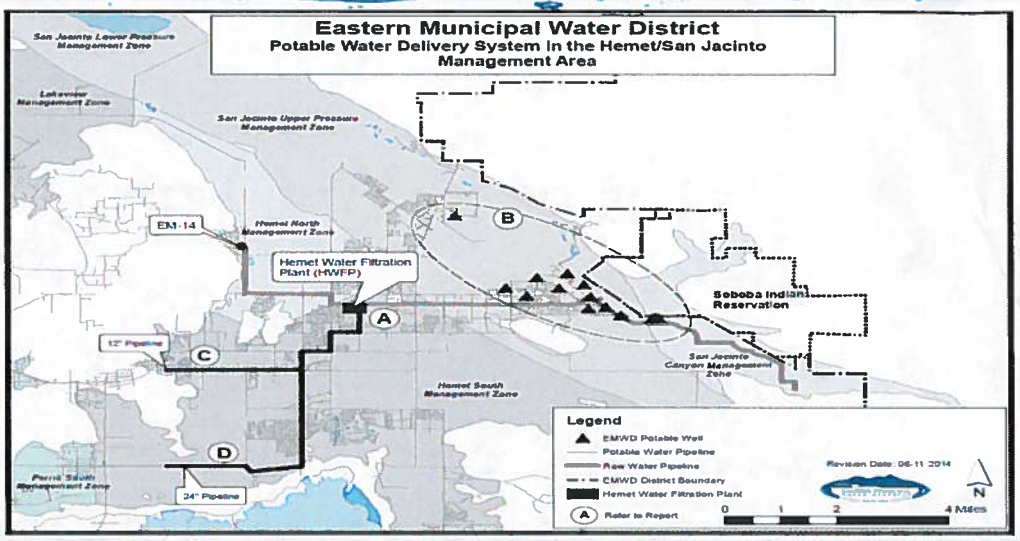
Background

IRRP Recharge		
Mo/Yr	AF/mo	YTD (AF)
Jun-12	412	412
Jul-12	802	1,214
Aug-12	1,001	2,215
Sep-12	816	3,031
Oct-12	1,031	4,062
Nov-12	1,343	5,405
Dec-12	347	5,752
Total		*5,752*
Jan-13	685	685
Feb-13	718	1,403
Mar-13	827	2,230
Apr-13	1,362	3,592
May-13	1,543	5,135
Jun-13	1,647	6,782
Jul-13	728	7,510
Total		7,510

- Maximum sustained recharge rate;15,500* gallons per minute (gpm)
- Required flow rate for 42 cubic feet per second (CFS);18,860 gpm
- Shortfall; 3,360 gpm

* Flows were subject to operational constraints

In-Lieu Area



In-Lieu Reporting Method 1

GROUNDWATER OPERATIONS

		IN-LIEU BASELINE June 2013 thru December 2013 GW Production DATA (AF)								ACTUAL OPERATIONS June 2014 thru December 2014 (AF)							
Well Designation	Account #	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
14 West River	81387-01	17.8	144.2	113.3	124.3	91.6	0.0	0.0	491.2	0.0	9.1	0.0	0.0	0.0	0.0	0.0	9.1
17 Cienega	19390-05	152.7	184.8	143.0	156.4	129.4	5.4	117.2	888.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25 Esplanade	90195-01	186.1	163.9	129.7	180.0	169.5	145.8	167.1	1042.0	0.0	29.9	0.0	0.0	0.0	0.0	0.0	29.9
26 Cienega	76995-01	189.6	221.4	171.2	171.5	131.9	185.2	173.6	1244.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27 Hewitt/Evans	91704-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29 Oleandt Well	41968-01	175.8	216.3	161.3	199.1	181.8	178.4	8.5	1123.3	0.0	35.1	0.0	0.0	0.0	0.0	0.0	35.1
33 Mountain (Not turn on!)	104817-01	0.0	96.7	86.0	100.4	104.1	99.4	62.4	581.3	54.7	35.6	7.3	0.0	0.0	0.0	0.0	97.6
34 Cienega	105069-01	122.5	149.3	116.9	122.7	76.3	109.6	4.0	703.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35 Palm/Menlo	107017-01	10.4	129.3	85.8	129.3	89.8	0.0	0.0	444.7	0.0	16.8	0.0	0.0	0.0	0.0	0.0	16.8
36 Washington	107107-01	108.4	189.7	147.8	167.8	156.7	63.3	21.9	856.2	0.0	9.3	0.0	0.0	0.0	0.0	0.0	9.3
80 7th Street	107099-01	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90 Evans/Old Mtn. (Not turned on!)	107214-01	198.5	212.3	164.5	118.9	0.0	0.0	157.2	851.6	173.2	233.7	22.8	0.0	0.0	0.0	0.0	429.7
91 Ramona/Esp	107215-01	5.8	168.7	126.2	123.5	131.2	159.2	34.2	900.8	62.7	177.2	17.8	0.0	0.0	0.0	0.0	257.7
92 Ramona/Hemet	107215-01	182.2	194.5	91.6	101.5	98.4	101.0	91.5	860.7		6.4						6.4
Total GW Production ("B" on attached figure)		1270.3	2073.3	1551.4	1675.6	1422.8	1048.0	857.5	9896.9	290.6	553.6	48.1	0.0	0.0	0.0	0.0	892.2
									Groundwater Underproduction	979.7	1517.8	1503.3	1675.6	1422.8	1048.0	857.5	9004.6

HEMET WATER FILTRATION PLANT SYSTEM DELIVERIES

	June 2013 thru December 2013 DATA (AF)								June 2014 thru December 2014 (AF)							
	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
Metered HWFP Production ("A" on attached figure)	349.5	478.7	503.5	466.7	454.4	378.1	316.6	2947.8	827.4	833.8	102.1	0.0	0.0	0.0	0.0	1763.2
Metered flow to the West																
12" P/L ("C" on attached figure)(Homeland Pump 1 - 33466-01 PP) Pump 2 - 100355-0	1.8	49.3	21.4	32.6	42.9	50.8	10.5	229.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24" P/L ("D" on figure)(Simpson Bypass) 99067-01	22.6	36.6	19.4	54.8	21.5	7.8	36.9	224.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total flow to the West	204.7	497.1	353.6	417.4	457.9	369.3	420.6	3719.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Groundwater going to the West	229.0	585.1	412.4	524.8	523.3	428.4	469.9	3172.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total HWFP going to the West	0.0	106.4	0.0	58.1	68.9	50.3	153.3	437.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total flow to the East	229.0	478.7	412.4	466.7	454.4	378.1	316.6	2735.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Simpson Booster to EV	120.8	0.0	91.1	0.0	0.0	0.0	0.0	211.9	1100.0	1328.9	113.1	0.0	0.0	0.0	0.0	2541.9
CHECK - HWFP flows to the East	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	272.6	495.1	11.0	0.0	0.0	0.0	0.0	778.7
	120.8	0.0	91.1	0.0	0.0	0.0	0.0	211.9	827.4	833.8	102.1	0.0	0.0	0.0	0.0	1763.2

In-Lieu Reporting Method 2

2014 IN-LIEU PLAN

	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTALS
DEMAND	1220	1780	1715					4715
HWFP	827.4	833.8	102.1					1763
WELLS	290.6	553.6	48.1					892
QUALIFYING IN-LIEU	827.4	833.8	102.1	0	0	0	0	1763

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SINCE 1950

QUESTIONS/COMMENTS?

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Groundwater Model Update Status Report

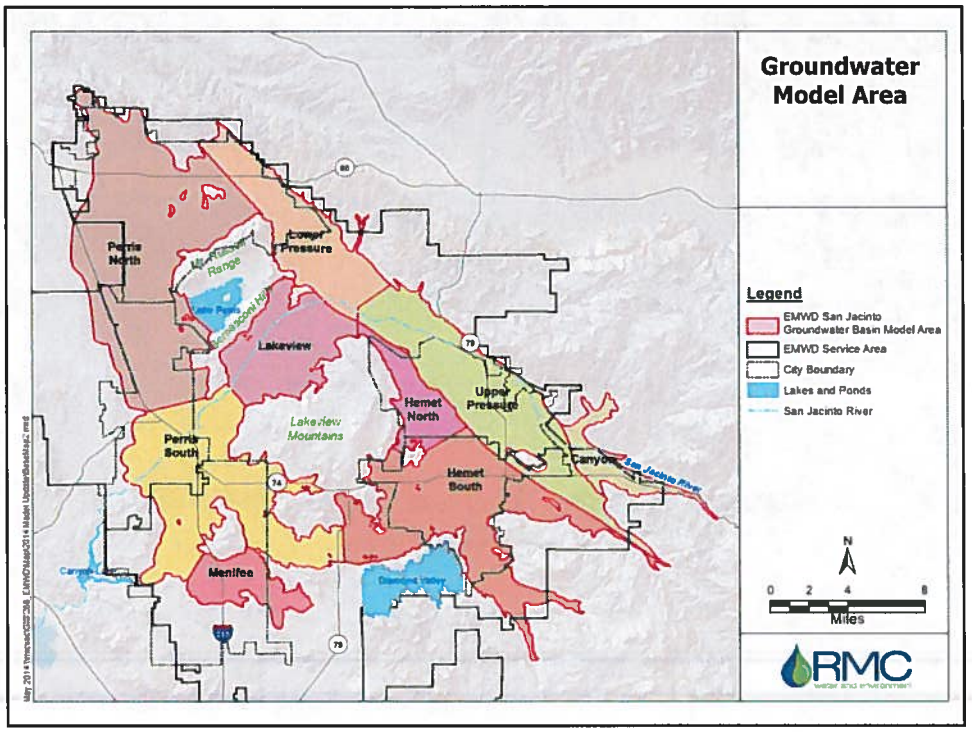
Hemet - San Jacinto Watermaster
TAC Meeting

August 11, 2014

Presentation Outline

- Overview of Project Goals
- Summary of Previous Modeling Efforts in the Region
- Project Schedule and Tasks
- Advisory Panel Members and Workshop Schedule
- Sources of Groundwater Recharge (TAC only)

Recognition: Significant amount of information used for this presentation was developed by RMC (project consultants) as part of the Advisory Panel Workshop presentations.



PROJECT GOALS

Develop an updated and more accurate planning tool to better analyze:

- Physical processes within the groundwater basin
- Regulatory compliance requirements
- Effectiveness/impacts of water resources projects:
  - Integrated Recharge & Recovery Project (IRRP)
  - Groundwater Banking
  - Indirect Potable Reuse (IPR)
  - Desalination System
- Groundwater production impacts/sustainability

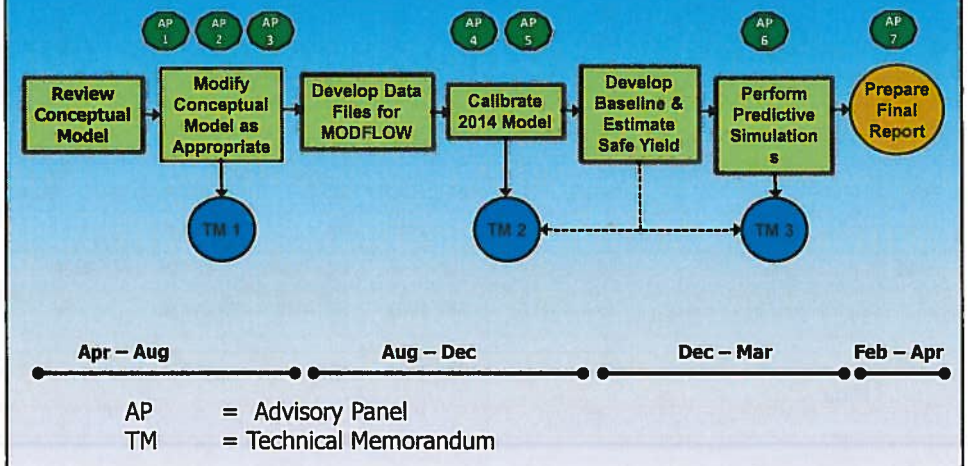
Modeling Efforts within San Jacinto Groundwater Basin

Year	Model Area	Type of Model	Simulation Period	Consultant	Client
1975	San Jacinto Groundwater Basin	Flow & Water Quality (WQ)	1963-1972	WRE & CDM	SAWPA/Santa Ana Regional WQ Board
1991	Upper Pressure (UP), Lower Pressure, Canyon	Flow & WQ	1963-1983	UCLA	MWD, EMWD, SAWPA
1995	Hemet	Flow & WQ	1963-1983	UCLA	MWD, EMWD, SAWPA
1998	Hemet, UP, Canyon	Flow & WQ	1972-1991	DHI	EMWD
2001	Perris North	Flow & WQ	1993-1999	Tetra Tech	EPA/U.S. Air Force
2002	San Jacinto Groundwater Basin	Flow & WQ	1984-1999	TechLink	EMWD
2014	San Jacinto Groundwater Basin	Flow	1984-2012	RMC	EMWD, Watermaster

PROJECT SCHEDULE

Task	Description	2014									2015			
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
1	Project Management													
2	Data Collection and Analysis													
3	Model Configuration Refinement Review with AP													
4	Model Calibration													
5	Predictive Simulations													
6	Reporting													

PROJECT TASKS



AP = Advisory Panel
TM = Technical Memorandum

Advisory Panel Members and Workshop Schedule

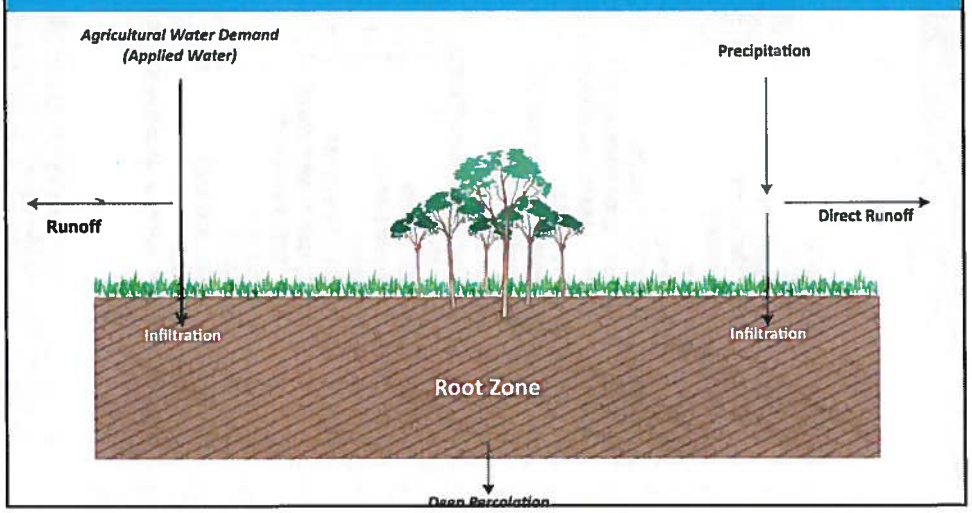
- Mr. Aleksander Vdovichenko (Department of Water Resources)
- Dr. Cindy Li (Regional Water Quality Control Board)
- Mr. Ralph Phraner (Local Groundwater Expert)
- Dr. Tracy Nishikawa (U.S. Geological Survey)

Workshop	Purpose	Approx. Date
1	Review proposed conceptual model	July 16, 2014
2	Review proposed landuse and water recharge components of the model	August 5, 2014
3	Review proposed approach for water balance, safe yield and model calibration	August 28, 2014
4	Review model calibration process	October 2014
5	Review model calibration results	December 2014
6	Review simulation scenarios results	March 2015
7	Comment/review of Draft Report (Optional)	April 2015

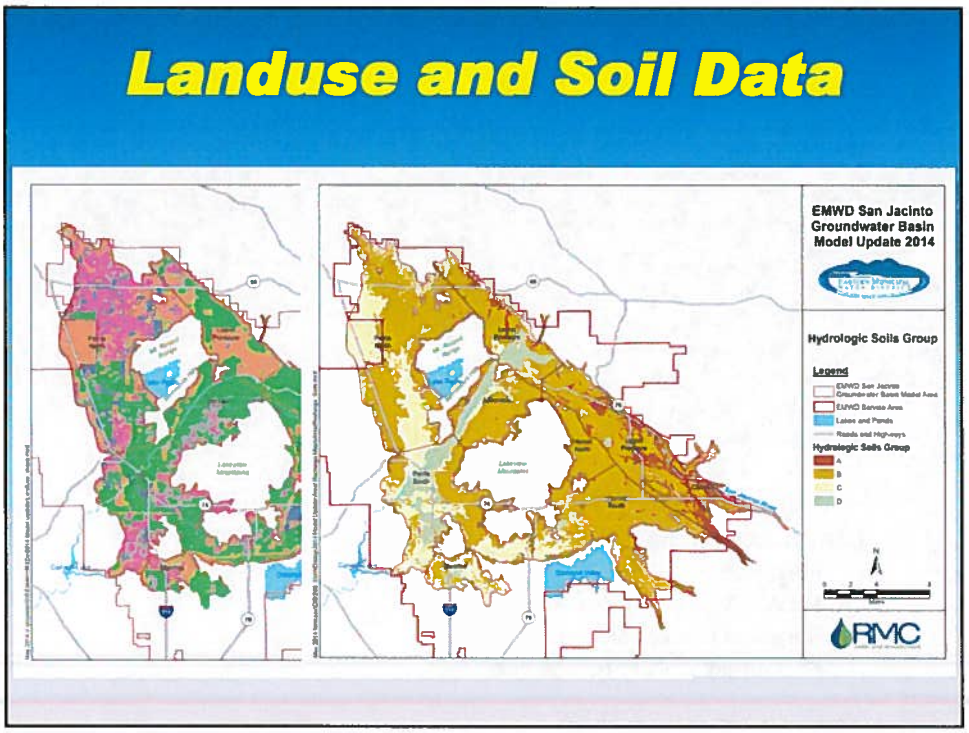
Sources of Groundwater Recharge

- Natural Recharge
  - Precipitation
  - River Recharge
    - San Jacinto River
    - Salt Creek
    - Perris Drain
  - Mountain Front Recharge
- Underflow
  - Lake Perris
  - Diamond Valley Lake
- Distributed Recharge
  - Irrigation
  - EMWD & Subagencies Water Sales
  - Recycled Water Sales
  - Reclaimed Water Storage Ponds

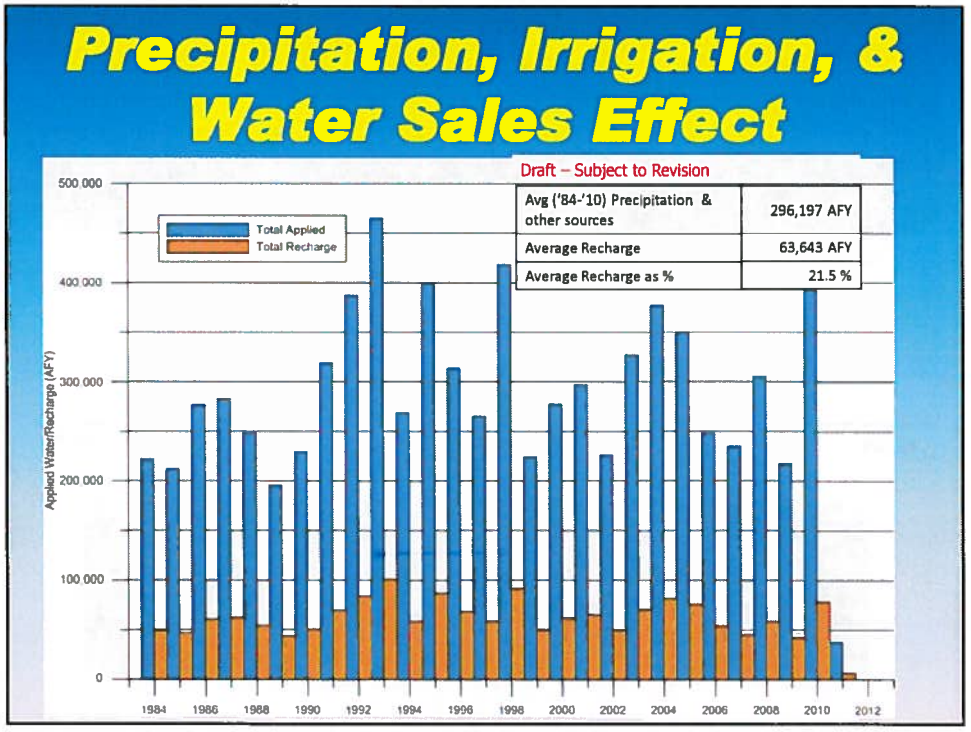
Natural Recharge



Landuse and Soil Data



Precipitation, Irrigation, & Water Sales Effect



Questions/Comments?

SUMMARY OF
SB 1168 (PAVLEY) & AB 1739 (DICKINSON)

THESE BILLS WOULD:

Establish the Sustainable Groundwater Management Act:

- Applies to groundwater basins.
- Applies to the United States & an Indian tribe to the extent authorized under federal or tribal law.

The Act does not apply to:

- Adjudicated basins, except for the provision of the judgment or judicial order & annual reporting of groundwater use.
- Low & very low priority basins, though such basins are encouraged to adopt groundwater sustainability plans.

Timetable:

- By January 1, 2017:
  - Local agencies must identify whether they elect to be, or to form, a groundwater sustainability agency. There can be more than one groundwater sustainability agency for a basin.
  - The entire basin must be covered by one or more groundwater sustainability agencies; i.e. no "unmanaged areas."
  - Counties are presumed to be the default groundwater sustainability agency if no other local agency identifies itself as such; counties may elect, or decline, to undertake the role.
  - If there is more than one groundwater sustainability agency for a basin, the agencies must coordinate their planning.
- By January 1, 2020:
  - Each high & medium priority basin must be covered by an adopted groundwater sustainability plan.
  - If there is more than one adopted groundwater sustainability plan for a basin, the plans must use common data & demonstrate how they are coordinated with each other to achieve the basin objectives.

- Annually, upon adoption of a groundwater sustainability plan:
  - Each groundwater sustainability agency would report to DWR groundwater data, including elevation, aggregate extraction, water usage & change in groundwater storage. ***Note: additional refinements will be made in the bill to address reporting requirements.***
- Every 5 years after 2020:
  - Each groundwater sustainability agency and each local agency with a functional equivalent would recertify it is making progress towards achieving groundwater sustainability.
- By January 1, 2040:
  - Each high & medium priority basin shall achieve its sustainability goals.
  - DWR may grant an extension of up to 10 years upon a showing of good cause.

The groundwater sustainability agency shall:

- Consider the interests of all beneficial uses & users of groundwater, as well as those responsible for implementing groundwater sustainability plans. These interests include, but are not limited to, all of the following:
  - Holders of overlying groundwater rights, including Agricultural & domestic well owners.
  - Municipal well operators.
  - Public water systems.
  - Local land use planning agencies.
  - Environmental users of groundwater.
  - Surface water users, if there is a hydrologic connection between surface & groundwater bodies.
  - The federal government, including, but not limited to, the military & managers of federal lands.
  - Indian tribes.
- Establish & maintain a list of persons interested in receiving notices regarding plan preparation, meeting announcements, & availability of draft plans, maps, & other relevant documents.
- Inform the department of its election or formation & its intent to undertake sustainable groundwater management within 30 days of its election or formation.
- Be presumed to be the County for any area within a basin that is not within the management area of an existing groundwater sustainability agency; counties may elect, or decline, to undertake the role.

Agency powers & authorities:

- In addition to any other powers & authorities an agency may have, upon becoming an groundwater sustainability agency, the agency would be authorized to do the following:
  - To prepare & adopt a groundwater sustainability plan.
  - Adopt rules, regulations, ordinances, & resolutions.
  - To propose & update fees.
  - To monitor compliance & enforcement.
  - To require registration of groundwater extraction facilities.
  - To require every groundwater extraction facility be measured.
  - To appropriate & acquire surface water or groundwater & surface water or groundwater rights, import surface water or groundwater into the agency, & conserve & store that water within or outside the agency.
  - To transport, reclaim, purify, desalinate, treat, or otherwise manage & control polluted water, wastewater, or other waters for subsequent use.
  - File an action to determine the validity of the groundwater sustainability plan.
- This Act does not grant new authorities to groundwater sustainability agencies to do any of the following:
  - Issue permits for the construction, modification, or abandonment of groundwater wells
  - However, a county may authorize a groundwater sustainability agency to issue permits for the construction, modification, or abandonment of groundwater wells.

Contents of the plans:

- A groundwater sustainability plan must include:
  - A planning & implementation horizon of at least 50 years.
  - Measurable objectives, as well as interim milestones in increments of five years, to achieve the sustainability goal in the basin within 20 years of implementing the plan.
  - A description of the physical setting & characteristics of the aquifer system underlying the basin.
  - A description of how the plan helps meet each objective & how each objective is intended to achieve the sustainability goal for the basin for long-term beneficial uses of groundwater.
  - Components relating to the monitoring & management of groundwater levels, groundwater quality degradation, inelastic land surface subsidence, & changes in surface flow & surface water quality that directly affect groundwater levels or quality or are caused by groundwater pumping in the basin.
  - Mitigation of overdraft.
- A groundwater sustainability plan may when appropriate & in collaboration with the appropriate local agencies include any of the following:
  - Control of saline water intrusion.
  - Wellhead protection areas & recharge areas.
  - Migration of contaminated groundwater.
  - A well abandonment & well destruction program.
  - Replenishment of groundwater extractions.
  - Activities implementing, opportunities for, & impediments to, conjunctive use.
  - Well construction policies.
  - Measures addressing groundwater contamination cleanup, recharge, diversions to storage, conservation, water recycling, conveyance, & extraction projects.
  - Efficient water management practices.
  - Efforts to develop relationships with state & federal regulatory agencies.
  - Processes to review land use plans & efforts to coordinate with land use planning agencies to assess activities that potentially create risks to groundwater quality or quantity.

Functional equivalence:

- Local agencies in high and medium priority groundwater basins that demonstrate that current management or operations activities have been consistent with the sustainable yield of the basin over a period of at least 10 years will be in compliance with the plan requirements. ***Note: additional refinements will be made in the bill to address functional equivalency.***

Coordination of multiple plans for a basin:

- If multiple groundwater sustainability agencies cover a basin, there must be a coordination agreement that covers the entire basin & ensures that the plans utilize the same data for the following assumptions in developing the plan:
  - Groundwater elevation data.
  - Groundwater extraction data.
  - Surface water supply.
  - Total water use.
  - Change in groundwater storage.

- Water budget.
- Sustainable yield.

DWR Review ***Note: additional refinements will be made in the bill to clarify this process***:

- By June 1, 2016, DWRs hall develop guidelines for evaluating groundwater sustainability plans & groundwater sustainability programs.
- The guidelines shall identify the necessary plan components & other information that will assist local agencies in developing & implementing groundwater sustainability plans & groundwater sustainability programs.
- Upon completion of a groundwater sustainability plan, a groundwater sustainability agency shall submit the groundwater sustainability plan to DWR for review.
- DWR shall evaluate the groundwater sustainability plan within two years of its submission by a groundwater sustainability agency & issue an assessment of the plan. The assessment may include recommended corrective actions to address any deficiencies identified by DWR.
- At least every five years after submission, DWR, in consultation with the board, shall review the basin conditions and the progress in implementing a groundwater sustainability plan, or a plan or program deemed to be a functional equivalent for consistency with this part, including achieving the sustainability goal.
- DWR shall adopt a schedule of fees to recover costs incurred in carrying out this chapter.

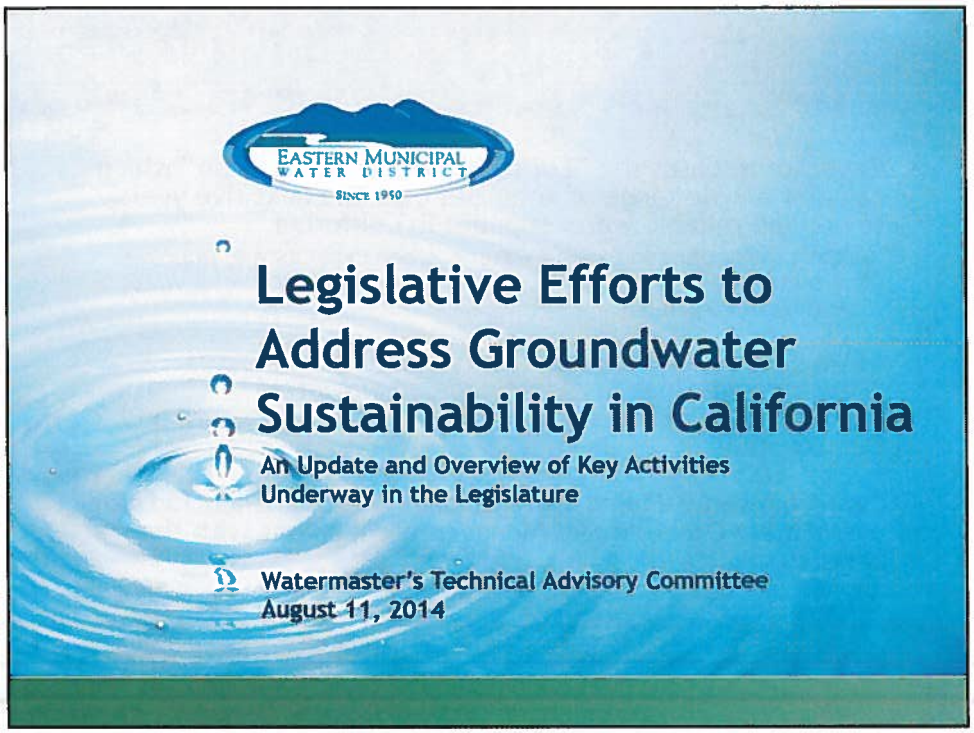
State Intervention ***Note: additional refinements will be made in the bill to clarify this process:***

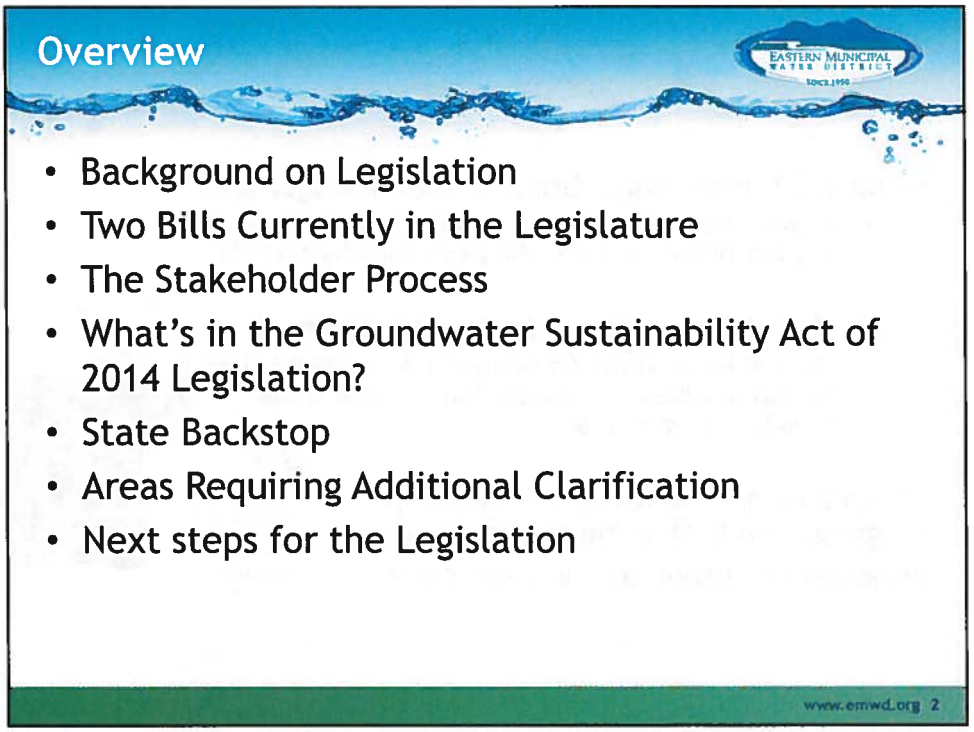
- General provisions:
  - Intervention is not mandatory; the state water board always may exercise discretion.
  - The board has discretion to apply pressure incrementally.
  - 2- & 5-year safe havens for governance & plans, respectively.
- The four conditions that would allow state intervention:
  1. When local authorities fail to have subbasin-wide governance in 2 years.
  2. When local authorities fail to adopt a subbasin-wide plan in 5 years.
  3. When DWR determines that a plan is inadequate & the board determines that the basin is in a state of long-term overdraft or has significant depletions of interconnected surface water.
  4. When DWR determines that implementation is inadequate & the board determines that the basin is in a state of long-term overdraft or has significant depletions of interconnected surface water.
- The board will consult with DWR in assessing overdraft or surface water depletions.
- Long term overdraft is defined so that drought won't trigger intervention.
- Process:
  - If any of the four above conditions apply, the board may designate a basin as a probationary basin:
    - The board is required to identify specific deficiencies.
    - Deficiencies are limited to overdraft or surface water problems – not other problems with plans.
    - Designation triggers a 180-day cure period. During the cure period, the board may appoint a mediator to assist local agencies. The board may require extractors to report extractions.

- If the local agency does not cure the deficiency, the state water board may proceed with an interim plan:
  - The interim plan would address the deficiencies identified in the probation designation & are thus limited to overdraft & surface water issues, not other problems.
  - The board may tailor remedies within a subbasin by relying on local groundwater sustainability plans that are working well & focusing on problem areas.
  - The board may stay action or rescind its interim plan if local agencies are making good progress on a groundwater sustainability plan or an adjudication, even if the progress or adjudication is incomplete.
- If it limits extractions, the board must follow water right priorities to the extent feasible.
- The board may impose fees on extractors to pay its costs.

These bills would also:

- Establish that it is the policy of the state that groundwater resources be managed sustainably for long term water supply reliability & multiple economic, social, or environmental benefits for current & future beneficial uses.
- Require a city or county planning agency, before adopting or substantially amending a general plan, to review & consider groundwater sustainability plans.
- DWR may provide technical assistance to any groundwater sustainability agency in response to that agency's request for assistance in the development & implementation of a groundwater sustainability plan. DWR shall use its best efforts to provide the requested assistance.
- A basin's boundaries are those identified in Bulletin 118 unless other basin boundaries are established pursuant to this Act:
  - A local agency may request DWR to revise the boundaries of a basin, including the establishment of new subbasins.
  - A local agency's request shall be supported by information demonstrating that the proposed adjusted basin can be the subject of sustainable groundwater management; technical information regarding the boundaries of, & conditions in, the proposed adjusted basin; & information demonstrating that the entity proposing the basin boundary adjustment consulted with interested local agencies & public water systems in the affected basins before filing the proposal with the department
- DWR shall prioritize basins & subbasins as provided in CASGEM (California State Groundwater Elevation Monitoring).
- DWR, in consultation with California Department of Fish & Wildlife, shall identify & develop criteria to identify groundwater basins & subbasins that should be prioritized based on adverse impacts to habitat & surface water resources. The criteria shall be incorporated into the determination of basin & subbasin prioritization at the department's next update of basin & subbasin prioritizations that occurs after January 1, 2017.
- Nothing in the bill prevents a legal action to adjudicate water rights.


EASTERN MUNICIPAL
WATER DISTRICT
SINCE 1950
Legislative Efforts to Address Groundwater Sustainability in California
An Update and Overview of Key Activities Underway in the Legislature
Watermaster's Technical Advisory Committee
August 11, 2014


Overview
EASTERN MUNICIPAL
WATER DISTRICT
• Background on Legislation
• Two Bills Currently in the Legislature
• The Stakeholder Process
• What's in the Groundwater Sustainability Act of 2014 Legislation?
• State Backstop
• Areas Requiring Additional Clarification
• Next steps for the Legislation
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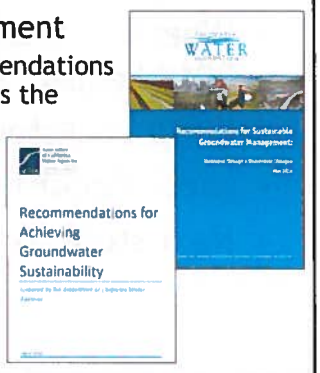
Background on Legislation

- Governor releases the "*California Water Action Plan*" which calls for a wide range of activities over the next five years to provide reliable water supplies in California.
  - Calls for actions to expand water storage capacity and improve groundwater management to be developed for successful water supply management.
- ACWA Groundwater Sustainability Task Force releases "*Recommendations for Achieving Groundwater Sustainability*", shares document with the Legislature and the Governor.
- California Water Foundation releases "*Recommendations for Sustainable Groundwater Management*", shares with the Legislature.

Two Bills Introduced in the Legislature

- AB 1739 (Dickinson): Groundwater Management
  - ACWA's "Recommendations for Achieving Groundwater Sustainability" serves as the foundation for AB 1739.
- SB 1168 (Pavley): Groundwater Management
  - The California Water Foundation's Recommendations for Sustainable Groundwater Management is the foundation for SB 1168.



* Both bills are identified as a work in progress, and both authors became the principal co-author on the other's bill.

Stakeholder Process Initiated

- SB 1168 and AB 1739 are held to allow for a stakeholder process to be implemented.
- Four stakeholder meetings have been held to-date.
  - July 2, 2014
  - July 10, 2014
  - July 16, 2014
  - July 31, 2014
- Draft language for both bills emerged on July 29, 2014.
- The language has been amended into both SB 1168 and AB 1739.

Who Does the Act Apply to?

The Groundwater Sustainability Act of 2014 does not apply to:

- Adjudicated basins, except for the provision of the judgment or judicial order.
  - However annual reporting will be required which specifies groundwater use.
- Low and very low priority basins, however they will be encouraged to adopt a groundwater sustainability plan.

Details of the Bills (8/6 version)

- 2015 will serve as the baseline;
- States that groundwater management is best achieved locally;
- Bulletin 118 basin boundaries serve as the foundation, however a local agency may petition DWR to revise boundaries;
- Requires DWR to consult with Fish and Wildlife to identify and establish prioritization criteria when identifying groundwater basins/sub-basins based on adverse impacts to habitat and surface water resources;
- A local agency/combination of local agencies may elect to be a groundwater sustainability agency;
- The agency may adopt fees to implement the program;

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Details of the Bills

- A Groundwater Sustainability Agency may require registration of extraction facilities and installation of a water-measuring device. May also require reporting (excludes de minimis extractors);
- Groundwater sustainability plans must be submitted to DWR by January 2020 and every five years after that;
- A local agency may submit an alternative plan believed to be the functional equivalent as a groundwater sustainability plan (plan);
- Annual pumping reports must also be transmitted to DWR;
- State Board and DWR may develop a fee schedule to recover costs of oversight and implementation.
- As of right now long term drought will not trigger state intervention.

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Groundwater Sustainability Plan

Covers the entire basin - can be one plan or multiple plans with a single coordination agreement. Includes:

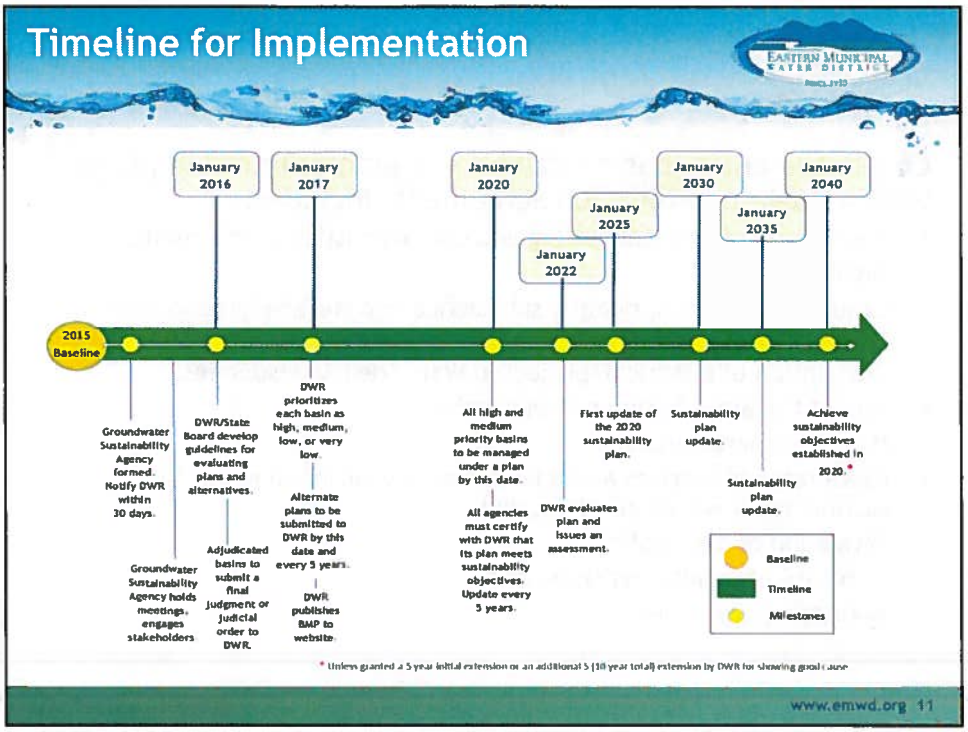
- Description of physical setting and characteristics of the aquifer;
- Historical data;
- Groundwater levels, quality, subsidence and surface/groundwater interaction;
- Description of historical/projected water demand/supplies;
- Map of the area, basin and boundaries;
- Map of recharge areas;
- Measurable objectives and milestones (5 year increments) for sustainability within 20 years; and
- Mitigation of overdraft;
- Summary of monitoring sites; and
- Monitoring protocols.

State Backstop

State may intervene when:

1. If after January 1, 2017 a groundwater sustainability agency has not been formed;
2. After January 31, 2020 a groundwater sustainability plan/ alternate plan has not been adopted by the local agency(s); and
3. DWR/State Board has determined that the groundwater sustainability plan is inadequate or is not being implemented, AND the basin is in a condition of long-term overdraft or extractions result in significant depletions.

- If a basin is designated as probationary by the State Board the agency will have 180 days to remedy. Additional time may be granted or the board may intervene.


Timeline for Implementation
January 2016
January 2017
January 2020
January 2022
January 2025
January 2030
January 2035
January 2040
2015 Baseline
Groundwater Sustainability Agency formed. Notify DWR within 30 days.
Groundwater Sustainability Agency holds meetings, engages stakeholders
DWR/State Board develop guidelines for evaluating plans and alternatives.
Adjudicated basins to submit a final judgment or judicial order to DWR.
DWR prioritizes each basin as high, medium, low, or very low.
Alternate plans to be submitted to DWR by this date and every 5 years.
DWR publishes BMP to website.
All high and medium priority basins to be managed under a plan by this date.
All agencies must certify with DWR that its plan meets sustainability objectives. Update every 5 years.
DWR evaluates plan and issues an assessment.
First update of the 2020 sustainability plan.
Sustainability plan update.
Sustainability plan update.
Achieve sustainability objectives established in 2020.*
Baseline
Timeline
Milestones
* Unless granted a 5 year initial extension or an additional 5 (10 year total) extension by DWR for showing good cause
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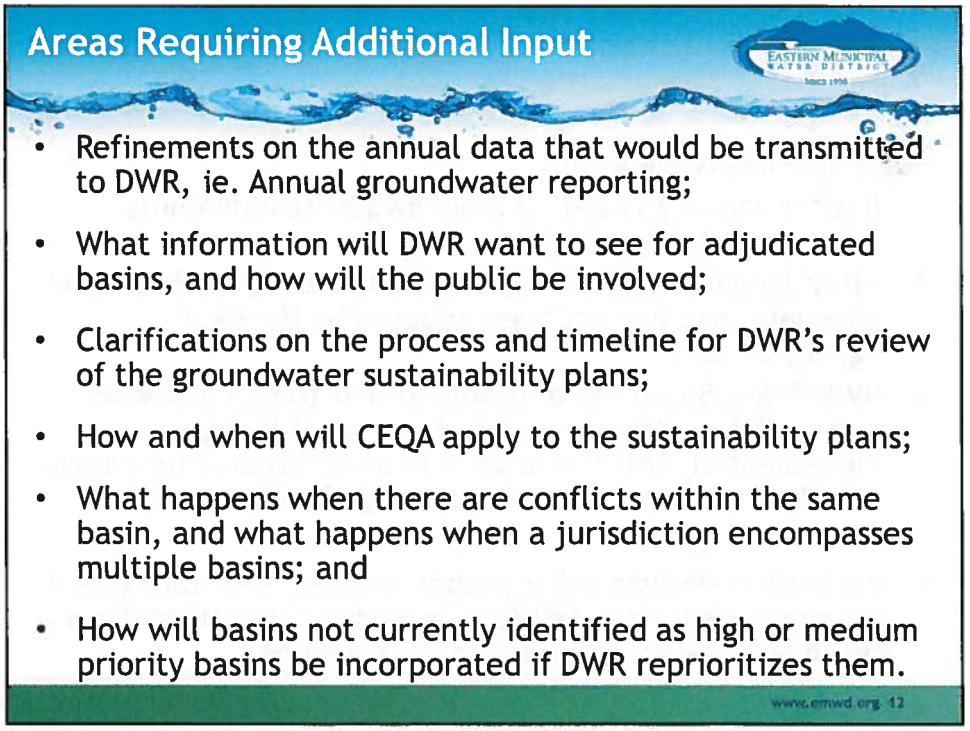
Areas Requiring Additional Input
• Refinements on the annual data that would be transmitted to DWR, ie. Annual groundwater reporting;
• What information will DWR want to see for adjudicated basins, and how will the public be involved;
• Clarifications on the process and timeline for DWR's review of the groundwater sustainability plans;
• How and when will CEQA apply to the sustainability plans;
• What happens when there are conflicts within the same basin, and what happens when a jurisdiction encompasses multiple basins; and
• How will basins not currently identified as high or medium priority basins be incorporated if DWR reprioritizes them.
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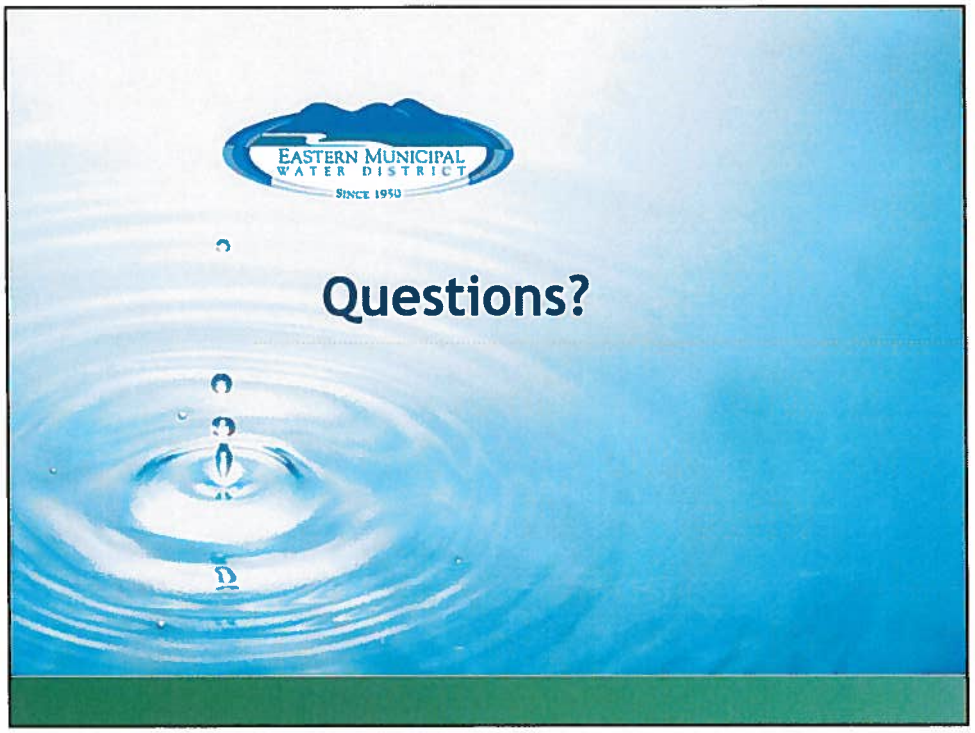
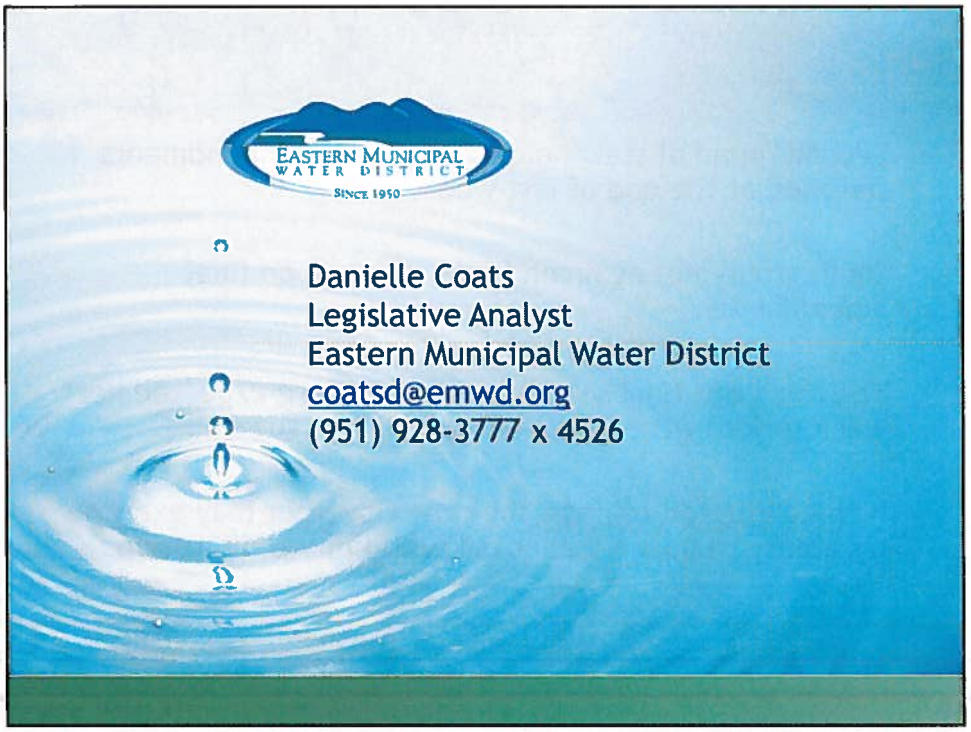
Next Steps for the Legislation

- Second round of stakeholder/small group amendments released at the end of last week.
- Small group met again on Friday to work on final amendments.
- The third and final set of amendments are expected next week, prior to the bill(s) being heard on the floor.
- If the bill(s) fail to pass, then the Governor may exercise his ability to pass a trailer bill with limited discussion.




EASTERN MUNICIPAL
WATER DISTRICT
SINCE 1950
Danielle Coats
Legislative Analyst
Eastern Municipal Water District
coatsd@emwd.org
(951) 928-3777 x 4526

AGENDA

HEMET – SAN JACINTO WATERMASTER
BOARD OF DIRECTORS

August 25, 2014
4:00 pm
2270 Trumble Road, Perris, CA 92750

CALL TO ORDER

PLEDGE OF ALLEGIANCE

ROLL CALL

I. PUBLIC COMMENTS

Any person may address the Board on any subject within the Watermaster's jurisdiction which is not on the agenda. However, any non-agenda matter that requires action will be referred to staff for a report and action at a subsequent Board meeting. Any person may also address the Board on any agenda matter at the time that matter is discussed, prior to Board action.

II. ADDITIONS/DELETIONS TO THE AGENDA

III. REPORTS

The following agenda items are reports. They are placed on the agenda to provide information to the Board and public. There is no action called for in these items.

A. Board Member Comments/Questions/Reports

B. Advisor Report

C. Legal Counsel Report

D. Treasurer Report

IV. CONSENT CALENDAR

A. Approval of Minutes – June 23, 2014 Regular Board Meeting.
Recommendation: Adopt a motion to approve item A on the Consent Calendar.

Consent Calendar items are expected to be routine and non-controversial and are to be acted upon by the Board at one time without discussion. If any Board member, staff member, or interested person requests that an item be removed from the Consent Calendar, it will be removed from the Consent Calendar for separate action.

V. ACTION ITEMS - NONE

The following items call for discussion and possible action by the Board. These items are placed on the Agenda so that the Board may discuss and possibly take action on the items if the Board desires.

VI. INFORMATIONAL ITEMS/CORRESPONDENCE

A. Grants and Loans Opportunities – Presentation by Mr. Greg Kahlen, The Kahlen Group, on funding opportunities for water related projects.

B. Groundwater Model Update – Status Report – Overview of the groundwater model update project status.

C. 2014 Imported Water In-lieu Program Status – Presentation by Mr. Khos Ghaderi, EMWD, on the status of 2014 in-lieu recharge.

D. Assembly Bill 1739 and Senate Bill 1168 Overview – Presentation by Ms. Danielle Coats, EMWD, on draft groundwater management legislations being considered in Sacramento.

E. Change Order No. 1 to EMWD Task Order No.6 – 2014 Water Resources Monitoring Program Support – additional meter replacements not-to-exceed $4,333.80.

VII. CLOSED SESSION - NONE

VIII. ADJOURNMENT

Next Regular Board of Directors Meeting
October 27, 2014 at 4:00 pm. at:
Eastern Municipal Water District Board Room
2270 Trumble Road, Perris, CA 92750

Upon request, this agenda will be made available in appropriate alternative formats to persons with disabilities, as required by Section 202 of the Americans With Disabilities Act of 1990. Any person with a disability who requires a modification or accommodation in order to participate in a meeting should direct such a request to the Watermaster Executive Assistant at 714-707-4787, at least 48 hours before the meeting, if possible.

Pursuant to Government Code Section 54957.5, any writing that (a) is a public record; (b) relates to an agenda item for an open session of a regular meeting of the Watermaster Board of Directors; and (c) is distributed less than 72 hours prior to that meeting, will be made available for public inspection at the time the writing is distributed to the Board of Directors. Any such writing will be available for public inspection at Watermaster's office located at 2270 Trumble Road, Perris, CA 92750.

MEETING NOTES
October 20, 2014
TAC Members

EMWD Staff Present:	Paul D. Jones, General Manager, Nick Kanetis, Deputy General Manager Brian Powell, Director of Planning Khos Ghaderi, Director of Water Operations Jeff Wall, Assistant General Manager of Operations and Maintenance
City of Hemet Staff Present:	Ron Proze, Water/Wastewater Superintendent
City of San Jacinto Staff Present:	Lynn Merrill, Public Works Director; Dan Maudrovich, Water Utilities Superintendent
Lake Hemet Staff Present:	Tom Wagoner, General Manager
Private Producers	Steve Pastor, Private Pumpers Representative
Watermaster Staff Present:	Behrooz Mortazavi, Michelle Mayorga (Water Resources Engineers),
Others Present:	

I. Agency Reports

A - EMWD Project Report

i. Imported Water In-lieu Recharge – Status

Mr. Ghaderi presented a status update on the imported water in-Lieu water deliveries**.** MWD "In-lieu" water deliveries under the Soboba Settlement Agreement to the Hemet Water Filtration Plant began on June 6, 2014. In-lieu water deliveries stopped on October 10, 2014, at the request of MWD to preserve imported water supplies and perform maintenance on the State Water System. Total imported water in-lieu deliveries for 2014 were 3,753.5 AF.

ii. Review of Final Expenditures on The Phase I Facilities Construction Cost Agreement – Status
Attachment 1

Mr. Powell presented a status update on the Review of Final Expenditures on The Phase I Facilities Construction Cost Agreement. This Agreement shall remain in effect for the duration of the useful life of the Phase I facilities, currently estimated to be thirty (30) years. EMWD assumed responsibility for the construction of these facilities through the issuance and sale of bonds.

EMWD increased capacity in its raw water system facilities to accommodate a flow rate of 42 cfs (30,000 afy) for recharge of the Soboba Settlement water delivered by MWD. The Agreement includes EMWD's Grant Street Ponds, raw water pipeline, and the recharge ponds. These facilities are available for the Watermaster's related activities.

Participating Agencies will pay their prorate share of the water purchase from MWD as part of the Soboba Settlement requirement directly to EMWD. EMWD maintain a separate account for the portions of payments received that are attributable to repair and replacement of the facilities.

The total project budget was $24,806,000, which included Construction costs of $21,504,000 and $3,302,000 for Environmental mitigation. There was a total of $5,200,000 received in Grant funds. The net Budget after Grants was $19,606,000.00.

The Construction Costs summary shows the final construction cost to be $379,803 under budget and the Environmental mitigation cost to be $309,010 over budget, with some additional work remaining.

iii. Groundwater Model Project – Status
Attachment 2

Mr. Powell reported that the conceptual Model has been updated with the addition of a fourth aquifer layer in the San Jacinto Upper Pressure sub-basin and revisions to the Canyon Sub basin aquifer layering. The preliminary draft water budgets (inflow vs. outflow) used in the model has been submitted by the consultant for review and comment. The next Advisory Panel Meeting is planned for December 1, 2014 from 11:00am to 3:00pm at EMWD. Another Advisory Panel Meeting is also being scheduled for January 2015. Mr. Mortazavi reminded TAC members that they are invited and encouraged to attend these meetings.

iv. Canyon Operating Plan Study – Status

Mr. Powell reported that the Plan Participants (EMWD, LHMWD, and Soboba Tribe) have received the draft Canyon Operating Plan report and have submitted comments. The Participants will meet with the project consultant (RMC) in November to finalize the response to comments with the final report being prepared by the end of December 2014.

v. Other Activities - None

B - LHMWD Status Report

Mr. Wagoner reported that Well 16 is online but its production is not to the expected levels. LHMWD is currently working with the Flood Control on a recharge project; the property is around 13 acres. For the last two months, there has been a mandatory 20% cut back of water use by the LHMWD customers. There is the possibility of using water from the Lake under emergency conditions.

C - Hemet Status Report

Mr. Proze reported that the City has just finished construction of the intertie with EMWD. It will only run during emergencies if a city well goes down. The City is currently preparing an RFP for a rate study. As part of this RFP, the City is looking for a consultant to evaluate tiered rate options. Wells 4 and 14 are currently not online. Department of Health Services (DHS) is amending the current City permits for these wells to allow nitrate blending.

D - San Jacinto Status Report

Mr. Merrill reported that the city has shut off irrigation of several parks because of maintenance budget cuts. The City currently has 53 employees and the Council has authorized to lay off 13 employees. This is in addition to the cutbacks at the Fire and Police Departments. Since the water rate increase was implemented 4 months ago, the City has seen a 10 – 12% reduction in its water demand.

II. Watermaster Advisor Updates

Mr. Mortazavi presented the draft agenda for the October 27, 2014 Hemet – San Jacinto Watermaster Board meeting. The following is a summary of items that he will present to the Board. The action items include the 2015 Adjusted Base Production Rights presentation and Change Order No. 2 to EMWD Task Order No. 6. The informational items include In-lieu delivery of Soboba Settlement Water in 2014, drought impacts on the State Water Project System, Groundwater Model update, review of final expenditures on the Phase I Facilities Construction Cost Agreement and Water Banking Initiative.

A - 2015 Adjusted Base Production Rights
Attachment 3

Mr. Mortazavi noted Section 3.1.5 of the Stipulated Judgment requires the first 900 acre-feet of Hemet and San Jacinto Base Production Rights not be subject to reductions stated in Sections 3.2 to 3.2.2. Section 3.2 states that each Public Agency's base Production Right shall be subject to a 10% reduction in the first full year after entry of Judgment and Section 3.2.2 states the Watermaster shall determine the required reductions in Adjusted Production Rights to achieve Safe Yield over a six (6) year period assuming an annual overdraft of 10,000 acre feet. In addition, no reduction can be more than 10% of the Adjusted Production Rights of the prior year.

There are three (3) options for Production Rights Adjustments. These options are a) maximize reduction in the early years to achieve the reduction goal as fast as possible; b) minimize reductions in the early years and accelerate reductions in the last year to achieve the reduction goal; or c) have constant reductions in all the years to achieve the reduction goal.

The total allocation over the next 5 years under the fast reduction option is approximately 120,000 AF, and any amount over that would be subject to assessments. If the slow reduction option is favored then there would be 125,000 AF of allocation and anything above that would be subject to assessment. If the constant option is chosen, there would be 123,000 AF of allocation and any production above that would be subject to assessment.

Mr. Mortazavi recommended to set the reduction rates for the Public Agencies Adjusted production Rights at a constant 7% per year for the next three (3) years between May 2015 and April 2018.

Mr. Powell stated that given the current drought condition, the fast reduction option would not be beneficial to EMWD. Mr. Powell also suggested setting the annual reductions at a fixed amount over the next four years. Mr. Pastor asked how this allocation reduction would affect the private producers' production. Mr. Mortazavi explained that the allocation reduction only pertains to the Public Agencies.

It was the recommendation of the TAC members to approve a constant reduction rate. Mr. Mortazavi explained that this issue would now go to the Board for approval.

B - Groundwater Model Update Status Report
Attachment 4

Mr. Mortazavi presented a Groundwater Model Update Status Report. The outline of this presentation included, Administrative activities, advisory panel activities, selected information on model components, historic water level changes in Canyon & Upper Pressure Basins, groundwater level calibration (2002 Model), calibration process and preliminary water budget overview. He pointed out that even though the production in the Management area has reduced over the last several years, the groundwater level has not been stabilized.

Next Meeting:
December 8, 2014 – TAC Meeting

Groundwater Model Update Status Report

Hemet - San Jacinto Watermaster
TAC Meeting

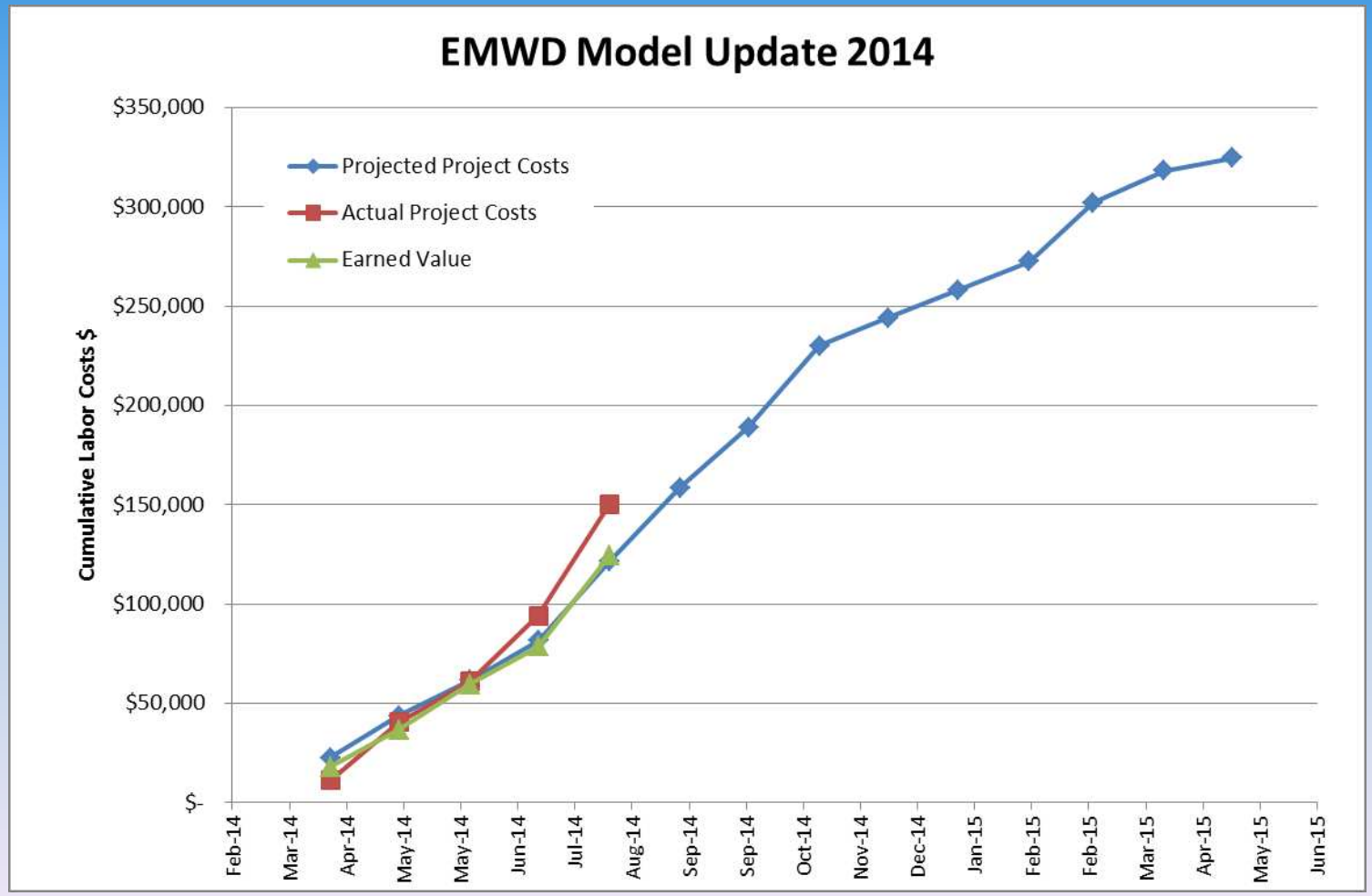
October 27, 2014

Presentation Outline

- Administrative Activities
  - Project Budget (prior to revisions)
  - Revised Schedule & Scope of Work
- Advisory Panel Activities
- Selected Information Used/Created by The Model
  - Type of data used
    - Lithological data
    - Groundwater Production
  - Historic water level changes in Canyon & Upper Pressure Basins
  - Groundwater level calibration (2002 Model)
- What is Next
  - Calibration Process
  - Water Budget Overview

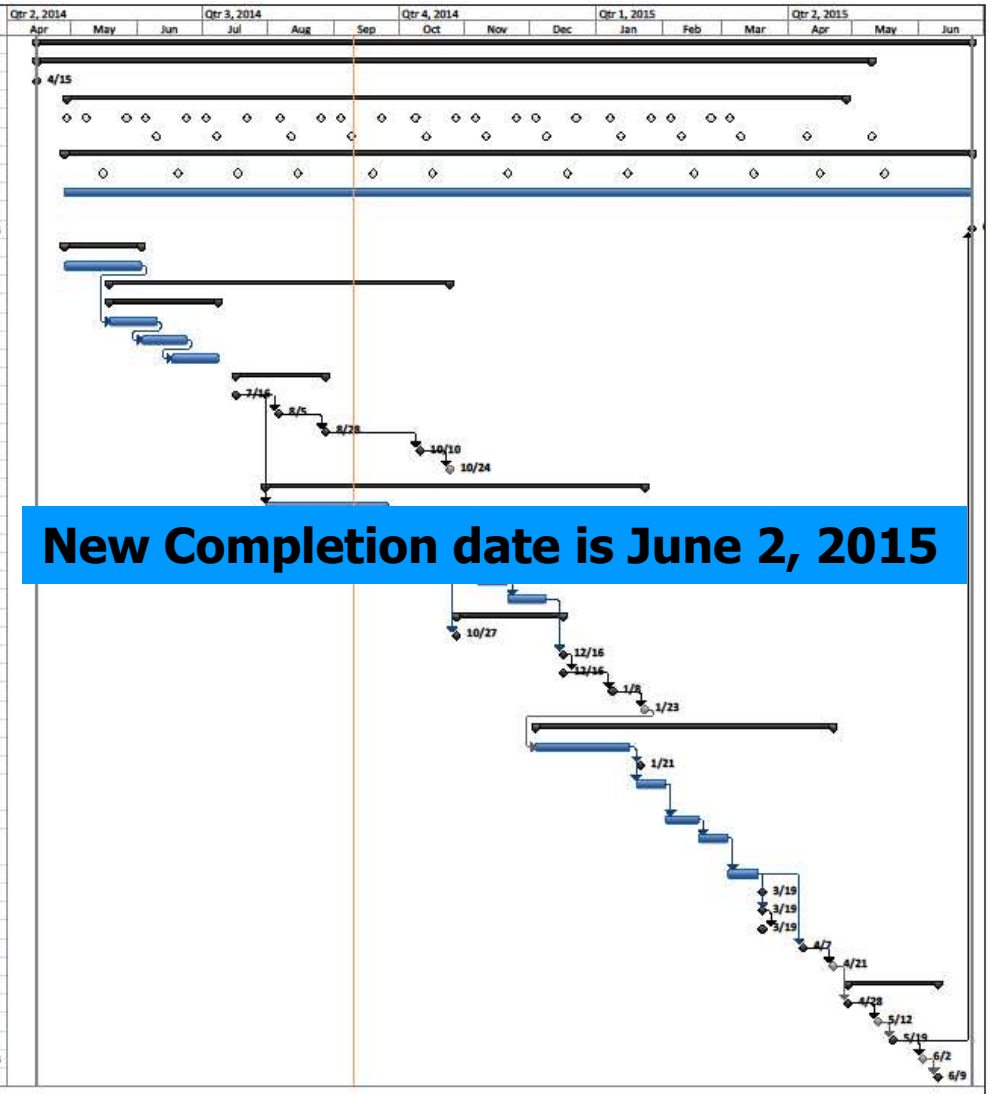
Recognition: Significant amount of information used in this presentation was developed by RMC (project consultants) as part of the Advisory Panel Workshop presentations.

Project Budget
(As of August 2014)



Revised Schedule

ID	Task Name	Duration	Start	Finish	Predecessors
1	**Task 1: Project Management**	**304 days**	**Tue 4/15/14**	**Thu 6/25/15**	
2	**Subtask 1.1- Conduct Project Management Meetings**	**270 days**	**Tue 4/15/14**	**Sun 5/10/15**	
3	Project Kick-off Meeting	0 days	Tue 4/15/14	Tue 4/15/14	
4	**Project Conference Calls**	**251 days**	**Tue 4/29/14**	**Mon 4/27/15**	
5	Project Conference Calls	**249 days**	**Thu 5/1/14**	**Mon 4/27/15**	
28	Monthly Project Status Meetings - 2nd Tuesday	**231 days**	**Tue 6/10/14**	**Sun 5/10/15**	
41	**Subtask 1.2- Perform Project Monitoring and Quality Control**	**295 days**	**Mon 4/28/14**	**Thu 6/25/15**	
42	Monthly Project Progress Reports (12 reports)	**252 days**	**Fri 5/16/14**	**Sat 5/16/15**	
56	Quality Control (for various deliverables)	295 days	Mon 4/28/14	Thu 6/25/15	
57	**Subtask 1.3- Conduct Knowledge Transfer Workshop**	**0 days**	**Thu 6/25/15**	**Thu 6/25/15**	
58	Knowledge Transfer Workshop	0 days	Thu 6/25/15	Thu 6/25/15	100FS+10 days
59	**Task 2: Data Collection and Analysis**	**25 days**	**Mon 4/28/14**	**Mon 6/2/14**	
60	Data Collection and Analysis	25 days	Mon 4/28/14	Mon 6/2/14	
61	**Task 3: Model Configuration Refinement Review with Advisory Panel**	**112 days**	**Mon 5/19/14**	**Fri 10/24/14**	
62	**Subtask 3.1- Review and Analyze Conceptual Model**	**35 days**	**Mon 5/19/14**	**Tue 7/8/14**	
63	Physical Model and Aquifer Characteristics	15 days	Mon 5/19/14	Mon 6/9/14	60FS-10 days
64	Land and Water Use Information and Recharge Analysis	15 days	Tue 6/3/14	Mon 6/23/14	63FS-5 days
65	Water Balance, Safe Yield and Calibration Approach	15 days	Tue 6/17/14	Tue 7/8/14	64FS-5 days
66	**Subtask 3.2- Conduct Advisory Panel Workshops**	**30 days**	**Wed 7/16/14**	**Thu 8/28/14**	
67	Advisory Panel Workshop No. 1	0 days	Wed 7/16/14	Wed 7/16/14	
68	Advisory Panel Workshop No. 2	0 days	Tue 8/5/14	Tue 8/5/14	67FS+5 days
69	Advisory Panel Workshop No. 3	0 days	Thu 8/28/14	Thu 8/28/14	68FS+5 days
70	Draft TM No. 1- Conceptual Model	0 days	Fri 10/10/14	Fri 10/10/14	69FS+31 days
71	Comments due for TM No. 1	0 days	Fri 10/24/14	Fri 10/24/14	70FS+10 days
72	**Task 4: Model Calibration**	**121 days**	**Thu 7/31/14**	**Fri 1/23/15**	
73	**Subtask 4.1- Perform Steady-State Calibration**	40 days	Thu 7/31/14	Thu 9/25/14	67FS+10 days
74	**Subtask 4.2- Perform Transient Calibration**	20 days	Fri 9/26/14	Thu 10/23/14	73
75	**Subtask 4.3- Perform Automated Calibration**	10 days	Fri 10/24/14	Thu 11/6/14	74
76	**Subtask 4.4- Perform Sensitivity Analysis**	5 days	Fri 11/7/14	Thu 11/13/14	75
77	**Subtask 4.5- Develop Water Budgets**	10 days	Fri 11/7/14	Thu 11/20/14	75
78	**Subtask 4.6- Develop Safe Yield Estimates**	10 days	Fri 11/21/14	Mon 12/8/14	77
79	**Subtask 4.7- Conduct Workshops and Meetings**	**34 days**	**Mon 10/27/14**	**Tue 12/16/14**	
80	AP Workshop No. 4- Model Calibration Progress	0 days	Mon 10/27/14	Mon 10/27/14	74FS+2 days
81	AP Workshop No. 5- Model Calibration Results	0 days	Tue 12/16/14	Tue 12/16/14	78FS+6 days
82	Meeting with EMWD & Watermaster	0 days	Tue 12/16/14	Tue 12/16/14	81
83	Draft TM No. 2- Model Calibration	0 days	Thu 1/8/15	Thu 1/8/15	82FS+15 days
84	Comments due for TM No. 2	0 days	Fri 1/23/15	Fri 1/23/15	83FS+10 days
85	**Task 5: Predictive Simulations**	**95 days**	**Thu 12/4/14**	**Tue 4/21/15**	
86	**Subtask 5. 1- Develop Baseline Condition**	30 days	Thu 12/4/14	Fri 1/16/15	84
87	Baseline Deliverable	0 days	Wed 1/21/15	Wed 1/21/15	86FS+2 days
88	**Subtask 5.2- Conduct Scenario 1 Analysis: Minimized RW Discharge from the Basin**	10 days	Tue 1/20/15	Mon 2/2/15	86
89	**Subtask 5.3- Conduct Scenario 2 Analysis: Drought Reliability**	10 days	Tue 2/3/15	Tue 2/17/15	88
90	**Subtask 5.4- Conduct Scenario 3 Analysis: Local GW Reservoir Optimization**	10 days	Wed 2/18/15	Tue 3/3/15	89
91	**Subtask 5.5- Conduct Scenario 4 Analysis: Salt Mitigation**	10 days	Wed 3/4/15	Tue 3/17/15	90
92	**Subtask 5.6- Conduct Workshops and Meetings**	**0 days**	**Thu 3/19/15**	**Thu 3/19/15**	
93	AP Workshop No. 6- Predictive Simulations Results	0 days	Thu 3/19/15	Thu 3/19/15	91FS+2 days
94	EMWD & Watermaster Meeting	0 days	Thu 3/19/15	Thu 3/19/15	93
95	Draft TM No. 3- Predictive Simulations	0 days	Tue 4/7/15	Tue 4/7/15	91FS+15 days
96	Comments due for TM No. 3	0 days	Tue 4/21/15	Tue 4/21/15	95FS+10 days
97	**Task 6: Reporting**	**30 days**	**Tue 4/28/15**	**Tue 6/9/15**	
98	Preliminary Draft Report	0 days	Tue 4/28/15	Tue 4/28/15	96FS+5 days
99	EMWD Comments due for Preliminary Draft Report	0 days	Tue 5/12/15	Tue 5/12/15	98FS+10 days
100	Draft Report	0 days	Tue 5/19/15	Tue 5/19/15	99FS+5 days
101	Comments due for Preliminary Draft Report	0 days	Tue 6/2/15	Tue 6/2/15	100FS+10 days
102	Final Report (Electronic and 5 Hard Copies)	0 days	Tue 6/9/15	Tue 6/9/15	101FS+5 days



New Completion date is June 2, 2015

Project: EMWD Model Update 2014
Date: Wed 9/10/14

Task | Milestone | Summary | Rolled Up Milestone | External Milestone | Deadline

Revised Scope of Work

- Update Canyon Basin Conceptual Geology and Implement in Numerical Model
- Implement the Canyon Updated Hydrogeology in Numerical Model
- Implement 4-Layer Geology in Numerical Model

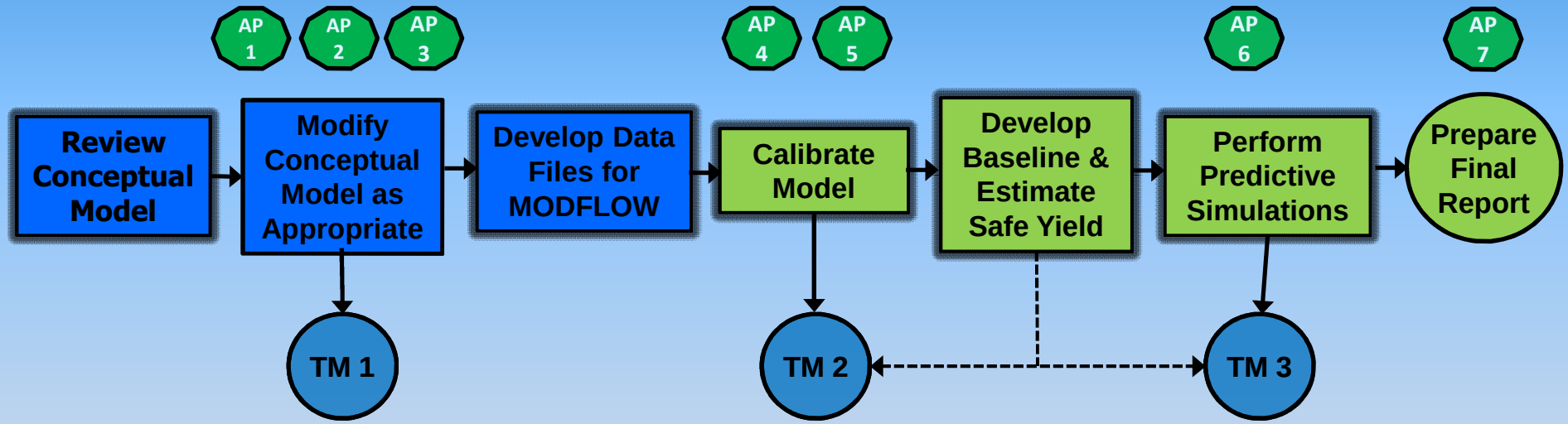
Cost of above scope changes	$ 29,335
Initial EMWD contract amount	$329,867
Revised EMWD contract amount	$359,202

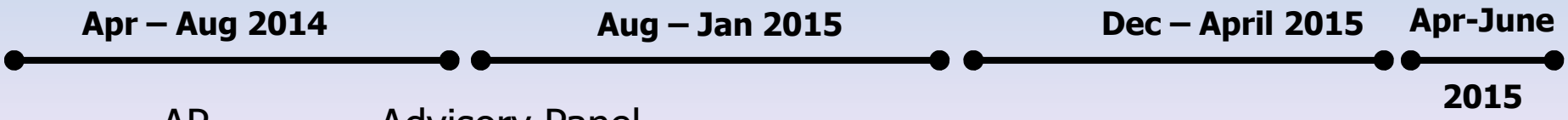
Advisory Panel Members and Workshop Schedule

- Mr. Aleksander Vdovichenko (Department of Water Resources)
- Dr. Cindy Li (Regional Water Quality Control Board)
- Mr. Ralph Phraner (Local Groundwater Expert)
- Dr. Tracy Nishikawa (U.S. Geological Survey)

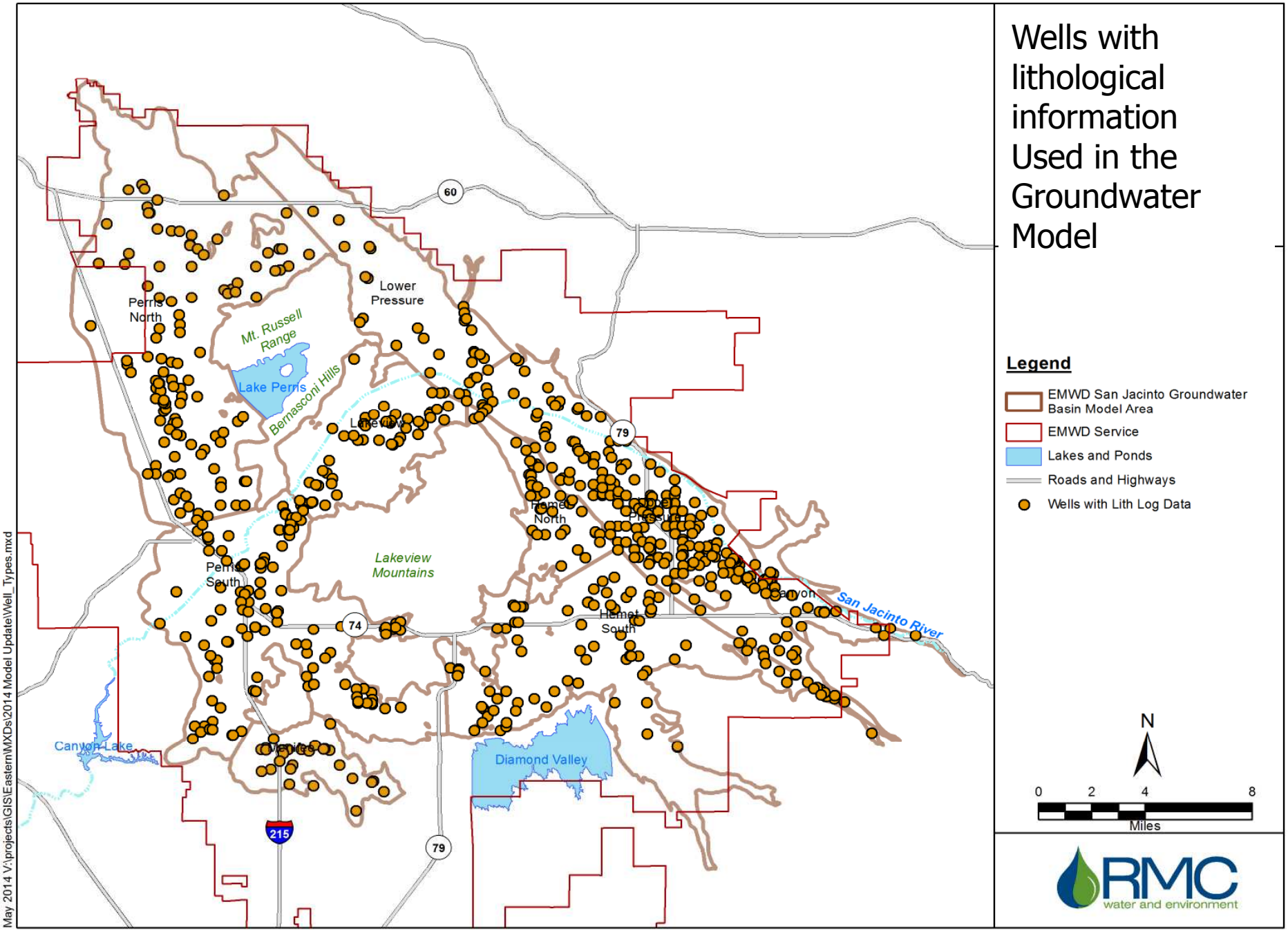
Workshop	Purpose	Approx. Date
1	Review proposed conceptual model	July 16, 2014
2	Review proposed landuse and water recharge components of the model	August 5, 2014
3	Review proposed approach for water balance, safe yield and model calibration	August 28, 2014
4	Review model calibration process	December 2014
5	Review model calibration results	December 2014/January 2015
6	Review simulation scenarios results	First Quarter 2015
7	Comment/review of Draft Report (Optional)	TBD

Project Tasks

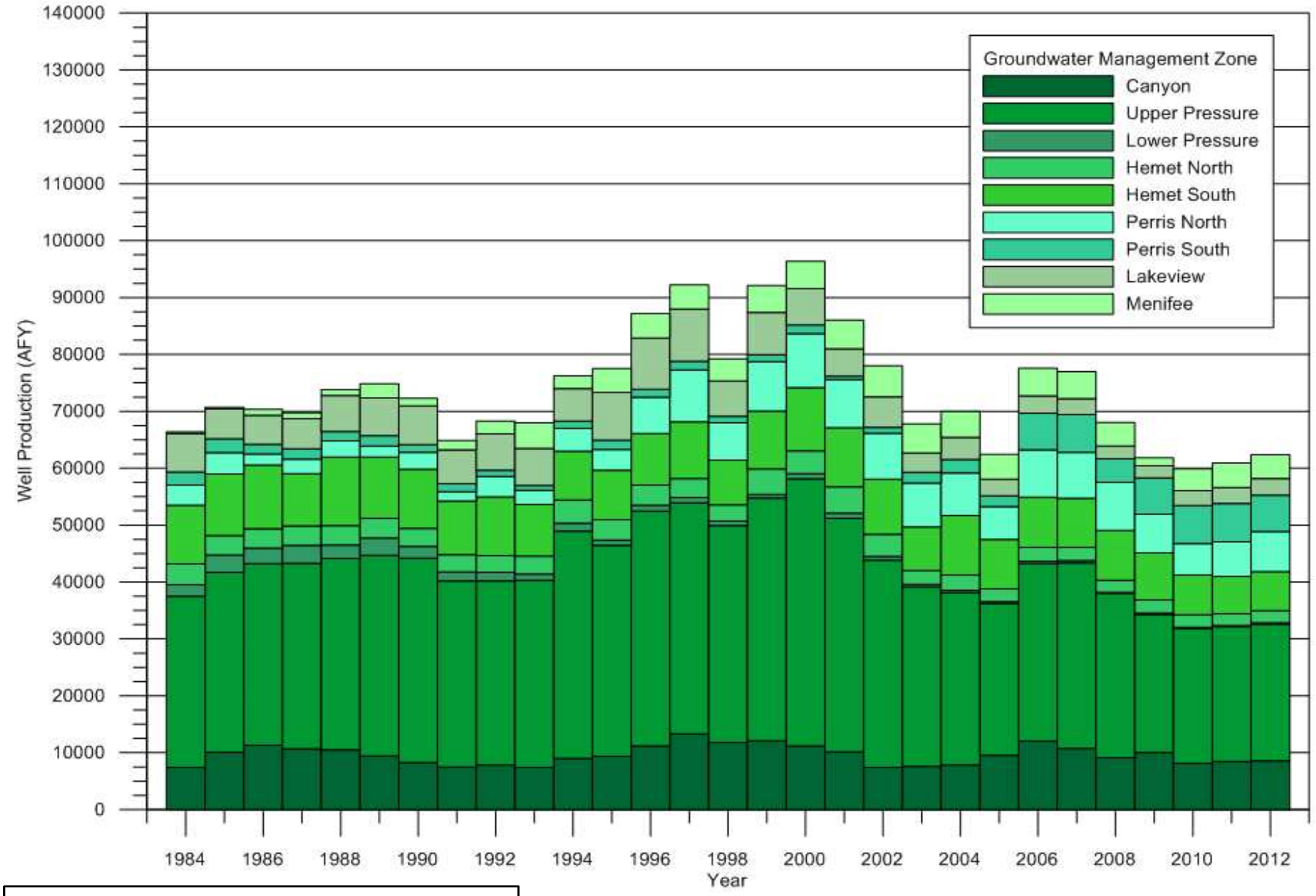




AP = Advisory Panel
TM = Technical Memorandum

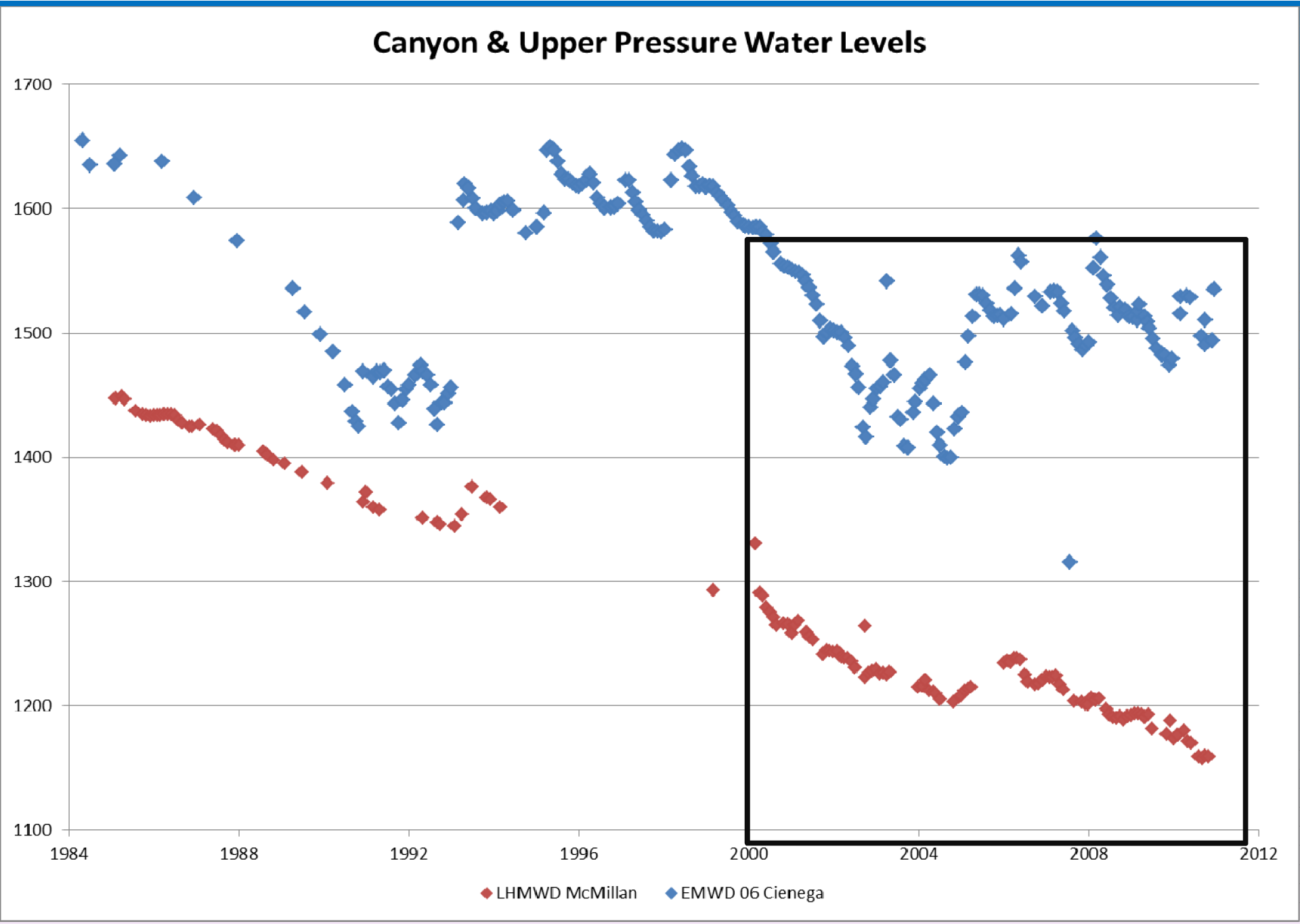

Wells with lithological information Used in the Groundwater Model
Legend
EMWD San Jacinto Groundwater Basin Model Area
EMWD Service
Lakes and Ponds
Roads and Highways
Wells with Lith Log Data
N
0 2 4 8
Miles
RMC water and environment
Perris North
Lower Pressure
Mt. Russell Range
Lake Perris
Bernasconi Hills
Lakeview
Hemet North
Perris South
Lakeview Mountains
San Jacinto River
Hemet South
Canyon Lake
Menifee
Diamond Valley
60
79
74
215
May 2014 V:\projects\GIS\EasternMXDs\2014 Model Update\Well_Types.mxd

San Jacinto Basin Production

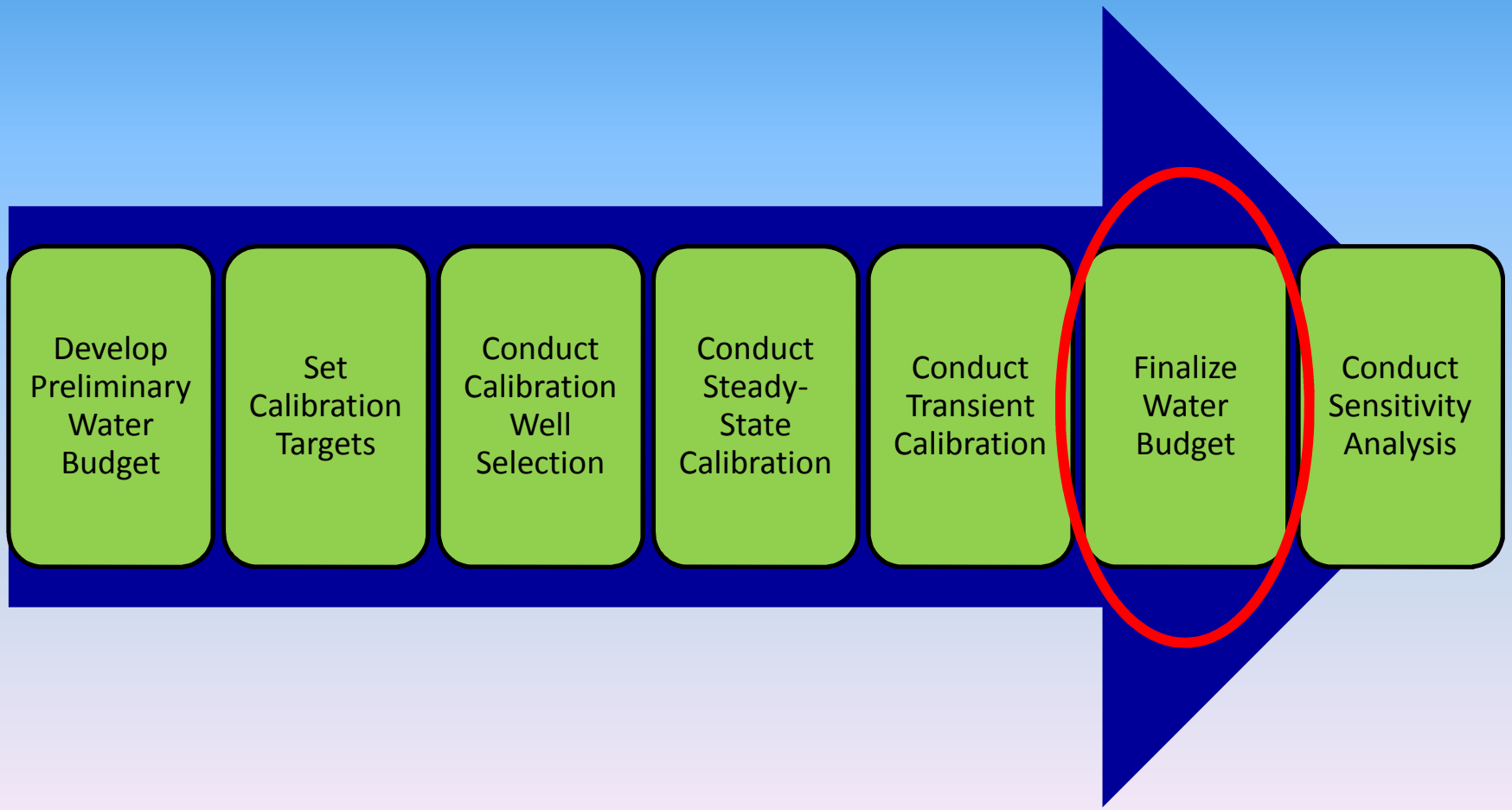


Draft – Subject to Revision

10:21 06/27/14


Canyon & Upper Pressure Water Levels
1700
1600
1500
1400
1300
1200
1100
1984
1988
1992
1996
2000
2004
2008
2012
LHMWD McMillan
EMWD 06 Cienega

Groundwater Model Calibration Process



Questions/Comments?

2015 Adjusted Base Production Rights

TAC Meeting
October 22, 2013

Stipulated Judgment Requirements

Section 3.1.5:

- The Base Production Rights of Hemet and San Jacinto each include 900 acre-feet per year…These…amounts…shall not be subject to reduction…as provided in Sections 3.2 to 3.2.2…

Section 3.2:

- …each Public Agency's Base Production Right shall be subject to …a 10% reduction…in the first full year after entry of…Judgment.

Section 3.2.2:

- Watermaster shall determine the required reductions in Adjusted Production Rights…to achieve Safe Yield…The goal is to achieve Safe Yield over a six (6) year period assuming an annual overdraft of 10,000 acre feet…in no event shall any reduction be more than 10% of the Adjusted Production Rights of the prior year.

Public Agencies Water Rights Based on Section 3 of The Judgment

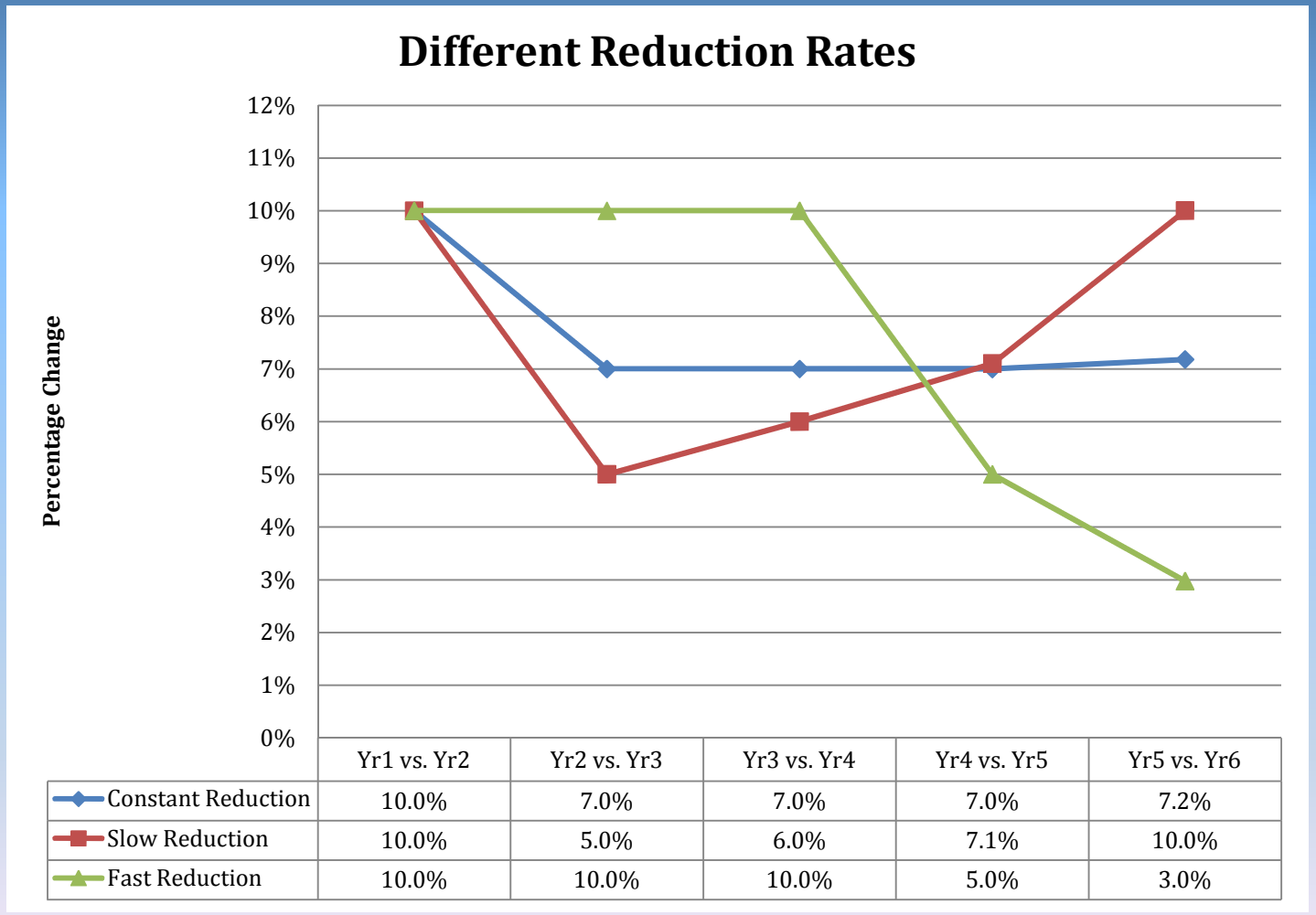
	EMWD	LHMWD	City of Hemet	City of San Jacinto
Base Production Rights	10,869	11,063	6,320	4,031
Total Reductions in 6 years	3,566	3,629	1,778	1,027
Ultimate Adjusted Base Production Rights in 6 Years	7,303	7,434	4,542	3,004

All values are in acre-feet per year (AFY)

Production Rights Adjustment Options

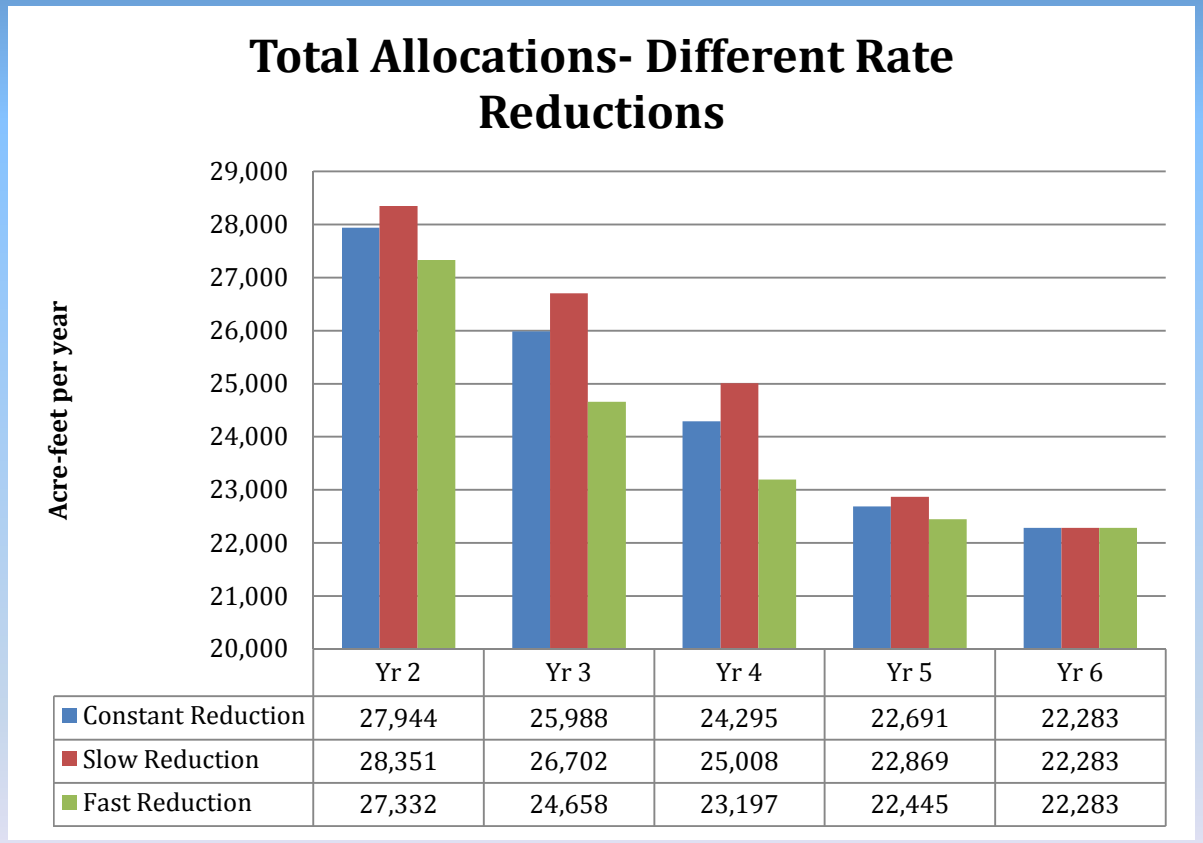
- **Maximize reduction in the early years to achieve the 10,000 AF reduction goal as fast as possible.**
  - Most beneficial option for the groundwater basins.
  - Most expensive for the public agencies.
- **Minimize reductions in the early years and accelerate reductions in the last year to achieve the 10,000 AF reduction goal.**
  - Least beneficial option for the groundwater basins.
  - Least expensive for the public agencies.
- **Constant reductions in all the years to achieve the 10,000 AF reduction goal.**

Adjusted Base Production Rights Reduction Rate Options



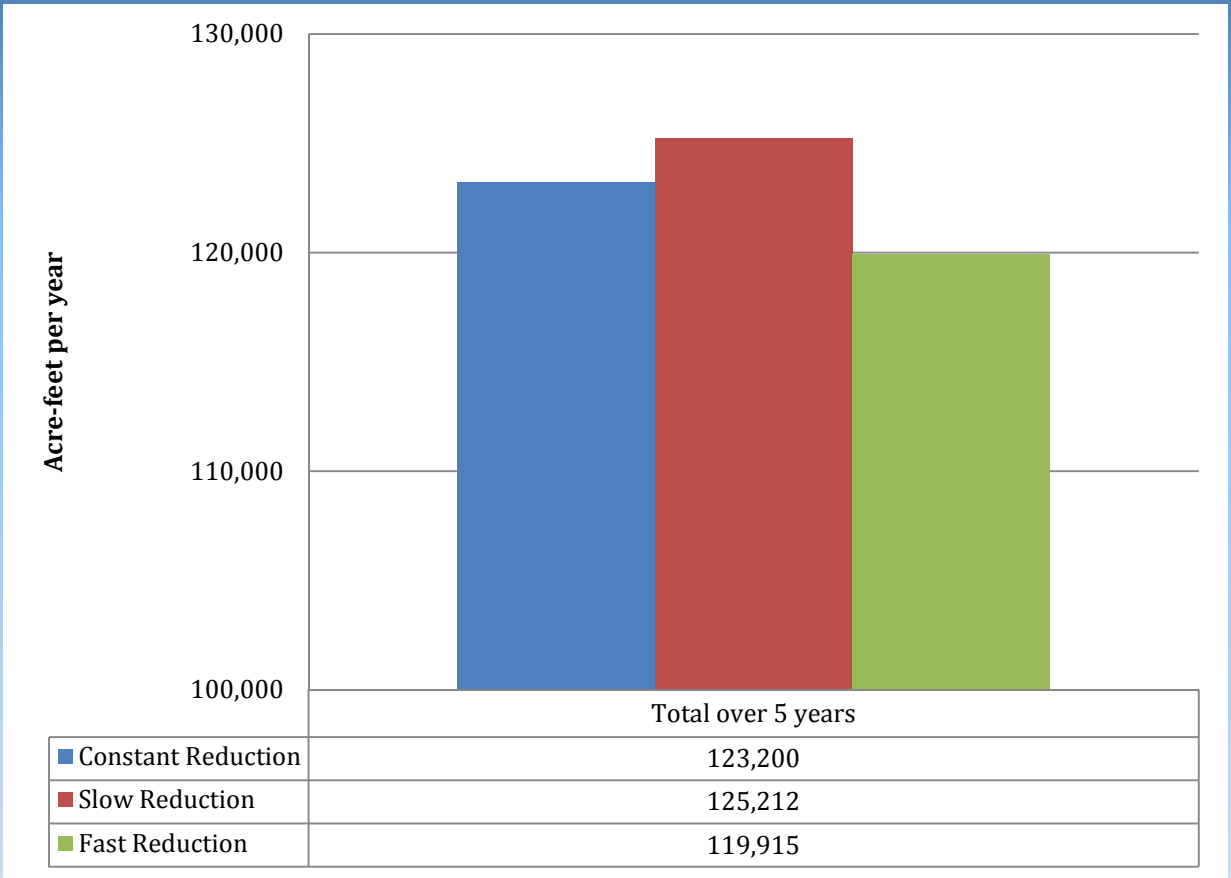
	Yr1 vs. Yr2	Yr2 vs. Yr3	Yr3 vs. Yr4	Yr4 vs. Yr5	Yr5 vs. Yr6
Constant Reduction	10.0%	7.0%	7.0%	7.0%	7.2%
Slow Reduction	10.0%	5.0%	6.0%	7.1%	10.0%
Fast Reduction	10.0%	10.0%	10.0%	5.0%	3.0%

Annual Adjusted Base Production Rights with Different Reduction Rates



	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6
Constant Reduction	27,944	25,988	24,295	22,691	22,283
Slow Reduction	28,351	26,702	25,008	22,869	22,283
Fast Reduction	27,332	24,658	23,197	22,445	22,283

Total Public Agencies Rights with Different Reduction Rates



	Total over 5 years
Constant Reduction	123,200
Slow Reduction	125,212
Fast Reduction	119,915

Recommendation

Set the reduction rates for the Public Agencies Adjusted Production Rights at 7% per year for the next three years between May 2015 and April 2018.

EASTERN MUNICIPAL WATER DISTRICT

Review of Final Expenditures on the Phase 1 Facilities Construction Cost Agreement

Brian Powell, P.E.
Director of Planning
October 27, 2014

Presentation Overview

- Phase 1 Agreement Requirements
- Phase 1 Facilities Construction Costs
- Phase 1 Environmental Costs
- Phase 1 Ongoing Environmental Work & Costs
- Phase 1 Total Project Costs
- Future Program Costs

Phase 1 Agreement Requirements

- The Agreement shall remain in effect for the duration of the useful life of the Phase 1 facilities, currently estimated to be thirty (30) years, and continue in full force and in effect while the facilities are maintained

- EMWD has assumed responsibility for the construction of the additional facilities through the issuance and sale of bonds

Phase 1 Agreement Requirements

- EMWD to increase capacity in the facilities to accommodate a flow rate of 42 cfs (30,000 afy) for recharge of the Soboba Settlement water delivered by MWD

- The Agreements includes EMWD's Grant Street Ponds and raw water pipeline component of the recharge project. These facilities are available for the Watermaster's use.

Phase 1 Agreement Requirements

- Participating Agencies will pay their prorata share of the water purchases from MWD as part of the Soboba Settlement requirement

- The Watermaster will invoice each Party for its prorata share of operational, maintenance, repair and replacement costs

- EMWD shall maintain a separate account for the portions of payments received that are attributable to repair and replacement of the facilities

Phase 1 Facilities - Construction

The existing EMWD facilities, as expanded and increased in capacity to accommodate a flow rate of 42 cfs, and the recharge and recovery facilities to be constructed for recharge of the MWD water, are known as the “Phase 1 Facilities”; the cost of the expansions, additions and construction is currently estimated to be $21,504,000.00.

- Budget for Construction of Phase 1 Facilities: $21,504,000

Source: Phase 1 Facilities Agreement, Page 6, Item 6

Phase 1 Facilities - Environmental

In addition to these capital costs, and additional $3,302,000.00 will be required to fund environmental related activities to obtain the Clean Water Act's Section 404 Permit from the Army Corps of Engineers, necessary to construct and operate the Phase 1 Facilities, including the recharge ponds. Specifically, $2,084,000.00 will be required to create an endowment fund to be held by the Riverside County Habitat Conservation Authority; and $1,218,000.00 to fund the environmental mitigation costs beyond the endowment held by the Riverside County Habitat Conservation Authority.

- Budget for Environmental Activities: $3,302,000

Source: Phase 1 Facilities Agreement, Page 6-7, Item 6

Phase 1 Facilities – Budget Summary

Budget	
Construction Costs	$ 21,504,000
Environmental	$ 3,302,000
Total Project Budget	$ 24,806,000
Grants	
Prop 50-Feasibility Study	$ 200,000
Prop 13-Facilities Construction	$ 5,000,000
Total Grant Funds	$ 5,200,000
Net Budget after Grants	**$ 19,606,000**

Construction Costs Summary

Planning, Design and Construction	Estimated Cost	Actual Cost Before Grant	Grants Received	Actual Cost After Grant	Variance (under)/over
Feasibility, CEQA/NEPA, Land Purchase and Permits Subtotal	$2,470,000	$2,469,421	$200,000	$2,269,421	($579)
Facilities Design Subtotal	$3,054,000	$3,568,995	None	$3,568,995	$514,995
Facilities Construction Subtotal	$15,980,000	$15,085,781	$5,000,000	$10,085,781	($894,219)
Facilities Total	**$21,504,000**	**$21,124,197**	**$5,200,000**	**$15,924,197**	**($379,803)**

Final Construction Costs are $379,803 Under Budget

Environmental Costs Summary

Environmental	Estimated Cost	Actual Cost	Ongoing Cost Est.	Est. Cost to Complete	Variance
Endowment with Riverside County Conservation Authority, RCA Subtotal	$2,084,000	$2,084,378	$0	$2,084,378	$378
Habitat Mitigation Per 2011 BO Subtotal	$1,218,000	$1,070,316	$0	$1,070,316	($147,684)
Ongoing Environmental Subtotal	N/A	$137,710	$318,606	$456,316	$456,316
Environmental Total to Date	**$3,302,000**	**$3,292,404**	**$318,606**	**$3,611,010**	**$309,010**

Environmental Costs To Date are $309,010 Over Budget

with Additional Work Remaining

Phase 1 Facilities Status Summary

- Construction of All Facilities is Complete
- Construction was Completed Slightly Under Budget
- Environmental Activities to Date are Slightly Over Budget
- Environmental Activities are Ongoing
  - Helix: SBKR Habitat Restoration
  - Dudek: Habitat Maintenance for 5 years
- Environmental Obligations Remain Active for at least 5 years
- Net Project Costs $ 70,793 under budget to date

EASTERN MUNICIPAL WATER DISTRICT

Contact Information

Brian Powell, P.E.
Director of Planning
(951) 928-3777 ext. 4278
powellb@emwd.org

MEETING NOTES
December 8, 2014
TAC Members

EMWD Staff Present:	Charlie Bachmann, Assistant to the GM Nick Kanetis, Deputy General Manager Brian Powell, Director of Planning; Khos Ghaderi, Director of Water Operations Jeff Wall, Assistant General Manager of Operations and Maintenance
City of Hemet Staff Present:	Kris Jensen, Public Works Director Ron Proze, Water/Wastewater Superintendent
City of San Jacinto Staff Present:	Lynn Merrill, Public Works Director
Lake Hemet Staff Present:	Tom Wagoner, General Manager
Private Producers	Bruce Scott, Private Pumpers Representative
Watermaster Staff Present:	Behrooz Mortazavi, Michelle Mayorga (Water Resources Engineers)
Others Present:	

I. Agency Reports

A. EMWD Project Report

IRRP Activities – Status

i. Groundwater Production for LHMWD

Mr. Ghaderi reported that the connection to Well 92 was made in early summer for LHMWD's use and EMWD has pumped and delivered 427.1 AF to LHMWD through the end of November. EMWD has also delivered 541 AF of water via Lake Hemet Booster for the year through October. Mr. Ghaderi asked Mr. Wagoner to double check these numbers to make sure the numbers are in agreement between both agencies. There needs to be some clarification regarding the billing amount to LHMWD by EMWD. Mr. Ghaderi will discuss this with finance to get clarification on the correct amount to bill LHMWD.

ii. Diversion at Grant Ave. Ponds

Mr. Powell made this presentation. The Diversion License allows river flows be diverted from November 1st through June 30th of the next calendar year. The maximum allowed diversion is 5,760 AF and the peak flow limitation is set at 100 cfs. By July 1st the SBKR crossing needs to be put back in place, which prevents any more water be diverted to the ponds after July 1st. Mr. Powell will also make this same presentation at the next Board meeting.

iii. Recharge Ponds

Mr. Ghaderi reported that after current storms there was only minor damage to the outer layer of the berms. Mr. Mortazavi asked if any water was flowing out of the gravel pit to cause this damage. Mr. Ghaderi replied that there was no water flowing out of the gravel pit.

Groundwater Model Project - Status

Mr. Powell presented on the status of the Groundwater Model Project. RMC has completed the data collection and conceptual model development, and is working on the calibration. There have been a couple of advisory panel meetings. The calibrations will continue and then simulations will begin once there is agreement that the model is calibrated. The goal is to have this model completed by the middle of 2015. There will be one more advisory meeting and will likely be held in February. Mr. Mortazavi commended EMWD on the progress made on the model, and also was pleased to see Mr. Scott and Mr. Mudrovich being interested in the

process, and attending the advisory panel meetings as TAC representatives. Mr. Scott mentioned that these meetings are very technical but also very informative.

Canyon Operating Plan Study – Status

Mr. Powell stated the schedule was changed to accommodate additional reviews and information that was added to the report. The last draft was circulated in October. There was a meeting in November to review comments. The goal is to have the new comments incorporated in the report to allow LHMWD to present the draft/final report at their January 2015 Board meeting. The expectation is to incorporate the final comments from LHMWD's Board meeting into the final report by January 23rd. RMC will then make a presentation to the Watermaster Board at the February Board meeting. Mr. Powell also commented that the Soboba Tribe may also want to see a presentation.

Other Actives

None

B. LHMWD Status Report

Mr. Wagoner reported that there was limited storm damage after the last storm. The lake is still approximately half full even after the storm. The Board is considering a public notice regarding a rate increase hearing, taking into consideration the pass through from EMWD and MWD. There will be a meeting on December 11th to authorize the board to hold a public hearing. Mr. Merrill mentioned, based on his experience, it is best to address rate changes without mentioning percentage changes.

C. Hemet Status Report

Ms. Jensen reported that the City of Hemet is in the middle of a Water Rate Study. The city has not had a rate increase since 2007. There is a meeting with the consultant Bartell Wells Associates on December 16th to discuss the study. The city is currently Requesting Qualifications (RFQ) for a consultant to help develop an RFP to assist the city with reducing city's operational cost. The city hopes to have a consultant chosen by the end of February or beginning of March.

The city is waiting on the Department of Health Services for permission to restart using Wells 4 and 14.

D. San Jacinto Status Report

Mr. Merrill reported that the current storm caused all of the Cities detention/retention basins overtop, and flooded some of the streets. The area around Rancho San Jacinto was completely filled with water and did some damage to walls in the area. The City has seen a reduction of water use due to the rate increase and closure of four (4) major park sites.

II. Watermaster Advisor Updates

Mr. Mortazavi presented the draft agenda for the December 22, 2014 Hemet – San Jacinto Watermaster Board meeting. The action items include the 2015 Annual Budget, 2015 Monitoring Program options, Financial Audit Contract and the consideration to adopt Resolution 1.2 changing the regular meetings to four per year. The informational items include Groundwater Model update, Monitoring Program Enhancement project, and the 2015 Database Management System demonstration.

A. 2015 Draft Budget

Mr. Mortazavi presented the 2015 proposed budget. The assumptions are very close to last year. The carry over accounts should offset the production accounts for 2015, therefore, it is expected that there will not be any replenishment assessments. Administrative Assessment Revenues are estimated based on $50 per AF. The In-lieu Agreement budget includes EMWD's proposed 10% recycled water rate increase, and operation will continue to be out of the Corona office. As previously agreed, for the purpose of budgeting, for May 2015 to April 2016, the Public Agencies adjusted production rights will be reduced by 7%. By February 2015, after local agencies evaluate the impacts of MWD supplies to the region, the final reduction rates should be set. By October 2015 the agencies should determine the Adjusted Base Production Rights for May 2016 to April 2017. Potential 2015 projects include the completion of the Groundwater Model (funded in 2014), Monitoring Program Enhancement Project (funded by DWR Grant), Data mapping/evaluation system enhancement, Webpage for Watermaster and development of a potential in-lieu project for the Soboba Golf Course. Mr. Scott requested a meeting with Mr. Mortazavi and EMWD to review his base right production. The estimated 2015 Administrative and 2014 Replenishment Assessment totals will be $1,221,256. The proposed payment schedule for 2015 for Administrative Assessment invoices will be: 25% of total by July 15, 2015, 50% of total by October 15, 2015 and any remaining balance will be reconciled and invoices by March 1, 2016. Four (4) different budget options for 2015 were reviewed. Option 1 is the amount needed to be operational without any new additional studies for 2015. Option 2 includes developing a potential In-lieu project for the Soboba Golf Course, Monitoring Program Enhancement Project,

Database/mapping Application Report Enhancements and Website Application Development. Option 3 is the same as option 2 except Babcock Lab leads Sampling Program with EMWD conducting Mobile Sampling, Well Capping, etc. Option 4 is also the same as Option 2 with the Advisor leading the Sampling Program with EMWD conduction Mobile Sampling. After much discussion, it was proposed that a hybrid of Option 1 and 4 be presented at the next Board meeting. Mr. Mortazavi, will distribute the hybrid Option slide via email to the TAC members prior to the Watermaster Board meeting.

B. <u>Groundwater Monitoring Program Options</u>

Mr. Mortazavi presented the 2015 monitoring program comparison options. The extraction monitoring includes 62 wells per month and 34 wells estimated annually. The level monitoring includes 186 wells twice per year. The water quality monitoring includes 75 grab samples per year and 34 mobile pump samples per year. The effort also requires Documentation and Annual reporting. The presentation included the cost comparison by activities as well as the cost comparisons by task. The TAC members asked about the quality of the Lab analysis that would be used in the different options. Mr. Mortazavi responded that all options will have lab analysis done by certified laboratory.

C. <u>Monitoring Program Enhancement</u>

Mr. Mortazavi presented the Groundwater Monitoring Program Enhancement overview. This included the project objectives, scope of work, schedule and deliverables. The project objectives are to prepare an enhanced groundwater monitoring program that would provide necessary information for the next safe yield assessment at a cost effective manner. The scope of work includes Task 1, develop the enhanced groundwater Monitoring Program, Task 2 is to prepare a draft and final report, Task 3 is the project management, project coordination and project meetings. This project costs about $96,000 and will be funded by DWR as a result of a recent assistance application request filed with DWR by the Advisor. TAC concurred to proceed with the project.

Next Meeting:
February 9, 2015 – TAC Meeting

AGENDA

HEMET – SAN JACINTO WATERMASTER
BOARD OF DIRECTORS

December 22, 2014
4:00 pm
2270 Trumble Road, Perris, CA 92750

CALL TO ORDER

PLEDGE OF ALLEGIANCE

ROLL CALL

I. PUBLIC COMMENTS

Any person may address the Board on any subject within the Watermaster's jurisdiction which is not on the agenda. However, any non-agenda matter that requires action will be referred to staff for a report and action at a subsequent Board meeting. Any person may also address the Board on any agenda matter at the time that matter is discussed, prior to Board action.

II. ADDITIONS/DELETIONS TO THE AGENDA

III. REPORTS

The following agenda items are reports. They are placed on the agenda to provide information to the Board and public. There is no action called for in these items.

A. Board Member Comments/Questions/Reports

B. Advisor Report

C. Legal Counsel Report

D. Treasurer Report

IV. CONSENT CALENDAR

A. Approval of Minutes – October 27, 2014 Regular Board Meeting.
Recommendation: Adopt a motion to approve item A on the Consent Calendar.

Consent Calendar items are expected to be routine and non-controversial and are to be acted upon by the Board at one time without discussion. If any Board member, staff member, or interested person requests that an item be removed from the Consent Calendar, it will be removed from the Consent Calendar for separate action.

DRAFT

V. ACTION ITEMS

The following items call for discussion and possible action by the Board. These items are placed on the Agenda so that the Board may discuss and possibly take action on the items if the Board desires.

A. 2015 Annual Budget - 2015 Budget presentation and schedule for Administrative and Replenishment Assessments Invoicing.
Recommendation: Adopt a motion to Approve Proposed 2015 Annual Budget and Authorize Advisor to initiate proposed activities and invoice participating agencies in accordance with the proposed payment schedule.

B. 2015 Monitoring Program Options – Review of different options for 2015 Monitoring Program.
Recommendation: Adopt a motion authorizing Advisor to sign necessary contracts to implement 2015 Monitoring Program.

C. Financial Audit Contract - Advisor is requesting for Board authorization to select a financial auditor that is familiar with Watermaster operations.
Recommendation: Authorize a three year contract with Hosaka, Rotherham & Company to conduct annual financial audits for 2014-2016 at a not-to-exceed cost of $4,500 per year.

D. Consideration to Adopt Resolution 1.2 Changing The Regular Meetings to Four Per Year and Permitting Temporary Changes - Summary of the Resolution 1.2 and proposed changes.
Recommendation: Adopt a motion to Approve Resolution 1.2.

VI. INFORMATIONAL ITEMS/CORRESPONDENCE

A. Groundwater Model Update – Status report on the groundwater model update project.

B. Monitoring Program Enhancement – Review of recently approved financial assistance from Department of Water Resources to enhance existing groundwater monitoring program.

C. 2014 Database Management System – Demonstration of the database management system by Spatial Wave

VII. CLOSED SESSION - NONE

VIII. ADJOURNMENT

Next Regular Board of Directors Meeting
February 23, 2015 at 4:00 pm. at:
Eastern Municipal Water District Board Room
2270 Trumble Road, Perris, CA 92750

Upon request, this agenda will be made available in appropriate alternative formats to persons with disabilities, as required by Section 202 of the Americans With Disabilities Act of 1990. Any person with a disability who requires a

modification or accommodation in order to participate in a meeting should direct such a request to the Watermaster Executive Assistant at 714-707-4787, at least 48 hours before the meeting, if possible.

Pursuant to Government Code Section 54957.5, any writing that (a) is a public record; (b) relates to an agenda item for an open session of a regular meeting of the Watermaster Board of Directors; and (c) is distributed less than 72 hours prior to that meeting, will be made available for public inspection at the time the writing is distributed to the Board of Directors. Any such writing will be available for public inspection at Watermaster's office located at 2270 Trumble Road, Perris, CA 92750.

DRAFT

2015 Proposed Budget

Watermaster TAC Meeting
December 8, 2014

2015 Budget Assumptions

- Carry-over accounts are used to offset any excess production in 2015 and no Replenishment Assessments will be collected in 2015.
- Administrative Assessment Revenues are estimated based on $50/acre-foot.
  - Productions are estimated based on actual 2013/2014 data.
- The In-lieu Agreement budget includes EMWD's proposed 10% recycled water rate increase.
- Coordinated efforts with EMWD:
  - Groundwater Modeling Effort (funded under 2014 budget)
  - Potential in-lieu project for the Soboba Golf Course

2015 Budget Assumptions (Cont.)

- **Watermaster will continue its operation out of the Corona office.**
- **For budgeting purpose, May 2015 to April 2016 Public Agencies Adjusted Production Rights is reduced by 7%.**
  - **By February 2015, finalize the May 2015 to April 2016 reduction rate. After local agencies evaluate impacts of MWD supplies to the region.**
  - **By October 2015, determine the Adjusted Base Production Rights for May 2016 to April 2017.**

Potential 2015 Projects

- Completion of the Groundwater Model (funded in 2014).
- Monitoring Program Enhancement Project (funded by DWR).
- Data mapping/evaluation system enhancement.
- Develop a webpage for the Watermaster.
- Develop an in-lieu project for the Soboba Golf Course.

Estimated Administrative Assessments 2015

Agency	2015 Adjusted BPR (AFY)	Projected 2015 Production (AF) *	Est. Prod. Subject to Admin. Assmt. (AF) **	2015 Budget Admin. Assmt. ($)
City of Hemet	5,590	4,545	3,645	$182,271
City of San Jacinto	3,637	2,963	2,063	$103,170
EMWD	9,300	13,827	9,300	$464,980
LHMWD	9,417	13,071	9,417	$470,834
Totals	**27,944**	**34,406**	**24,425**	**$1,221,256**

AF = Acre-feet
Assmt. = Assessment
Est. = Estimated
AFY = Acre-feet per year
BPR = Base Production Rights
Prod. = Production

- 2015 Production Projections are based on Jan-Aug 2014 and Sept-Dec 2013 productions.

** The Cities of Hemet and San Jacinto can produce 900 AFY without any Admin. Assessment payment.

Estimated 2015 Administrative & 2014 Replenishment Assessments

Agency	Estimated Admin. Assmt.	Replenishment Assessment for 2014	Total Assessments
City of Hemet	$182,271	$0	$182,271
City of San Jacinto	$103,170	$0	$103,170
EMWD	$464,980	$0	$464,980
LHMWD	$470,834	$0	$470,834
Totals	**$1,221,256**	**$0**	**$1,221,256**

Admin. = Administrative
Assmt. = Assessment

Estimated Replenishment for 2015

Agency	Modified BPR for 2015 (AFY)	Estimated 2015 Production	Estimated 2015 Prod. Above/Below Adjusted BPR	Estimated 2015 Repl. (AF)
City of Hemet	5,590	4,545	(1,045)	0
City of San Jacinto	3,637	2,963	(674)	0
EMWD	9,300	13,827	4,527	0
LHMWD	9,417	13,071	3654	0
Totals	27,944	34,406	6,463	0

AF = Acre-feet
Assmt. = Assessment
Est. = Estimated
Repl. = Replenishment

AFY = Acre-feet per year
BPR = Base Production Rights
Prod. = Production

- The Cities of Hemet and San Jacinto can produce 900 AFY without any Admin. Assessment payment.

Proposed Payment Schedule

- **Administrative Assessment Invoicing:**
  - **25% of total by July 15, 2015.**
  - **50% of total by October 15, 2015.**
  - **The remaining balance will be reconciled and invoiced by March 1, 2016.**
- **Replenishment Assessment Invoicing (if any):**
  - **Full 100% invoiced by August 1, 2016.**

2015 Budget Options

Budget Items	2014 Budget	Option 1	Option 2	Option 3	Option 4
Agreements					
In-Lieu Program Agreement	$160,000	$182,000	$182,000	$182,000	$182,000
EMWD Support					
Groundwater Monitoring Program	$148,965	$179,500	$179,500		
Gravel Pit Cleanup Project					
Dewatering	~~$35,000~~	$35,000	$35,000	$35,000	$35,000
De-silting	~~$105,000~~	$112,500	$112,500	$112,500	$112,500
Organization Operations & Management					
Financial Support Services	$18,000	$12,000	$12,000	$12,000	$12,000
Legal Counsel Services	$33,000	$33,000	$33,000	$33,000	$33,000
Advisor Services	$166,000	$160,000	$160,000	$160,000	$160,000
Insurance; Office Supplies; and Other Direct Costs	$15,000	$10,000	$10,000	$10,000	$10,000
Administrative Support Services	$50,000	$21,500	$21,500	$21,500	$21,500
Education and Training	$15,000	$15,000	$15,000	$15,000	$15,000
Database/Mapping Application Maintenance		$5,250	$5,250	$5,250	$5,250
Additional Projects/Activities					
Database/Mapping Application Development	$20,000				
Groundwater Model Development	$120,000				
Develop new In-lieu project for Soboba Golf Course			$100,000	$100,000	$100,000
Monitoring Program Enhancement Project			DWR	DWR	DWR
Database/Mapping Application Report Enhancement			$8,000	$8,000	$8,000
Website Application Development			$5,000	$5,000	$5,000
Babcock Lab leads Sampling with EMWD Conducting Mobile Sampling, Well Capping, etc..				$140,600	
Advisor leads Sampling with EMWD Conducting Mobile Sampling					$124,000
TOTALS	$745,965	$765,750	$878,750	$839,850	$823,250

2015 Monitoring Program Options

Watermaster TAC Meeting
December 8, 2014

2015 Monitoring Program Options Comparison Basis

- Extraction Monitoring:
  - 62 Wells Per Month
  - 34 Wells Estimated Annually
- Level Monitoring - 186 Wells Twice Per Year
- Water Quality Monitoring:
  - 75 Grab Samples Per Year
  - 37 Mobile Pump Samples Per Year
- Inactive Well Capping/Sealing - 5 Wells Per Year
- Meter Replacement/Repair - 5 Wells Per Year
- Documentation and Annual Report Preparation

Cost Comparisons by Activities

Description	EMWD in Charge of the Full Program (Current Condition)	Babcock Conducts the Field Work	WRE conducts the Monitoring Program
Extraction Monitoring	$ 22,684	$ 28,800	$ 17,200
GW Level Monitoring	$ 22,620	$ 15,345	$ 15,840
Water Quality Monitoring (Grab Sampling)	$ 41,357	$ 19,939	$ 23,133
Water Quality Monitoring (Mobile Sampling)	$ 30,097	$ 22,395	$ 22,395
Inactive Well Capping/Sealing	$ 9,660	$ 9,660	$ 6,600
Meter Replacement/Repair	$ 12,450	$ 12,450	$ 10,750
Documentation and Annual Report Preparation	$ 18,729	$ 18,729	$ 22,020
Other Direct Costs (ODC)	$ 21,920	$ 6,070	$ 6,070
WRE Coordination		$ 7,200	
Totals	$179,517	$140,588	$124,007

Cost Comparisons by Task

Description	EMWD in Charge of the Full Program (Current Condition)	Babcock Conducts the Field Work	WRE conducts the Monitoring Program
Report Preparation /Office Work	$ 47,241	$ 26,341	$ 31,432
Water Quality Analysis	$ 40,470	$ 17,955	$ 17,955
Field Work + ODC	$ 91,806	$ 96,292	$ 74,620
Totals	$179,517	$140,588	$124,007

Questions?

Groundwater Monitoring Program Enhancement

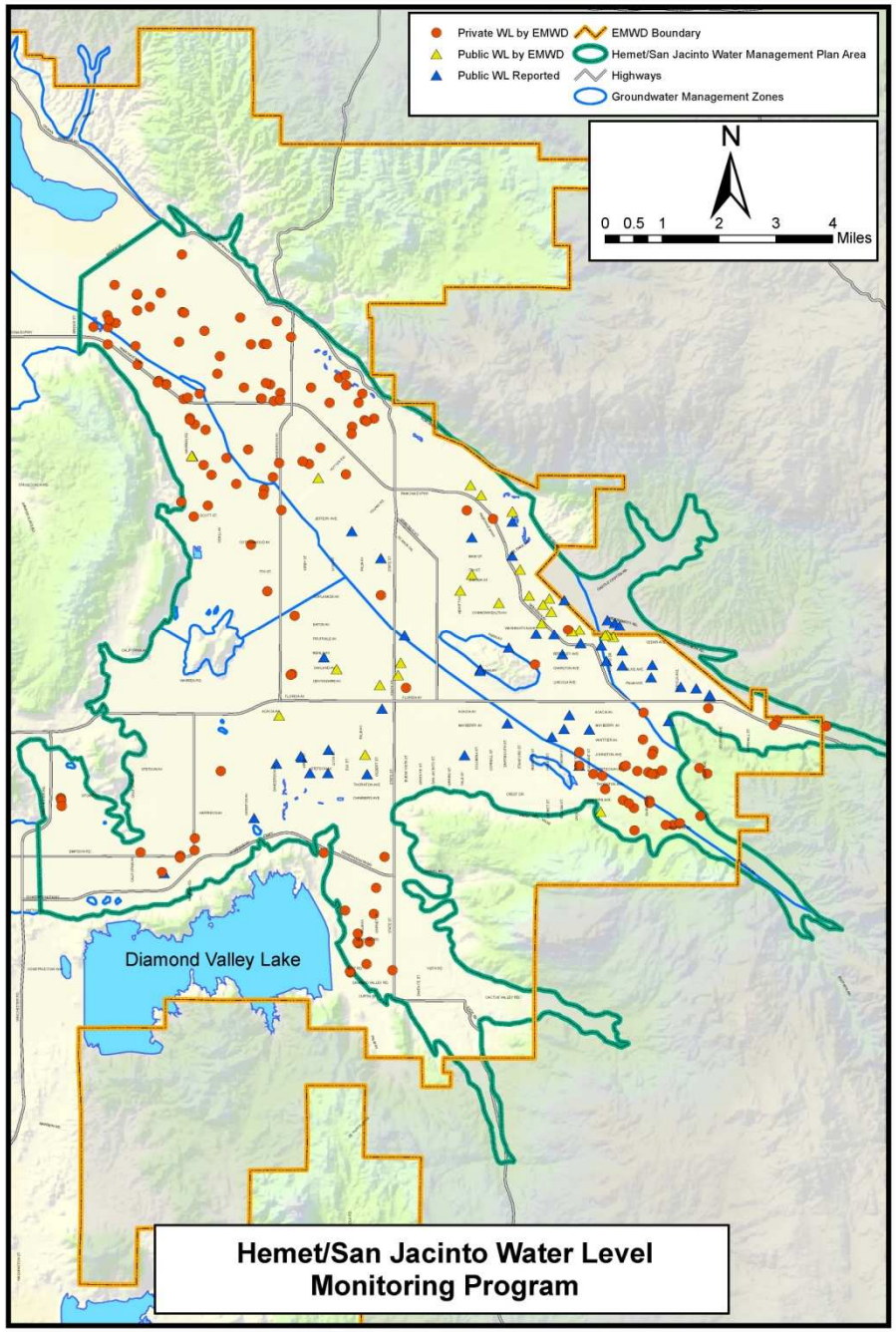
Watermaster Board Meeting
December 22, 2014

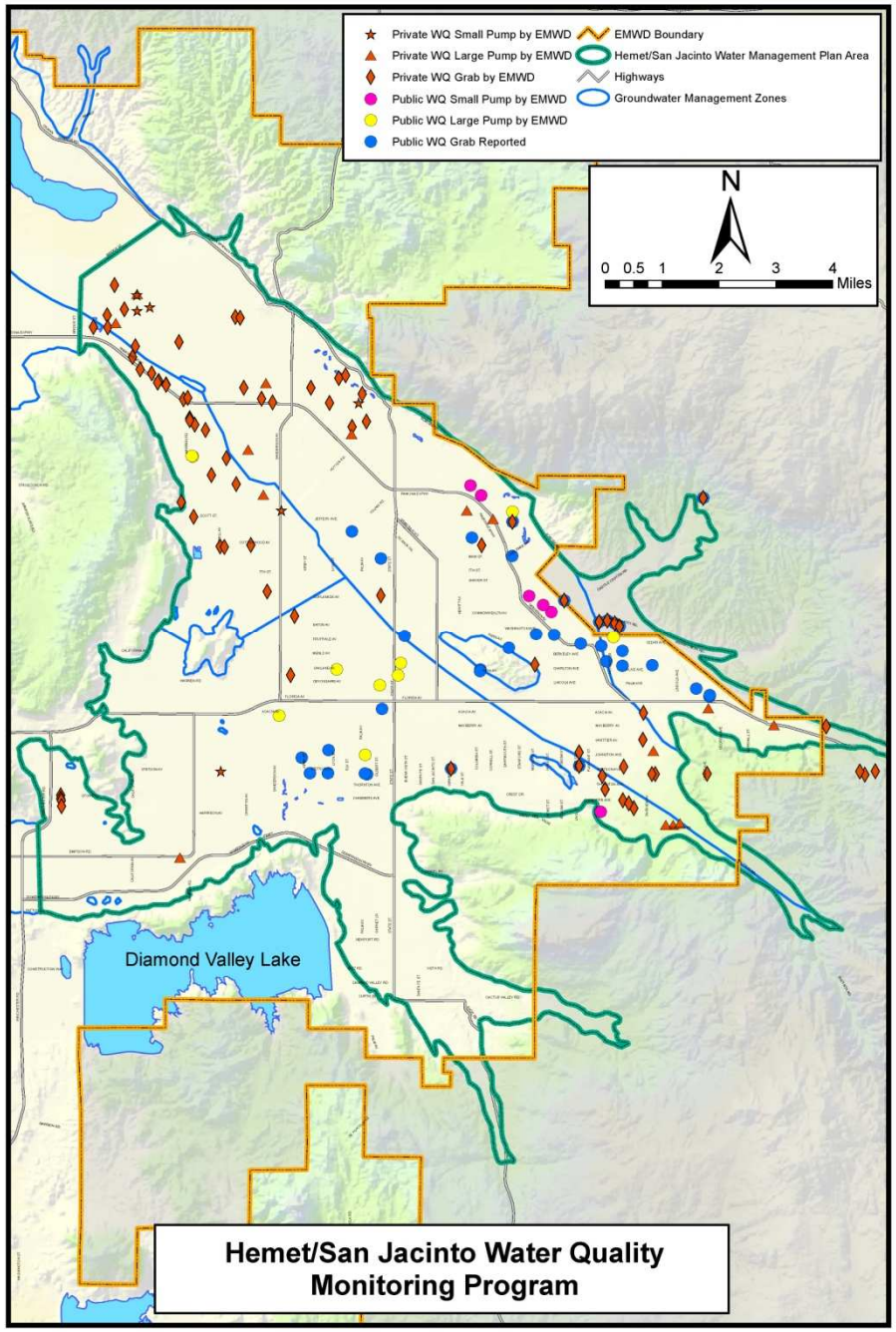
Presentation Overview

- Project Objectives
- Scope of Work
- Schedule
- Deliverables

Project Objectives

- **Prepare an enhanced groundwater monitoring program that would provide necessary information for the next safe yield assessment at a cost effective manner.**


Private WL by EMWD
Public WL by EMWD
Public WL Reported
EMWD Boundary
Hemet/San Jacinto Water Management Plan Area
Highways
Groundwater Management Zones
N
0 0.5 1 2 3 4
Miles
Diamond Valley Lake
Hemet/San Jacinto Water Level Monitoring Program


Private WQ Small Pump by EMWD
Private WQ Large Pump by EMWD
Private WQ Grab by EMWD
Public WQ Small Pump by EMWD
Public WQ Large Pump by EMWD
Public WQ Grab Reported
EMWD Boundary
Hemet/San Jacinto Water Management Plan Area
Highways
Groundwater Management Zones
N
0 0.5 1 2 3 4
Miles
Diamond Valley Lake
Hemet/San Jacinto Water Quality Monitoring Program

Scope of Work

- Task 1 – Develop the Enhanced Groundwater Monitoring Program (EGMP)
  - 1a – Develop goals, objectives for the (EGMP)
  - 1b – Collect and review data
  - 1c – Update monitoring protocols and plans
  - 1d – Assess and document the gaps
  - 1e – Develop the enhanced groundwater monitoring program
- Task 2 – Prepare Draft and Final Reports
  - Maps identifying the key wells for monitoring
  - Monitoring protocols
  - Updated field forms for data collection for agencies involved
- Task 3 – Project Management, Project Coordination and Project Meetings
  - Project Management and Coordination
  - Meetings
- Deliverables (Electronic format)
  - Draft Hemet-San Jacinto Groundwater Monitoring Program Report
  - Final Hemet-San Jacinto Groundwater Monitoring Program Report

Schedule

Task	Description	2015 Jan	Feb	Mar	Apr	May	Jun
1	Develop Enhanced Groundwater Monitoring Program (EGMP)						
1a	Develop Goals, Objectives for the EGMP						
1b	Collect and Review Data						
1c	Update Monitoring Protocols						
1d	Assess and Document the Gaps						
1e	Develop EGMP						
2	Prepare Draft and Final Reports Draft Report Final Report						
3a	Project Management & Coordination						
3b	Project Meetings – Tech Advisory Committee Project Meeting - Watermaster Board						

Deliverables

- **Deliverables (Electronic format)**
  - **Draft Report**
  - **Final Report**

Questions?

Hemet-San Jacinto Watermaster

11 Appendices

11.1 Watermaster Board Meeting Minutes

11.2 Technical Advisory Committee Meeting Notes

11.3 Agreements

11.4 Resolutions

11.5 Task Orders

11.6 Independent Auditor's Report

11.7 References

ACCOUNTING SERVICES AGREEMENT

BETWEEN
HEMET-SAN JACINTO WATERMASTER
AND
BELL BOOKKEEPING

This Agreement is made and entered into this 24th day of February, 2014, by and between the Hemet-San Jacinto Watermaster ("Watermaster"), and Bell Bookkeeping ("Contractor"), an Independent Contractor, to provide Accounting Services to the Watermaster.

1) **SCOPE OF SERVICES.** Contractor will provide all necessary services required to meet accounting needs of the Watermaster. Contractor will provide all current bookkeeping as well as any previous year or clean up bookkeeping, as needed, for tax preparation and/or auditing purposes. Including but not limited to:

   - Maintain the chart of accounts;
   - Post journal entries as needed and perform account reconciliations;
   - Produce regular financial statements and reports;
   - Prepare budget-to-actual reporting;
   - Verify invoices and process for payment upon appropriate approvals;
   - Create and post billings;
   - Maintain account aging;
   - Record payment receipts;
   - Monthly reporting of financials;
   - Answering pertinent emails and phone calls to staff and/or board members in a timely manner;
   - If required process payroll for any employees of the Watermaster who are not contractors;
   - Lead hiring of financial auditors and conducting annual audits;
   - Other Controller or general bookkeeping duties to ensure the proper documentation of all income and expenses;
   - Filing of all appropriate, quarterly sales taxes, and payroll taxes, if required; and
   - Preparing information needed for any submittals to the Court and/or annual taxes.

2) **FEES AND COSTS.** Watermaster agrees to pay Contractor at an hourly rate of $65 per hour, not-to-exceed $6,000.00 per year. Contractor shall submit detail monthly invoices for services rendered under this Agreement. Each invoice will be due within 30 days of its date.

3) **TERM.** This Annual Agreement renews automatically on January 1 of each year. Each party can terminate this Agreement by providing a 30-days termination notice.

   Contractor shall deliver all files, accounting documents, completed work, and work in progress to the Watermaster Advisor in an acceptable format within fifteen (15) days of the termination notice.

4) **PERFORMANCE OF SERVICES.** Contractor shall perform services under this Agreement as an Independent Contractor and not as an employee of the Watermaster. Contractor will ensure that its employees observe and abide by all regulations and laws.

5) **INSURANCE.** Contractor shall carry and maintain professional liability insurance coverage of $1,000,000.00 per claim and $1,000,000.00 aggregate.

6) **INDEMNIFICATION; HOLD HARMLESS.** Contractor, to the extent permitted by law, shall indemnify, and hold harmless the Watermaster, its Directors, and representatives from and against all claims, liabilities, damages, losses or expenses to the extent arising out of any negligence, willful misconduct, breach of contract, violation of law or other conduct for which the Advisor in the performing of services under this Agreement, is at fault.

In the event it is determined that the parties are jointly negligent, the liability, loss, or damages, shall be allocated among the parties in proportion of their relative fault.

7) **MISCELLANEOUS.** The Contractor shall consider any files created and used by the Contractor for the Watermaster strictly confidential.

This Agreement constitutes the entire Agreement of the parties. No other agreement, statement or promise made on or before the effective date of this Agreement, will be binding on the parties.

This Agreement may be modified by subsequent agreement of the parties in writing, signed by or on behalf of both parties.

If any provision of this Agreement is held in whole or in part to be unenforceable for any reason, the remainder of the provisions and of the entire Agreement will be severable and remain in effect.

This Agreement may be signed in counterparts.

DATED: March 12, 2014

Constance Bell, CEO
Bell Bookkeeping

Hemet-San Jacinto Watermaster

DATED: Feb 24, 2014

Bruce B. Mortazavi, Advisor
Hemet-San Jacinto Watermaster

Hemet-San Jacinto Watermaster

Groundwater Management Database and Reporting System

Introduction

The purpose of this proposal is to outline the necessary tasks to implement a solution for creation of a hosted database management system and an associated mapping interface for retrieval and reporting of the groundwater data related to the San Jacinto basin. The data is currently collected by Eastern Municipal Water District (EMWD). EMWD will provide this data on a monthly basis to update the water master database. Once the data is updated, the system will inform the water master that new data has been uploaded in the system and is available for query and reporting purposes. The technology used in this project will be Mapplet 7 from Spatial Wave. The GIS data corresponding to the Wells will be dynamically displayed. The other GIS data including the Parcel data will be provided as a cached layer with linkage to parcel ownership information.

Tasks

This section describes the tasks that are needed to implement this solution.

Task 1 - Kick-off Workshop

The purpose of this task is to conduct a kick-off workshop to evaluate the data that will be provided by EMWD on a monthly basis. This includes the groundwater data (pumping, water level, well locations, well construction, etc.) and the GIS data such as parcels.

Water Master Responsibility: Organize the workshop to discuss the above items.

Deliverables: Memorandum describing the items above.

Task 2 – Setup Cloud Server to receive data

The purpose of this task is to setup the server to receive the data on a regular basis. During this task we will setup the database and update the content using data received in EMWD's format.

Deliverables: Cloud Server containing the groundwater data loaded into the water master database.

Task 3 – Setup Mapplet to access the data

All data from the database will be displayed on the map based on X, Y location of the corresponding wells. The data will include

- Well Locations
- Well Type and Construction Information (if present in EMWD's data)
- Water Levels
- Production
- Water Quality

Deliverables: Mapplet data access via the protected mapping interface.

Task 4 – Testing and Documentation

The purpose of this task is to do final testing and QA of the database environment and its functionality.

Water Master Responsibility: Participate in final testing of the integration and application.

Task 5 – Deployment and Training

The purpose of this task is to deploy the solution and to provide staff training.

Water Master Responsibility: Participate in the training.

Project Cost

Project cost is broken down by task as shown in Table 1:

Spatial Wave

Table 1 – Breakdown of Cost by Tasks

Task	Description	Duration (Hrs.)	Cost
1	Kick-off Workshop	1	$180
2	Setup Cloud Server to receive data	42	$5,960
3	Setup Mapplet to access the data	9	$1,300
4	Testing and Documentation	5	$740
5	Deployment and Training	2	$360
	Total Setup (one-time) Cost	**59**	**$8,540**

Table 2 – Annual Cost

Items	Description	Annual Cost
Infrastructure	Server, DB, Software License, Backup and Maintenance	$3,900
Data	Updating of the data – 3 times a years ($450/update assuming no database changes)	$1,350
	Total Annual Cost	**$5,250**

The labor rates used to estimate the cost are shown in Table 3.

Table 3 - Labor Rates

Classification	Labor Rate ($/hr.)
Project Manager	**$180**
Professional Engineer/Trainer	**$140**
Assistant Professional/Report Development	**$ 100**

Project Assumption

The following assumptions were included in the following:

- Monthly data exchange with EMWD.
- All data will be loaded into the database via EMWD's data exchange.
- Database format remains unchanged.
- Reports will be developed on Times and Material basis.

Project Duration

The duration of this project from the start to deployment will be six weeks. This may be revised based on availability of data from EMWD. Beyond the 6 weeks the data update processing will be conducted on a monthly basis.

Authorization to Proceed

Hemet-San Jacinto Watermaster

Behrooz Mortazavi — 2/25/2014

Representative Name — Date

Watermaster Advisor

GROUNDWATER MANAGEMENT TOOL MODEL CALIBRATION UPDATE
FINANCIAL PARTICIPATION AGREEMENT

This Agreement is made and entered into this _____ day of _____, 2014, by and between **EASTERN MUNICIPAL WATER DISTRICT**, organized and operating pursuant to Division 20 of the California Water Code (hereinafter "Eastern"), and the **HEMET-SAN JACINTO WATERMASTER**, a judicial creation of the Superior Court of the State of California in and for the County of Riverside (hereinafter "Watermaster") Eastern and Watermaster are sometimes collectively referred to herein as the "Parties".

RECITALS

WHEREAS, the Watermaster is a court created entity, chartered to manage the groundwater and surface waters in the Hemet-San Jacinto Management Area with powers and duties defined in the Stipulated Judgment entered on April 18, 2013 in Eastern Municipal Water District v. City of Hemet, et al, (Riverside County Superior Court case no. RIC 1207274); and

WHEREAS, Eastern owns and utilizes a Groundwater Management Tool ("Model") for purposes of monitoring groundwater levels within the Hemet-San Jacinto Management Area ("Basin"); and

WHEREAS, In 2002, Eastern last updated its Model which includes eight (8) Groundwater Management Zones within the Basin; and

WHEREAS, Groundwater levels within each of the eight (8) Groundwater Management Zones have, in some cases, fluctuated significantly. The Parties have determined that it is necessary to calibrate the Model within the Basin; and

WHEREAS, The Parties desire to work collaboratively to contract with a consultant to calibrate the aforementioned Model; and

WHEREAS, Eastern, as lead agency, has issued a competitive solicitation, attached hereto and incorporated herein as **Exhibit A**, for consulting services to update the Model, a portion of which includes the scope of work for Model calibration; and

WHEREAS, The Watermaster has agreed to share the cost of the Model update; and

WHEREAS, The purpose of this Agreement is set forth the terms and conditions whereby the parties will collaborate in the consultant selection and will share the cost of the Model update.

NOW, THEREFORE, in consideration of the premises and covenants herein contained, the parties agree as follows:

AGREEMENT

1. Incorporation of Recitals. The Recitals set forth above are incorporated into and are a part of this Agreement.

   Agreement. Eastern, as lead agency, hereby agrees to contract in its standard form, based on the outcome of the competitive solicitation, with the selected consultant to

perform the scope of services identified, therein. Watermaster, hereby, acknowledges and agrees that they have reviewed and accept the proposals, scope of work, schedule, and estimated costs and certify that they are satisfactory for Watermaster's individual use and intended purpose. Watermaster further acknowledges and agrees that the consultant shall perform the proposed services under control of Eastern, as an independent contractor and not as an employee of any Party, hereto. The Watermaster agrees to provide $120,000 towards the cost of Model calibration and update.

The Watermaster shall:

- Participate in consultant selection process;
- Participate in consultant submittal review;
- Attend technical meetings and discussions related to Model Calibration;
- Provide comments to the consultants as required; and
- Participate in determining the calibration parameters and predictive simulations of groundwater basins within the Hemet-San Jacinto Management area; and have the right to develop a separate model for the Hemet-San Jacinto Management area using the data and information developed by the Consultant.

Eastern shall:

- Provide a copy of all correspondences related to the Model development at the time of communication takes place with the Consultant, and set meeting time and dates with the consultant considering Watermaster Advisor's availability;
- Provide a copy of the calibrated model, all reports developed by the Consultant, and all related databases needed to run the Model for future simulations;
- Provide necessary presentations to the Watermaster Board and Technical Advisory Board;
- Provide training on the model; and
- Provide Watermaster the right to use the model for future simulation runs with or without direct involvement by Eastern.

2. Payment and Billing:

   a. Eastern shall, itself, pay the consultant for services performed in accordance with the terms and conditions of the Agreement. Eastern shall invoice Watermaster for payment of $120,000 of the Model update cost.
   b. Watermaster shall remit payment to Eastern within thirty (30) days of receipt of such invoice.

3. Term and Termination. This Agreement shall remain in effect unless terminated, in writing, for any reason, with or without cause, by giving sixty (60) days prior notice, by either Party.

   Watermaster shall be required to compensate Eastern for consultant services rendered prior to the effective date of the notice and further services set forth in the notice. Watermaster shall be entitled to reimbursement for compensation paid in excess of services rendered. Eastern waives claims for damages that might arise from Watermaster's termination of this Agreement.

4. Hold Harmless and Indemnification. Eastern and Watermaster, each mutually, indemnify and hold each other harmless from any and all claims, demands, causes of action, damages, costs and expenses, including attorney's fees, property damage,

bodily injury, personal injury, losses or liabilities, in law or in equity, of every kind and nature to the extent that the same are the result of an error, omission or negligent act of the other, its officers or employees, or any other person acting pursuant to its control in performing under this Agreement.

5. Binding Provision. This Agreement is binding on the representatives, successors and assigns of the Parties hereto.

6. Entire Agreement. This Agreement is intended by the Parties as a complete and exclusive statement of the terms of their agreement and supersedes all prior agreements, written or oral, as to this subject matter.

7. Notices. Any notice required by this Agreement to be given or delivered to any Party shall be deemed to have been received when personally delivered or mailed in the United States mail addressed as follows:

Eastern: Eastern Municipal Water District
Post Office Box 8300
Perris, Ca. 92572-8300
Attn: General Manager

Watermaster: Hemet-San Jacinto Watermaster
c/o Water Resources Engineers Inc.
1295 Corona Pointe Court, Suite 104
Corona, Ca. 92879
Attn: Watermaster Advisor

8. Authority to Enter Agreement. Each party warrants that the individuals who have signed this Agreement have the legal power, right, and authority to make this Agreement and bind each respective party.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the day and year first above written.

EASTERN MUNICIPAL WATER DISTRICT **HEMET-SAN JACINTO WATERMASTER**

By: _____ By: _____
Paul D. Jones II, P.E., General Manager Frank D. Gorman, Chairman

Dated: _____ Dated: _____

PACKAGE POLICY

Alteris

Allied World Assurance Company (U.S.) Inc.
199 Water Street, 24th Floor
New York, NY 10038
(646) 794-0500

Common Policy: DECLARATIONS

WATERPLUS

POLICY NUMBER: 5105-1266	**POLICY PERIOD:** From 4/1/2014 To 4/1/2015
Replacement Number: N/A	at 12:01 a.m. Standard Time at the mailing address below

NAMED INSURED AND MAILING ADDRESS:	PROGRAM MANAGER NAME AND ADDRESS:
Hemet-San Jacinto Watermaster c/o EMWD, PO Box 8300, 2270 Trumble Road Perris, CA 92572	ALTERIS INSURANCE SERVICES, INC. 250 Summer Street, 3rd Floor Boston, MA 02210

BUSINESS DESCRIPTION: Special District

IN RETURN FOR THE PAYMENT OF THE PREMIUM, AND SUBJECT TO ALL THE TERMS AND CONDITIONS OF THIS POLICY, WE AGREE WITH YOU TO PROVIDE THE INSURANCE AS STATED IN THIS POLICY.

THIS POLICY CONSISTS OF THE FOLLOWING COVERAGE PARTS FOR WHICH A PREMIUM IS INDICATED. THIS PREMIUM MAY BE SUBJECT TO ADJUSTMENT.

	PREMIUM
Property Coverage Form $	N/A
Commercial Crime Coverage Form $	N/A
Commercial General Liability Coverage Form $	500.00
Public Officials and Management Liability Coverage Form $	500.00
Terrorism $	2.00
TOTAL PREMIUM: $	**1,002.00**
The following Fees are not included in the above Total Premium:	
Policy Fee $	**100.00**

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FORMS APPLICABLE TO ALL COVERAGE PARTS SHOWN BELOW:

WA-IL 00001 00 (03/12), FORMS LOB 02 10, WA-IL 00003 00 (03/12), WA-IL 00004 04 (03/12), WA-IL 00005 00 (03/12), WA-IL 00006 00 (03/12), WA-IL 00007 00 (03/12), WA-IL 00008 00 (03/12), WA-GL 00001 00 (03/12), WA-GL 00003 00 (03/12), WA-GL 00004 04 (03/12), WA-GL 00005 04 (03/12), WA-GL 00006 00 (03/12), WA-GL 00013 00 (03/12), WA-GL 00014 00 (03/12), WA-GL 00022 00 (03/12), WA-PO 00001 00 (03/12), WA-PO 00005 00 (03/12), WA-PO 00014 00 (03/12)

THESE DECLARATIONS TOGETHER WITH THE COMMON POLICY CONDITIONS, COVERAGE FORM DECLARATIONS, COVERAGE FORMS, AND FORMS AND ENDORSEMENTS, IF ANY, ISSUED TO FORM A PART THEREOF, COMPLETE THE ABOVE NUMBERED POLICY.

Countersigned: **3/25/2014** By:

Date **Authorized Representative**

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Schedule of Forms

Named Insured Hemet-San Jacinto Watermaster

Policy No: 5105-1266 Allied World Assurance Company

Water Plus

Form Name	Form Number
Common Policy Declarations - AWAC	WA-IL 00001 00 (03/12)
SCHEDULE OF FORMS LOB	FORMS LOB 02 10
Common Policy Conditions	WA-IL 00003 00 (03/12)
CA Changes Cancellation and Nonrenewal	WA-IL 00004 04 (03/12)
Disclosure -Terrorism Risk Insurance Act	WA-IL 00005 00 (03/12)
Nuclear Energy Excl (Broad Form)	WA-IL 00006 00 (03/12)
Anti-Stacking of Limits Endt.doc	WA-IL 00007 00 (03/12)
Policy Terrorism	WA-IL 00008 00 (03/12)

General Liability

Form Name	Form Number
Liability Declarations	WA-GL 00001 00 (03/12)
General Liability Coverage Form	WA-GL 00003 00 (03/12)
Amendment - CA Claims	WA-GL 00004 04 (03/12)
CA Changes - Spouse	WA-GL 00005 04 (03/12)
Blanket A I	WA-GL 00006 00 (03/12)
Fellow Employee Endorsement	WA-GL 00013 00 (03/12)
Per Location Aggregate Limit Endorsement	WA-GL 00014 00 (03/12)
Terrorism GL Cap on Losses from Cert Acts	WA-GL 00022 00 (03/12)

Public Officials Management Liability

Form Name	Form Number
Public Officials Occurrence Dec - AWAC	WA-PO 00001 00 (03/12)
Public Officials Occurrence Coverage Form	WA-PO 00005 00 (03/12)
Employment Practices Exclusion	WA-PO 00014 00 (03/12)

COMMON POLICY CONDITIONS

WATER PLUS

THE FOLLOWING CONDITIONS ARE INCLUDED UNDER EACH COVERAGE FORM WHICH IS PART OF THE POLICY, UNLESS OTHERWISE STATED.

A. Cancellation

1. The first Named Insured may cancel this policy or any of its individual coverages at any time by sending us a written request or by returning the policy and stating when thereafter cancellation is to take effect.
2. We may cancel this policy or any of its individual coverages at any time by sending to the first Named Insured written notice of cancellation at least:
   a. 10 days before the effective date of cancellation if we cancel for nonpayment of premium; or
   b. 60 days before the effective date of cancellation if we cancel for any other reason.
3. We will mail or deliver our notice to the first Named Insured's last mailing address known to us.
4. Notice of cancellation will state the effective date of the cancellation. The policy period will end on that date.
5. If this policy is cancelled, we will send the first Named Insured any premium refund due. The earned premium will be computed on a pro rata basis. Any unearned premium will be returned as soon as practicable.
6. If notice of cancellation is mailed, proof of mailing will be sufficient proof of notice.

B. Changes

This policy can only be changed by a written endorsement that becomes part of this policy. The endorsement must be signed by one of our authorized representatives.

C. Compliance By Insureds

We have no duty to provide coverage under this policy unless you and any other involved insured have fully complied with all of the terms and conditions of the policy.

D. Compliance with Applicable Trade Sanctions

This insurance does not apply to the extent that trade or economic sanctions or other laws or regulations prohibit us from providing insurance.

E. Conformance

Any terms of this insurance which are in conflict with the applicable statutes of the State in which this policy is issued are amended to conform to such statutes.

F. Examination of Your Books and Records

We may examine and audit your books and records as they relate to this policy at any time during the policy period and up to three years afterwards.

G. First Named Insured

The person or organization first named in the Declarations is primarily responsible for payment of all premiums. The first Named Insured will act on behalf of all other Named Insureds for the giving and receiving of notice of cancellation or non-renewal and the receiving of any return premiums that become payable under this policy.

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H. Inspections and Surveys

We may:

1. make inspections and surveys at any time;
2. give you reports on the conditions we find; and
3. recommend changes.

Any inspections, surveys, reports or recommendations relate only to insurability and the premiums to be charged. We do not make safety inspections. We do not undertake to perform the duty of any person or organization to provide for health or safety of workers or the public. And we do not warrant that conditions:

1. are safe or healthful; or
2. comply with laws, regulations, codes or standards.

This condition applies not only to us, but also to any rating, advisory, rate service or similar organization which makes insurance inspections, surveys, reports or recommendations for us.

I. Titles of Paragraphs

The titles of the various paragraphs of this policy and endorsements, if any, attached to this policy are inserted solely for convenience or reference and are not to be deemed in any way to limit or affect the provisions to which they relate.

J. Transfer of Rights and Duties

Your rights and duties under this insurance may not be transferred without our written consent. However, if you die, then your rights and duties will be transferred to your legal representative, but only while acting within the scope of duties as your legal representative, or to anyone having temporary custody of your property until your legal representative has been appointed.

K. When We Do Not Renew

If we decide not to renew this policy, we will mail or deliver to the first Named Insured stated in the Declarations written notice of the non-renewal not less than 60 days before the expiration date. If notice of non-renewal is mailed, proof of mailing will be sufficient proof of notice.

L. Deductible Waiver

If a covered loss involves multiple policies, Coverage Forms or Coverages within a Coverage Form issued to you by us, only one deductible, the largest, will be applied. The deductible under the other policies or Coverage Forms will be waived.

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CALIFORNIA CHANGES – CANCELLATION AND NONRENEWAL

THIS ENDORSEMENT CHANGES THE POLICY.

PLEASE READ IT CAREFULLY.

THIS ENDORSEMENT MODIFIES THE FOLLOWING FORM:

COMMON POLICY CONDITIONS

Paragraphs **2., 3. and 5.** of **A. Cancellation under the COMMON POLICY CONDITIONS** are replaced by the following:

1. All Policies in Effect for 60 Days or Less

If this policy has been in effect for 60 days or less, and is not a renewal of a policy we have previously issued, we may cancel this policy by mailing or delivering to the first Named Insured at the mailing address shown in the policy and to the producer of record, advance written notice of cancellation, stating the reason for cancellation at least:

a. 10 days before the effective date of cancellation if we cancel for:

(1) Nonpayment of premium; or

(2) Discovery of fraud by:

(a) any insured or his or her representative in obtaining this insurance; or

(b) you or your representative in pursuing a claim under this policy.

b. 60 days before the effective date of cancellation if we cancel for any other reason.

2. All Policies in Effect for More Than 60 Days

a. If this policy has been in effect for more than 60 days, or is a renewal of a policy we issued, we may cancel this policy only upon the occurrence, after the effective date of the policy, of one or more of the following:

(1) Nonpayment of premium, including payment due on a prior policy we issued and due during the current policy term covering the same risks.

(2) Discovery of fraud or material misrepresentation by:

(a) any insured or his or her representative in obtaining this insurance; or

(b) you or your representative in pursuing a claim under this policy.

(3) A judgment by a court or an administrative tribunal that you have violated a California or Federal law, having as one of its necessary elements an act which materially increases any of the risks insured against.

(4) Discovery of willful or grossly negligent acts or omissions, or of any violations of state laws or regulations establishing safety standards, by you or your representative, which materially increase any of the risks insured against.

(5) Failure by you or your representative to implement reasonable loss control requirements, agreed to by you as a condition of policy issuance, or which were conditions precedent to our use of a particular rate or rating plan, if that failure materially increases any of the risks insured against.

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(6) A determination by the Commissioner of Insurance that the:

(a) loss of, or changes in, our reinsurance covering all or part of the risk would threaten our financial integrity or solvency; or

(b) continuation of the policy coverage would:

(a) place us in violation of California law or the laws of the state where we are domiciled; or

(b) threaten our solvency.

(7) A change by you or your representative in the activities or property of the commercial or industrial enterprise, which results in a materially added, increased or changed risk, unless the added, increased or changed risk is included in the policy.

b. We will mail or deliver advance written notice of cancellation, to the first Named Insured, at the mailing address shown in the policy, and to the producer of record, at least:

(1) 10 days before the effective date of cancellation if we cancel for nonpayment of premium or discovery of fraud; or

(2) 60 days before the effective date of cancellation if we cancel for any other reason listed in Paragraph **3.a.**

5. If this policy is cancelled, we will send the first Named Insured any premium refund due. The refund, if any, will be computed on a pro rata basis. However, the refund may be less than pro rata if we made a loan to you for the purpose of payment of premiums for this policy.

The cancellation will be effective even if we have not made or offered a refund.

The following provision is added to **A. Cancellation under the COMMON POLICY CONDITIONS:**

7. Residential Property

This provision applies to coverage on real property which is used predominantly for residential purposes and consisting of not more than four dwelling units, and to coverage on tenants' household personal property in a residential unit.

a. If such coverage has been in effect for 60 days or less, and is not a renewal of coverage we previously issued, we may cancel this coverage for any reason, except as provided in **b.** and **c.** below.

b. We may not cancel such coverage solely because the first Named Insured has accepted our offer of earthquake coverage.

c. We may not cancel such coverage solely because corrosive soil conditions exist on the premises. This restriction **c.** applies only if the coverage provided under this policy excludes loss or damage caused by or resulting from corrosive soil conditions.

The following is added and supersedes any provisions to the contrary:

1. Nonrenewal

a. Subject to the provisions of paragraphs **b.(2)** and **b.(3)** below, if we elect not to renew this policy, we will mail or deliver written notice stating the reason for non-renewal to the first Named Insured and to the producer of record, at least 60 days, but not more than 120 days, before the expiration or anniversary date.

We will mail or deliver our notice to the first Named Insured and to the producer of record, at the mailing address shown in the policy.

b. This provision applies to coverage on real property which is used predominantly for residential purposes and consisting of not more than four dwelling units, and to coverage on tenants' household personal property in a residential unit, if such coverage is written under

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this policy:

(1) We may elect not to renew such coverage for any reason, except as provided in **(2)** and **(3)** below.

(2) We will not refuse to renew such coverage solely because the first Named Insured has accepted our offer of earthquake coverage.

(3) We will not refuse to renew such coverage solely because corrosive soil conditions exist on the premises. This restriction **(3)** applies only if the coverage provided under this policy excludes loss or damage caused by or resulting from corrosive soil conditions.

2. We are not required to send notice of non-renewal in the following situations:

a. If the transfer or renewal of a policy, without any changes in terms, conditions, or rates, is between us and a member of our insurance group.

b. If the policy has been extended for 90 days or less, provided that notice has been given in accordance with Paragraph **1.a. above.**

c. If you have obtained replacement coverage, or if the first Named Insured has agreed in writing, within 60 days of the termination of the policy, to obtain that coverage.

d. If the policy is for a period of no more than 60 days and you are notified at the time of issuance that it will not be renewed.

e. If the first Named Insured requests a change in the terms or conditions or risks covered by the policy within 60 days of the end of the policy period.

f. If we have made a written offer to the first Named Insured, in accordance with the timeframes shown in paragraph **1.a. above**, to renew the policy under changed terms or conditions or at an increased premium rate, when the increase exceeds 25%.

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DISCLOSURE PURSUANT TO TERRORISM RISK INSURANCE ACT

THIS ENDORSEMENT IS ATTACHED TO AND MADE PART OF YOUR POLICY IN RESPONSE TO THE DISCLOSURE REQUIREMENTS OF THE TERRORISM RISK INSURANCE ACT.

THIS ENDORSEMENT DOES NOT GRANT ANY COVERAGE OR CHANGE THE TERMS AND CONDITIONS OF ANY COVERAGE UNDER THE POLICY.

SCHEDULE

Terrorism Premium (Certified Acts) $2

This premium is the total Certified Acts premium attributable to the following Coverage Part(s), Coverage Form(s) and/or Policy(s):

Additional information, if any, concerning the terrorism premium:

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

A. Disclosure Of Premium

In accordance with the federal Terrorism Risk Insurance Act, we are required to provide you with a notice disclosing the portion of your premium, if any, attributable to coverage for terrorist acts certified under the Terrorism Risk Insurance Act. The portion of your premium attributable to such coverage is shown in the Schedule of this endorsement or in the policy Declarations.

B. Disclosure Of Federal Participation In Payment Of Terrorism Losses

The United States Government, Department of the Treasury, will pay a share of terrorism losses insured under the federal program. The federal share equals 85% of that portion of the amount of such insured losses that exceeds the applicable insurer retention. However, if aggregate insured losses attributable to terrorist acts certified under the Terrorism Risk Insurance Act exceed $100 billion in a Program Year (January 1 through December 31), the Treasury shall not make any payment for any portion of the amount of such losses that exceeds $100 billion.

C. Cap On Insurer Participation In Payment Of Terrorism Losses

If aggregate insured losses attributable to terrorist acts certified under the Terrorism Risk Insurance Act exceed $100 billion in a Program Year (January 1 through December 31) and we have met our insurer deductible under the Terrorism Risk Insurance Act, we shall not be liable for the payment of any portion of the amount of such losses that exceeds $100 billion, and in such case insured losses up to that amount are subject to pro rata allocation in accordance with procedures established by the Secretary of the Treasury.

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

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NUCLEAR ENERGY LIABILITY EXCLUSION (BROAD FORM)

THIS ENDORSEMENT CHANGES THE POLICY.

PLEASE READ IT CAREFULLY.

The following Exclusion is added:

A. Nuclear Energy

The insurance does not apply:

1. Under any Liability Coverage, to "bodily injury", "property damage", "injury" or "liability":
   a. With respect to which an "insured" under the policy is also an insured under a nuclear energy liability policy issued by Nuclear Energy Liability Insurance Association, Mutual Atomic Energy Liability Underwriters, Nuclear Insurance Association of Canada or any of their successors, or would be an insured under any such policy but for its termination upon exhaustion of its limit of liability; or
   b. Resulting from the "hazardous properties" of "nuclear material" and with respect to which **(a)** any person or organization is required to maintain financial protection pursuant to the Atomic Energy Act of 1954, or any law amendatory thereof, or **(b)** the "insured" is, or had this policy not been issued would be, entitled to indemnity from the United States of America, or any agency thereof, under any agreement entered into by the United States of America, or any agency thereof, with any person or organization.
2. Under any Medical Payments coverage, to expenses incurred with respect to "bodily injury" resulting from the "hazardous properties" of "nuclear material" and arising out of the operation of a "nuclear facility" by any person or organization.
3. Under any Liability Coverage, to "bodily injury", "property damage", "injury" or "liability" resulting from "hazardous properties" of "nuclear material", if:
   a. The "nuclear material" **(a)** is at any "nuclear facility" owned by, or operated by or on behalf of, an "insured" or **(b)** has been discharged or dispersed therefrom;
   b. The "nuclear material" is contained in "spent fuel" or "waste" at any time possessed, handled, used, processed, stored, transported or disposed of, by or on behalf of an "insured"; or
   c. The "bodily injury" or "property damage" arises out of the furnishing by an "insured" of services, materials, parts or equipment in connection with the planning, construction, maintenance, operation or use of any "nuclear facility", but if such facility is located within the United States of America, its territories or possessions or Canada, this exclusion **(3)** applies only to "property damage" to such "nuclear facility" and any property thereat.

As used in this endorsement:

1. **"Hazardous properties"** includes radioactive, toxic or explosive properties.
2. **"Nuclear material"** means "source material", "special nuclear material" or "by-product material".
3. **"Source material"**, "special nuclear material", and "by-product material" have the meanings given them in the Atomic Energy Act of 1954 or in any law amendatory thereof.
4. **"Spent fuel"** means any fuel element or fuel component, solid or liquid, which has been used or exposed to radiation in a "nuclear reactor".

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5. **"Waste"** means any waste material **(a)** containing "by-product material" other than the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its "source material" content, and **(b)** resulting from the operation by any person or organization of any "nuclear facility" included under the first two paragraphs of the definition of "nuclear facility".

6. **"Nuclear facility"** means:

   a. Any "nuclear reactor";

   b. Any equipment or device designed or used for

      (1) separating the isotopes of uranium or plutonium,

      (2) processing or utilizing "spent fuel", or

      (3) handling, processing or packaging "waste";

   c. Any equipment or device used for the processing, fabricating or alloying of "special nuclear material" if at any time the total amount of such material in the custody of the "insured" at the premises where such equipment or device is located consists of or contains more than 25 grams of plutonium or uranium 233 or any combination thereof, or more than 250 grams of uranium 235;

   d. Any structure, basin, excavation, premises or place prepared or used for the storage or disposal of "waste";

   and includes the site on which any of the foregoing is located, all operations conducted on such site and all premises used for such operations.

7. **"Nuclear reactor"** means any apparatus designed or used to sustain nuclear fission in a self-supporting chain reaction or to contain a critical mass of fissionable material.

8. **"Property damage"** includes all forms of radioactive contamination of property.

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

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ANTI-STACKING OF LIMITS

THIS ENDORSEMENT CHANGES THE POLICY.

PLEASE READ IT CAREFULLY.

If any claim and / or suit gives rise to coverage under this Coverage Form, and / or any other Coverage Form(s) or Policy(ies) issued by the company or any of its affiliates; the maximum limit of liability for all loss under this Coverage Form and / or the other Coverage Form(s) or Policy(ies) combined shall not exceed the largest single applicable limit of liability under any of the Coverage Form(s) or Policy(ies). The Limits of Liability under this Coverage Form shall be reduced, and may be exhausted, by payments under this Coverage Form and / or payments under the other Coverage Form(s) or Policy(ies).

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

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TERRORISM

THIS ENDORSEMENT CHANGES THE POLICY.

PLEASE READ IT CAREFULLY.

THIS ENDORSEMENT MODIFIES INSURANCE PROVIDED UNDER THE FOLLOWING:

PROPERTY COVERAGE FORM

COMMERCIAL GENERAL LIABILITY COVERAGE FORM

Your policy contains coverage for certain losses caused by terrorism. We are required to notify you of the portion of the premium, if any, attributable to the coverage for terrorist acts certified under the Terrorism Risk Insurance Act (hereinafter "The Act"). The Act also requires us to provide disclosure of federal participation in payment of terrorism losses resulting from an "act of terrorism" as defined by **Section 102(1)** of the Act.

Section 102(1) of the Terrorism Risk Insurance Act defines the term "act of terrorism" as any act that is certified by the Secretary of the Treasury of the United States – in concurrence with the Secretary of State of the United States, and the Attorney General of the United States – to be an act of terrorism; to be a violent act or an act that is dangerous to human life, property, or infrastructure; to have resulted in damage within the United States, or outside the United States in the case of an air carrier or vessel or the premises of a United States mission; and to have been committed by an individual or individuals acting on behalf of any foreign person or foreign interest, as part of an effort to coerce the civilian population of the United States or to influence the policy or affect the conduct of the United States Government by coercion.

Please be advised that the actual coverage provided by your Policy for acts of terrorism, as is true for all coverages, is limited by terms, conditions, exclusions, limits, other provisions of your Policy, any endorsements to the Policy and generally applicable rules of law.

YOU SHOULD KNOW THAT WHERE COVERAGE IS PROVIDED BY THIS POLICY FOR LOSSES RESULTING FROM CERTIFIED ACTS OF TERRORISM SUCH LOSSES MAY BE PARTIALLY REIMBURSED BY THE UNITED STATES GOVERNMENT UNDER A FORMULA ESTABLISHED BY FEDERAL LAW. UNDER THIS FORMULA, THE UNITED STATES GOVERNMENT GENERALLY PAYS 90% (85% COMMENCING IN 2007) OF COVERED TERRORISM LOSSES EXCEEDING THE STATUTORILY ESTABLISHED DEDUCTIBLE PAID BY THE INSURANCE COMPANY PROVIDING THE COVERAGE. THE PREMIUM CHARGED FOR THIS COVERAGE IS PROVIDED BELOW AND DOES NOT INCLUDE ANY CHARGES FOR THE PORTION OF LOSS COVERED BY THE FEDERAL GOVERNMENT UNDER THE ACT.

The Additional Premium for coverage for Terrorist Acts certified under the Act is Included.

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

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Allied World Assurance Company (U.S.), Inc.
199 Water Street, 24th Floor
New York, NY 10038
(646) 794-0500

COMMERCIAL GENERAL LIABILITY COVERAGE FORM
SUPPLEMENTAL DECLARATIONS

NAMED INSURED: Hemet-San Jacinto Watermaster	POLICY NUMBER: 5105-1266
	EFFECTIVE DATE: 4/1/2014

THIS COVERAGE FORM AND ENDORSEMENTS MAY PROVIDE COVERAGE ON A CLAIMS MADE BASIS. PLEASE READ THE ENTIRE COVERAGE FORM AND ENDORSEMENTS CAREFULLY.

IN RETURN FOR THE PAYMENT OF THE PREMIUM, AND SUBJECT TO ALL THE TERMS OF THIS COVERAGE FORM, WE AGREE WITH YOU TO PROVIDE THE INSURANCE AS STATED IN THIS COVERAGE FORM.

LIMITS OF INSURANCE

General Aggregate Limit (Bodily Injury, Property Damage & Medical Expenses)	$	3,000,000	
Products/Completed Operations Aggregate Limit	$	3,000,000	
Personal and Advertising Injury Limit	$	1,000,000	
Each Occurrence Limit	$	1,000,000	
Damage to Premises Rent to You Limit	$	1,000,000	Any One Premises
Medical Expenses Limit	$	10,000	Any One Person

ADDITIONAL LIABILITY COVERAGES

Employee Benefit Plans	Occurrence Form	
Each Employee	$	N/A
Aggregate Limit	$	N/A
Retroactive Date		N/A

Hired and Non-Owned Auto Liability Coverage

Aggregate Limit	$	N/A

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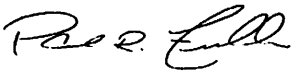
FORMS AND ENDORSEMENTS APPLICABLE TO THIS COVERAGE PART:
WA-GL 00001 00 (03/12)
WA-GL 00003 00 (03/12)
WA-GL 00004 04 (03/12)
WA-GL 00005 04 (03/12)
WA-GL 00006 00 (03/12)
WA-GL 00013 00 (03/12)
WA-GL 00014 00 (03/12)
WA-GL 00022 00 (03/12)

THESE DECLARATIONS, TOGETHER WITH THE COMMON POLICY CONDITIONS AND COVERAGE FORM(S) AND ANY ENDORSEMENT(S), COMPLETE THE ABOVE NUMBERED POLICY.

Countersigned: 3/25/2014 **By:** 
Date

Dam, Reservoir or Levee Structural Failure or Collapse Schedule of Covered Structures		
NPDP ID	**Dam, Reservoir or Levee Name**	**Location**

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COMMERCIAL GENERAL LIABILITY COVERAGE FORM

Various provisions in this policy restrict coverage. Read the entire policy carefully to determine rights, duties and what is and is not covered.

Throughout this Coverage Form the words "you" and "your" refer to the Named Insured shown in the Declarations, and any other person or organization qualifying as a Named Insured under this Coverage Form. The words "we," "us" and "our" refer to the company providing this insurance. The words "policy period" mean the term of duration of the policy shown in the Declarations.

The word "insured" means any person or organization qualifying as such under **Section II. – Who Is An Insured.**

Other words and phrases that appear in quotation marks have special meaning. Refer to **Section V. – Definitions.**

SECTION I. – COVERAGES

COVERAGE A. BODILY INJURY AND PROPERTY DAMAGE LIABILITY

1. Insuring Agreement

a. We will pay those sums that the insured becomes legally obligated to pay as damages because of "bodily injury" or "property damage" to which this insurance applies. We will have the right and duty to defend the insured against any "suit" seeking those damages. However, we will have no duty to defend the insured against any "suit" seeking damages for "bodily injury" or "property damage" to which this insurance does not apply. We may, at our discretion, investigate any "occurrence" and settle any claim or "suit" that may result. But:

(1) The amount we will pay for damages is limited as described in **SECTION III – LIMITS OF INSURANCE**; and

(2) Our right and duty to defend ends when we have used up the applicable limit of insurance in the payment of judgments or settlements under **Coverages A, B** or medical expenses under **Coverage C.**

No other obligation or liability to pay sums or perform acts or services is covered unless explicitly provided for under **SUPPLEMENTARY PAYMENTS – COVERAGES A AND B.**

b. This insurance applies to "bodily injury" or "property damage" only if:

(1) The "bodily injury" or "property damage" is caused by an "occurrence" arising out of your operations that takes place in the "coverage territory";

(2) The "bodily injury" or "property damage" occurs during the policy period; and

(3) Prior to the policy period, no insured listed under Paragraph 1., Paragraph 2.a., or Paragraph 2.f. of **SECTION II. – WHO IS AN INSURED** and no "employee" authorized by you to give or receive notice of an "occurrence" or claim, knew or had reason to know that the "bodily injury" or "property damage" had occurred in whole or in part. If such a listed insured or authorized "employee" knew or had reason to know, prior to the policy period, that the "bodily injury" or "property damage" occurred in whole or part, then any continuation, change or resumption of such "bodily injury" or "property damage" during or after the policy period will be deemed to have been known to have occurred prior to the policy period.

c. "Bodily injury" or "property damage" which occurs during the policy period and was not, prior to the policy period, known to have occurred by any insured listed under Paragraph 1., Paragraph 2.a., or Paragraph 2.f. of **SECTION II. – WHO IS AN INSURED** or any "employee" authorized by you to give or receive notice of an "occurrence", or claim, includes any continuation, change or resumption of that "bodily injury" or "property damage" after the end of the policy period.

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d. "Bodily injury" or "property damage" will be deemed to have been known to have occurred when any insured listed under Paragraph 1., Paragraph 2.a., or Paragraph 2.f. of **SECTION II – WHO IS AN INSURED** or any insured authorized by you to give or receive notice of an "occurrence" or claim:

(1) Reports all, or any part, of the "bodily injury" or "property damage" to us or any other insurer;

(2) Receives a written or verbal demand or claim for damages because of the "bodily injury" or "property damage"; or

(3) Becomes aware by any other means that "bodily injury" or "property damage" has occurred or has begun to occur.

e. Damages because of "bodily injury" include damages claimed by any person or organization for care, loss of services or death resulting at any time from the "bodily injury".

f. The insurance provided under **COVERAGE A. BODILY INJURY AND PROPERTY DAMAGE LIABILITY** is extended to apply to "bodily injury" or "property damage" arising out of your "water or wastewater professional activity". An act, error or omission arising out of your "water or wastewater professional activity" shall be considered one "occurrence".

2. Exclusions Applicable to Coverage A

This insurance does not apply to:

a. Aircraft, Auto or Watercraft

"Bodily injury" or "property damage" arising out of the ownership, maintenance, use or entrustment to others of any aircraft, "auto", or watercraft owned or operated by, or rented or loaned to any insured. Use includes operation and "loading or unloading".

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage" involved the ownership, maintenance, use or entrustment to others of any aircraft, "auto" or watercraft that is owned or operated by or rented or loaned to any insured.

This exclusion does not apply to:

(1) ~~An aircraft you do not own~~; An aircraft with a maximum passenger capacity of twenty (20) persons (including crew) that you do not own used solely for business travel of employees.

(2) A watercraft while ashore on premises you own or rent;

(3) A watercraft you do not own that is:

(a) Less than 26 feet long

(b) Not being used to carry persons or property for a charge

(4) Liability assumed under any "insured contract" for the ownership, maintenance or use of aircraft or watercraft;

(5) A watercraft you own that is:

(a) Powered by a motor or combination of motors of 250 horsepower or less;

(b) Not powered by a motor; or

(c) A "personal watercraft";

(6) Parking an "auto" on, or on the ways next to, premises you own or rent, provided the "auto" is not owned by or rented or loaned to you or the insured; or

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(7) "Bodily injury" or "property damage" arising out of:

(a) The operation of machinery or equipment that is attached to, or part of, a land vehicle that would qualify under the definition of "mobile equipment" if it were not subject to a compulsory or financial responsibility law or other motor vehicle insurance law in the state where it licensed or principally garaged; or

(b) The operation of any of the machinery or equipment listed in Paragraph f.(2) or f.(3) of the definition of "mobile equipment".

b. Asbestos

Any injury, damage, expense, cost, loss, liability or legal obligation arising out of or in any way related to asbestos or asbestos-containing materials, or exposure thereto, or for the costs of abatement, mitigation, removal, elimination or disposal of any of them.

This exclusion does not apply to "bodily injury" or "property damage" arising out of "potable water" which you supply to others.

c. Contractual Liability

"Bodily injury" or "property damage" for which the insured is obligated to pay damages by reason of the assumption of liability in a contract or agreement. This exclusion does not apply to liability for damages:

(1) That the insured would have in the absence of the contract or agreement; or

(2) Assumed in a contract or agreement that is an "insured contract", provided the "bodily injury" or "property damage" occurs or takes place subsequent to the execution of the contract or agreement. Solely for the purposes of liability assumed in an "insured contract", reasonable attorney fees and necessary litigation expenses incurred by or for a party other than an insured are deemed to be damages because of "bodily injury" or "property damage" provided:

(a) Liability to such party for, or for the cost of, that party's defense has also been assumed in the same "insured contract"; and

(b) Such attorney fees and litigation expenses are for defense of that party against a civil or alternative dispute resolution proceeding in which damages to which this insurance applies are alleged.

d. Dam, Reservoir or Levee Structural Failure or Collapse

"Bodily injury" or "property damage", loss, costs or expense arising directly or indirectly out of the structural failure, collapse, bursting, flooding, cracking, settling, seepage, underseepage, spillage, subsidence, landslide or other earth movement of any dam, reservoir, levee, or dike owned, operated, maintained, constructed or controlled by any insured.

This exclusion does not apply to "bodily injury" or property damage", loss, costs or expense arising directly or indirectly out of the structural failure, collapse, bursting, flooding, cracking, settling, spillage, subsidence, landslide or other earth movement of any dam, reservoir, levee or dike which is scheduled in the coverage declarations.

e. Damage to Impaired Property or Property Not Physically Injured

"Property damage" to "impaired property" or property that has not been physically injured, arising out of:

(1) A defect, deficiency, inadequacy or dangerous condition in "your product" or "your work"; or

(2) A delay or failure by you or anyone acting on your behalf to perform a contract or agreement in accordance with its terms.

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This exclusion does not apply to the loss of use of other property arising out of sudden and accidental physical injury to "your product" or "your work" after it has been put to its intended use.

f. Damage to Property

"Property damage" to:

(1) Property you own, rent, or occupy, including any costs or expenses incurred by you, or any other person, organization or entity, for repair, replacement, enhancement, restoration or maintenance of such property for any reason, including prevention of injury to a person or damage to another's property;

(2) Premises you sell, give away or abandon, if the "property damage" arises out of any part of those premises;

(3) Property loaned to you;

(4) Personal property in the care, custody or control of the insured;

(5) That particular part of real property on which you or any contractors or subcontractors working directly or indirectly on your behalf are performing operations, if the "property damage" arises out of those operations; or

(6) That particular part of any property that must be restored, repaired or replaced because "your work" was incorrectly performed on it.

Paragraphs (1), (3) and (4) of this exclusion do not apply to "property damage" (other than damage by fire) to premises, including the contents of such premises, rented or loaned to you for a period of 30 or fewer consecutive days. A separate limit of insurance applies to Damage To Premises Rented To You as described in **SECTION III. – LIMITS OF INSURANCE**.

Paragraph (2) of this exclusion does not apply if the premises are "your work" and were never occupied, rented or held for rental by you.

Paragraphs (3), (4), (5) and (6) of this exclusion do not apply to liability assumed under a sidetrack agreement.

Paragraph (6) of this exclusion does not apply to "property damage" included in the "products-completed operations hazard".

g. Damage to Your Product

"Property damage" to "your product" arising out of it or any part of it.

h. Damage to Your Work

"Property damage" to "your work" arising out of it or any part of it and included in the "products-completed operations hazard".

This exclusion does not apply if the damaged work or the work out of which the damage arises was performed on your behalf by a subcontractor.

i. Distribution of Material in Violation of Statutes

"Bodily injury" or "property damage" arising directly or indirectly out of any action or omission that violates or is alleged to violate:

(1) The Telephone Consumer Protection Act (TCPA), including any amendment of or addition to such law;

(2) The CAN-SPAM Act of 2003, including any amendment of or addition to such law; or

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(3) Any statute, ordinance or regulation, other than the TCPA or CAN-SPAM Act of 2003, that prohibits or limits the sending, transmitting, communicating or distribution of material or information.

j. Electronic Data

Damages arising out of the loss of, loss of use of, damage to, corruption of, inability to access, or inability to manipulate electronic data.

As used in this exclusion, electronic data means information, facts or programs stored as or on, created or used on, or transmitted to or from computer software, including systems and applications software, hard or floppy disks, CD-ROMS, tapes, drives, cells, data processing devices or any other media which are used with electronically controlled equipment.

k. Employer's Liability

"Bodily injury" to:

(1) An "employee" of the insured arising out of or in the course of:

(a) Employment by the insured; or

(b) Performing duties related to the conduct of the insured's operations;

(2) A "volunteer worker", if you provide or are required to provide benefits for such "volunteer worker" under any workers' compensation, disability benefits, or unemployment compensation law, or any similar law; or

(3) The spouse, child, parent, brother or sister of that "employee" or "volunteer worker" as a consequence of (1) or (2) above.

This exclusion applies whether the insured may be liable as an employer or in any other capacity and to any obligation to share damages with or repay someone else who must pay damages because of the injury.

This exclusion does not apply to liability assumed by the insured under an "insured contract".

l. Employment Practices and Employee Benefit Plans

"Bodily injury" or "property damage" arising out of your "employment practices" or "administration" of your "employee benefit plans".

m. Expected or Intended Injury

"Bodily injury" or "property damage" expected or intended from the standpoint of the insured.

This exclusion does not apply to "bodily injury" or "property damage" resulting from reasonable force to protect persons or property.

n. Fungi or Bacteria

(1) Any injury or damage which would not have occurred or taken place, in whole or in part, but for the actual, alleged or threatened inhalation of, ingestion of, contact with, exposure to, existence of, or presence of, any "fungi" or bacteria on or within a building or structure, including its contents, regardless of whether any other cause, event, material or product contributed concurrently or in any sequence to such injury or damage.

(2) Any loss, cost or expenses arising out of the abating, testing for, monitoring, cleaning up, removing, containing, treating, detoxifying, neutralizing, remediating or disposing of, or in any way responding to, or assessing the effects of, "fungi" or bacteria, by any insured or by any other person or entity.

(3) This exclusion does not apply:

(a) To any "fungi" or bacteria that are, are on, or are contained in a good or product intended for consumption; or

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(b) To any injury or damage arising out of or caused by your water or waste water treatment process or sewage operations.

o. Lead, Electromagnetic Radiation, Nuclear

(1) Any injury, damage, expense, cost, loss, liability or legal obligation arising out of or in any way related to:

(a) The toxic properties of lead, or any material or substance containing lead with the exception of "potable water" which you supply to others; or

(b) Electromagnetic radiation; or exposure thereto, or for the costs of abatement, mitigation, removal, elimination, or disposal of any of them.

(2) Any loss, cost or expense arising out of any actual, alleged or threatened injury or damage to any person or property from any radioactive matter or nuclear material.

p. Mobile Equipment

"Bodily injury" or "property damage" arising out of:

(1) The transportation of "mobile equipment" by an "auto" owned or operated by or rented or loaned to any insured; or

(2) The use of "mobile equipment" in, or while in practice for, or while being prepared for, any prearranged racing, speed, demolition or stunting activity.

q. Personal and Advertising Injury

"Bodily injury" arising out of "personal and advertising injury".

r. Pollution

Any injury, damage, expense, cost, loss, liability or legal obligation arising out of or in any way related to pollution, however caused. Pollution includes the actual, alleged, or potential presence in or introduction into the environment of any substance if such substance has, or is alleged to have, the effect of making the environment impure, harmful or dangerous.

Environment includes any air, land, structure (or the air within), watercourse or other body of water, including underground water.

(1) This exclusion does not apply:

(a) To "bodily injury" if sustained within a building which is or was at any time owned or occupied by, or rented or loaned to, any insured and is caused by smoke, fumes, vapor or soot produced by or originating from equipment that is used to heat, cool or dehumidify the building, or equipment that is used to heat water for personal use, by the building's occupants or their guests.

(b) To "bodily injury" or "property damage" arising out of heat, smoke or fumes from a "hostile fire" unless that "hostile fire" occurred or originated:

(i) At any premises, site or location which is or was at any time used by any insured or others for the handling, storage, disposal, processing or treatment of waste; or

(ii) At any premises, site or location on which any insured or other contractors or subcontractors working directly or indirectly on any insured's behalf are performing operations to test for, monitor, clean up, remove, contain, treat, detoxify, neutralize or in any way respond to, or assess the effects of, "pollutants" except to the extent coverage is provided in Paragraph (c) below.

(c) To "bodily injury" or "property damage" which occurs or takes place as a result of your operations provided the "bodily injury" or "property damage" is not otherwise excluded in whole or in part and arises out of the following:

(i) "Potable water" which you supply to others;

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(ii) Chemicals you use in your water or wastewater treatment process;

(iii) Natural gas or propane gas you use in your water or wastewater treatment process;

(iv) Urgent response for the protection of property, human life, health or safety conducted away from premises owned by or rented to or regularly occupied by you;

(v) Your application of pesticide or herbicide if such application meets all standards of any statute, ordinance, regulation or license requirement of any federal, state or local government;

(vi) Smoke drift from controlled or prescribed burning that has been authorized and permitted by the respective regulatory agency.

(vii) Fuels, lubricants or other operating fluids needed to perform the normal electrical, hydraulic or mechanical functions necessary for the operation of "mobile equipment" or its parts, but only if:

(a) The fuels, lubricants or other operating fluids escape from a vehicle part designed to hold, store or receive them; and

(b) The fuels, lubricants or other operating fluids are not:

(i) Intentionally discharged; or

(ii) Brought on or to a premises, site or location with the intent to be discharged as part of the operations being performed by an insured, contractor or subcontractor.

(d) "Bodily Injury" and "property damage" arising out of the actual, alleged, or threatened discharge, dispersal, seepage, migration, release or escape of "pollutants" if such "bodily injury" or "property damage" is sudden and accidental and neither expected nor intended by an Insured. However, no coverage is provided under this exception for petroleum underground storage tanks; or

Paragraph (1)(c) and (1)(d) of this exclusion only apply if the discharge is accidental, unintended and stopped as soon as possible. The entirety of any discharge or series of related discharges will be deemed a single discharge regardless of the length of time over which the "pollutants" are released. The entirety of any discharge or series of related discharges will be deemed to have only occurred at the date the earliest discharge commenced.

(e) To "bodily injury" or to "property damage" if such "bodily injury" or "property damage" is caused by the escape or back-up of sewage or waste water from any sewage treatment facility or fixed conduit or piping that you own, operate, lease, control or for which you have the right of way, but only if "property damage" occurs away from land you own or lease.

(2) This insurance does not apply to any loss, cost or expense arising out of any:

(a) Request, demand, order or statutory or regulatory requirement that any insured or others test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of, "pollutants"; or

(b) Claim or "suit" by or on behalf of a governmental authority for damages because of testing for, monitoring, cleaning up, removing, containing, treating, detoxifying or neutralizing, or in any way responding to, or assessing the effects of, "pollutants".

However, this paragraph does not apply to liability for damages because of "property damage" that the insured would have in the absence of such request, demand, order or statutory or regulatory requirement, or such claim or "suit" by or on behalf of a governmental authority.

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Discharge as used in this exclusion includes dispersal, seepage, migration, release or escape.

s. Professional Services

Any liability arising out of any act, error, omission, malpractice or mistake of a professional nature committed by the insured or any person for whom the insured is legally responsible. It is understood this exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured.

However, this exclusion does not apply to "bodily injury" or "property damage" arising out of your "water or wastewater professional activities".

t. Public Use of Property

"Bodily injury" or "property damage" arising out of the principles of eminent domain, condemnation, inverse condemnation or adverse possession.

u. Recall of Products, Work or Impaired Property

Damages claimed for any loss, cost or expense incurred by you or others for the loss of use, withdrawal, recall, inspection, repair, replacement, adjustment, removal or disposal of:

(1) "Your product";

(2) "Your work"; or

(3) "Impaired property";

if such product, work, or property is withdrawn or recalled from the market or from use by any person or organization because of a known or suspected defect, deficiency, inadequacy or dangerous condition in it.

v. Riot, Civil Commotion or Mob Action

"Bodily injury" or "property damage" arising out of:

(1) Riot, civil commotion or mob action; or

(2) Any act or omission in connection with the prevention or suppression of a riot, civil commotion or mob action.

w. Sexual Abuse

"Bodily injury" arising out of the "sexual abuse" of any person. However, this exclusion shall not apply to the Named Insured if no elected or appointed official, "executive officer", officer, director, or trustee of the Named Insured knew or had reason to know of the "sexual abuse". Also, we will defend an insured for covered civil action subject to the other terms of this Coverage Form until either a judgment or final adjudication establishes such an act, or the insured confirms such act.

x. Specific Operations

"Bodily injury" or "property damage" arising from the ownership, operation, maintenance, entrustment to others, or use of any:

(1) Gas or electric generation facility; or

(2) Sanitary landfill, dump, or other permanent waste disposal facility.

y. War

(1) "Bodily injury" or "property damage", however caused, arising, directly or indirectly, out of:

(2) War, including undeclared or civil war;

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(3) Warlike action by a military force, including action in hindering or defending against an actual or expected attack, by any government, sovereign or other authority using military personnel or other agents; or

(4) Insurrection, rebellion, revolution, usurped power, or action taken by governmental authority in hindering or defending against any of these.

z. Workers' Compensation and Similar Laws

Any obligation of the insured under a workers' compensation, disability benefits or unemployment compensation law or any similar law.

aa. Liquor Liability

"Bodily injury" or "property damage" for which any insured may be held liable by reason of:

(1) Causing or contributing to the intoxication of any person;

(2) The furnishing of alcoholic beverages to a person under the legal drinking age or under the influence of alcohol; or

(3) Any statute, ordinance or regulation relating to the sale, gift, distribution or use of alcoholic beverages.

This exclusion applies only if you are in the business of manufacturing, distributing, selling, serving or furnishing alcoholic beverages. Exclusions a. through c., e. through m., and o. through z., do not apply to damage by fire to premises while rented to you or temporarily occupied by you with permission of the owner. A separate limit of insurance applies to this coverage as described in **SECTION III. – LIMITS OF INSURANCE**.

COVERAGE B. PERSONAL AND ADVERTISING INJURY

1. Insuring Agreement

a. We will pay those sums that the insured becomes legally obligated to pay as damages because of "personal and advertising injury" to which this insurance applies. We will have the right and duty to defend the insured against any "suit" seeking those damages. However, we will have no duty to defend the insured against any "suit" seeking damages for "personal and advertising injury" to which this insurance does not apply. We may, at our discretion, investigate any offense and settle any claim or "suit" that may result. But:

(1) The amount we will pay for damages is limited as described in **SECTION III. – LIMITS OF INSURANCE;** and

(2) Our right and duty to defend end when we have used up the applicable limit of insurance in the payment of judgments or settlements under **Coverages A or B** or medical expenses under **Coverage C**.

No other obligation or liability to pay sums or perform acts or services is covered unless explicitly provided for under **SUPPLEMENTARY PAYMENTS – COVERAGES A AND B.**

b. This coverage applies to "personal and advertising injury" only if:

(1) The "personal and advertising injury" is caused by an offense arising out of your operations; and

(2) The offense is committed in the "coverage territory" during the policy period.

2. Exclusions Applicable to Coverage B

This insurance does not apply to:

a. Asbestos

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Any injury, damage, expense, cost, loss, liability or legal obligation arising out of or in any way related to asbestos or asbestos-containing materials, or exposure thereto, or for the costs of abatement, mitigation, removal, elimination or disposal of any of them.

b. Breach of Contract

"Personal and advertising injury" arising out of a breach of contract, except an implied contract to use another's advertising idea in your "advertisement".

c. Contractual Liability

"Personal and advertising injury" for which the insured has assumed liability in a contract or agreement. This exclusion does not apply to liability for damages that the insured would have in the absence of the contract or agreement.

d. Criminal Acts

"Personal and advertising injury" arising out of a criminal act committed by or at the direction of the insured.

e. Distribution of Material in Violation of Statutes

(1) "Personal and advertising injury" arising directly or indirectly out of any action or omission that violates or is alleged to violate:

(2) The Telephone Consumer Protection Act (TCPA), including any amendment of or addition to such law;

(3) The CAN-SPAM Act of 2003, including any amendment of or addition to such law; or

(4) Any statute, ordinance or regulation, other than the TCPA or CAN-SPAM Act of 2003, that prohibits or limits the sending, transmitting, communication or distribution of material or information.

f. Electronic Chatrooms or Bulletin Boards

"Personal and advertising injury" arising out of an electronic chatroom or bulletin board the insured hosts, owns, or over which the insured exercises control.

g. Employment Practices and Employee Benefit Plans

"Personal and advertising injury" arising out of your "employment practices" or "administration" of your "employee benefit plans".

h. Fungi or Bacteria

(1) Any injury which would not have occurred or taken place, in whole or in part, but for the actual, alleged or threatened inhalation of, ingestion of, contact with, exposure to, existence of, or presence of, any "fungi" or bacteria on or within a building or structure, including its contents, regardless of whether any other cause, event, material or product contributed concurrently or in any sequence to such injury or damage.

(2) Any loss, cost or expenses arising out of the abating, testing for, monitoring, cleaning up, removing, containing, treating, detoxifying, neutralizing, remediating or disposing of, or in any way responding to, or assessing the effects of, "fungi".

i. Infringement of Copyright, Patent, Trademark or Trade Secret

"Personal and advertising injury" arising out of the infringement of copyright, patent, trademark, trade secret or other intellectual property rights. Under this exclusion, such other intellectual property rights do not include the use of another's advertising idea in your "advertisement".

However, this exclusion does not apply to infringement, in your "advertisement", of copyright, trade dress or slogan.

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j. Insureds in Media and Internet Type Businesses

"Personal and advertising injury" committed by an insured whose business is:

(1) Advertising, broadcasting, publishing or telecasting;

(2) Designing or determining content of web-sites for others; or

(3) An Internet search, access, content or service provider.

However, this exclusion does not apply to Paragraphs 18.a. b., and c. of "personal and advertising injury" under the Definitions section.

For the purposes of this exclusion, the placing of frames, borders or links, or advertising, for you or others anywhere on the Internet, is not by itself, considered the business of advertising, broadcasting, publishing or telecasting.

k. Knowing Violation of the Rights of Another

"Personal and advertising injury" caused by or at the direction of the insured with the knowledge that the act would violate the rights of another and would inflict "personal and advertising injury".

l. Lead, Electromagnetic Radiation, Nuclear

(1) Any injury, expense, cost, loss, liability or legal obligation arising out of or in any way related to:

(a) The toxic properties of lead, or any material or substance containing lead; or

(b) Electromagnetic radiation;

or exposure thereto, or for the costs of abatement, mitigation, removal, elimination or disposal of any of them.

(2) Any loss, cost or expense arising out of any actual, alleged or threatened injury to any person or property from any radioactive matter or nuclear material.

m. Material Published Prior to Policy Period

"Personal and advertising injury" arising out of the oral or written publication of material whose first publication took place before the beginning of the policy period.

n. Material Published with Knowledge of Falsity

"Personal and advertising injury" arising out of oral or written publication of material, if done by or at the direction of the insured with knowledge of its falsity.

o. Pollution

"Personal and advertising injury" arising out of or in any way related to pollution, however caused. Pollution includes the actual, alleged, or potential presence in or introduction into the environment of any substance if such substance has, or is alleged to have, the effect of making the environment impure, harmful or dangerous. Environment includes any air, land, structure (or the air therein), watercourse or other body of water, including underground water.

p. Pollution Related

Any loss, cost or expense arising out of any:

(1) Request, demand, order or statutory or regulatory requirement that any insured or others test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of, "pollutants"; or

(2) Claim or suit by or on behalf of a governmental authority for damages because of testing for, monitoring, cleaning up, removing, containing, treating, detoxifying or neutralizing, or in any way responding to, or assessing the effects of, "pollutants".

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q. Professional Services

Any liability arising out of any act, error, omission, malpractice or mistake of a professional nature committed by the insured or any person for whom the insured is legally responsible. It is understood this exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured.

r. Public Use of Property

"Personal and advertising injury" arising out of the principles of eminent domain, condemnation, inverse condemnation or adverse possession.

s. Quality or Performance of Goods – Failure to Conform To Statements

"Personal and advertising injury" arising out of the failure of goods, products or services to conform with any statement of quality or performance made in your "advertisement".

t. Sexual Abuse

"Personal and advertising injury" arising out of the "sexual abuse" of any person.

u. Specific Operations

"Personal and advertising injury" arising from the ownership, operation, maintenance, entrustment to others, or use of any:

(1) Gas or electric generation facility; or

(2) Sanitary landfill, dump, or other permanent waste disposal facility.

v. Unauthorized Use of Another's Name or Product

"Personal and advertising injury" arising out of the unauthorized use of another's name or product in your e-mail address, domain name or metatag, or any other similar tactics to mislead another's potential customers.

w. War

"Personal and advertising injury", however caused, arising, directly or indirectly, out of:

(1) War, including undeclared or civil war;

(2) Warlike action by a military force, including action in hindering or defending against an actual or expected attack, by any government, sovereign or other authority using military personnel or other agents; or

(3) Insurrection, rebellion, revolution, usurped power, or action taken by governmental authority in hindering or defending against any of these.

x. Wrong Description of Prices

"Personal and advertising injury" arising out of the wrong description of the price of goods, products or services stated in your "advertisement".

COVERAGE C. MEDICAL EXPENSE

1. Insuring Agreement

a. At your written request, we will pay medical expenses as described below for "bodily injury" caused by an accident:

(1) On premises you own or rent;

(2) On ways next to premises you own or rent;

(3) On that portion of a right-of-way, easement, or similar interest in property, which you do not own or rent, upon which water, sewer, or other utility fixtures are installed as part of

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your operations, including any surface feature which directly results from the presence of such water, sewer or other utility fixture, but does not include any other portion of a right of-way, easement or similar interest in property; or

(4) Because of your operations;

provided that:

(a) The accident takes place in the "coverage territory" and during the policy period;

(b) The expenses are incurred and reported to us within one year of the date of the accident; and

(c) The injured person submits to examination, at our expense, by physicians of our choice as often as we reasonably require.

b. We will make these payments regardless of fault. These payments will not exceed the applicable limit of insurance. We will pay reasonable expenses for:

(1) First aid administered at the time of an accident;

(2) Necessary medical, surgical, x-ray and dental services, including prosthetic devices; and

(3) Necessary ambulance, hospital, professional nursing and funeral services.

2. Exclusions Applicable to Coverage C

We will not pay medical expenses for "bodily injury":

a. Any Insured

To any insured, except "volunteer workers" not performing an "emergency service activity" or a "law enforcement activity".

b. Athletic Activities

To a person injured while practicing, instructing or participating in any physical exercises or games, sports, or athletic contests.

c. Coverage A Exclusions

Excluded under **COVERAGE A. BODILY INJURY AND PROPERTY DAMAGE LIABILITY.**

d. Hired Person

To a person hired to do work for or on behalf of any insured or a tenant of any insured.

e. Injury on Normally Occupied Premises

To a person injured on that part of premises you own or rent that the person normally occupies.

f. Products – Completed Operations Hazard

Included within the "products-completed operations hazard".

g. Workers' Compensation and Similar Laws

To a person, whether or not an "employee" of any insured, if benefits for the "bodily injury" are payable or must be provided under a workers' compensation or disability benefits law or a similar law.

SUPPLEMENTARY PAYMENTS – COVERAGES A AND B

1. We will pay, with respect to any claim we investigate or settle, or any "suit" against an insured we defend:

a. All expenses we incur.

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b. Up to $1,000 for the cost of bail bonds required because of accidents or traffic law violations arising out of the use of any vehicle to which the Bodily Injury Liability Coverage applies. We do not have to furnish these bonds.

c. The cost of bonds to release attachments, but only for bond amounts within the applicable limit of insurance. We do not have to furnish these bonds.

d. All reasonable expenses incurred by the insured at our request to assist us in the investigation or defense of the claim or "suit", including actual loss of earnings up to $500 a day because of time off from work.

e. All court costs taxed against the insured in the "suit". However, these payments do not include attorneys' fees or attorneys' expenses taxed against the insured.

f. Prejudgment interest awarded against the insured on that part of the judgment we pay. If we make an offer to pay the applicable limit of insurance, we will not pay any prejudgment interest based on that period of time after the offer.

g. All interest on the full amount of any judgment that accrues after entry of the judgment and before we have paid, offered to pay, or deposited in court the part of the judgment that is within the applicable limit of insurance.

These payments will not reduce the limits of insurance.

2. If we defend an insured against a "suit" and an indemnitee of the insured is also named as a party to the "suit", we will defend that indemnitee if all of the following conditions are met:

a. The "suit" against the indemnitee seeks damages for which the insured has assumed the liability of the indemnitee in a contract or agreement that is an "insured contract";

b. This insurance applies to such liability assumed by the insured;

c. The obligation to defend, or the cost of the defense of, that indemnitee, has also been assumed by the insured in the same "insured contract";

d. The allegations in the "suit" and the information we know about the "occurrence" are such that no conflict appears to exist between the interests of the insured and the interests of the indemnitee;

e. The indemnitee and the insured ask us to conduct and control the defense of that indemnitee against such "suit" and agree that we can assign the same counsel to defend the insured and the indemnitee; and

f. The indemnitee:

(1) Agrees in writing to:

(a) Cooperate with us in the investigation, settlement or defense of the "suit";

(b) Immediately send us copies of any demands, notices, summonses or legal papers received in connection with the "suit";

(c) Notify any other insurer whose coverage is available to the indemnitee; and

(d) Cooperate with us with respect to coordinating other applicable insurance available to the indemnitee; and

(2) Provides us with written authorization to:

(a) Obtain records and other information related to the "suit"; and

(b) Conduct and control the defense of the indemnitee in such "suit".

So long as the above conditions are met, attorneys' fees incurred by us in the defense of that indemnitee, necessary litigation expenses incurred by us and necessary litigation expenses incurred by the indemnitee at our request will be paid as **SUPPLEMENTARY PAYMENTS.**

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Notwithstanding the provisions of Paragraph 2.c.(2) of **COVERAGE A** , such payments will not be deemed to be damages and will not reduce the limits of insurance.

Our obligation to defend an insured's indemnitee and to pay for attorneys' fees and necessary litigation expenses as **SUPPLEMENTARY PAYMENTS** ends when:

(1) We have used up the applicable limit of insurance in the payment of judgments or settlements; or

(2) The conditions set forth above, or the terms of the agreement described in Paragraph f. above, are no longer met.

SECTION II. – WHO IS AN INSURED

1. If you are designated in the Declarations as:

   a. An individual, you and your spouse are insureds, but only with respect to the conduct of a business of which you are the sole owner.

   b. A partnership or joint venture, you are an insured. Your members, your partners, and their spouses are also insureds, but only with respect to the conduct of your business. However, if you are a public entity, you are insured as a partner in a partnership or as a joint venturer in a joint venture, but only if the partnership or joint venture is between you and another governmental organization or non-profit entity. Coverage does not extend to a partnership or joint venture that operates, controls, or funds a gas or electric generation facility.

   c. A limited liability company, you are an insured. Your members are also insureds, but only with respect to the conduct of your business. Your managers are insureds, but only with respect to their duties as your managers.

   d. An organization other than a partnership, joint venture or limited liability company, you are an insured. Your "executive officers" and directors are insureds, but only with respect to their duties as your officers or directors. Your stockholders are also insureds, but only with respect to their liability as stockholders.

   e. A public entity, you are an insured. Your operating authorities, boards, commissions, districts or any other governmental units are insureds, provided that you operate, control and fund the authority, board, commission, district or other governmental unit. Coverage does not extend to an authority, board, commission, district or other governmental unit that operates, controls, or funds a gas or electric generation facility.

   f. A trust, you are an insured. Your trustees are also insureds, but only with respect to their duties as trustees.

2. Each of the following is also an insured:

   a. **Elected or Appointed Officials.** Your elected and appointed officials, including elected and appointed officials of your operating authorities, boards, commissions, districts, or other governmental units but only for acts within the course and scope of their duties for the insured public entity or its operating authorities, boards, commissions, districts or other governmental units.

   b. **"Volunteer Workers" or "Employees".** Your "volunteer workers" only while performing duties related to the conduct of your operations, or your "employees", other than either your "executive officers" (if you are an organization other than a partnership, joint venture or limited liability company) or your managers (if you are a limited liability company), but only for acts within the scope of their employment by you or while performing duties related to the conduct of your operations. However, none of these "employees" or "volunteer workers" are insureds for:

      (1) "Bodily injury" or "personal and advertising injury":

         (a) To you, to your partners or members (if you are a partnership or joint venture), to your members (if you are a limited liability company), to a co-"employee" while in the

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course of his or her employment or performing duties related to the conduct of your operations, or to your other "volunteer workers" while performing duties related to the conduct of your operations;

(b) To the spouse, child, parent, brother or sister of that co-"employee" or "volunteer worker" as a consequence of Paragraph (1)(a) above; or

(c) For which there is any obligation to share damages with or repay someone else who must pay damages because of the injury described in Paragraphs (1)(a) or (1)(b) above.

(2) "Property damage" to property:

(a) Owned, occupied or used by,

(b) Rented to, in the care, custody or control of, or over which physical control is being exercised for any purpose by you, any of your "employees", "volunteer workers", any partner or member (if you are a partnership or joint venture), or any member (if you are a limited liability company).

c. Real Estate Managers. Any person (other than your "employee" or "volunteer worker"), or any organization while acting as your real estate manager.

d. Temporary Custodians. Any person or organization having proper temporary custody of your property if you die, but only:

(1) With respect to liability arising out of the maintenance or use of that property; and

(2) Until your legal representative has been appointed.

e. Legal Representatives. Your legal representative if you die, but only with respect to duties as such. That representative will have all your rights and duties under this Coverage Form.

f. Mutual Aid Agreements. Any persons or organizations providing service to you under any mutual aid or similar agreement, but only for acts within the scope of that mutual aid or similar agreement.

g. Good Samaritans. "Employees" and "volunteer workers" while acting as a Good Samaritan independently of his or her activities on your behalf, but only when he or she encounters the scene of an emergency requiring sudden action. In no event will such person who responds to the scene of an emergency with or for any other emergency service organization be an insured.

h. Owners of Commandeered Equipment. The owner of commandeered equipment other than an "auto" is an insured while the equipment is in your temporary care, custody or control.

i. Lessors of Equipment

(1) Persons or organizations from whom you lease equipment are insureds; but they are insureds only with respect to the maintenance or use by you of such equipment and only if you are contractually obligated to provide them with such insurance as is afforded by this contract.

(2) However, no such person or organization is an insured with respect to any:

(a) damages resulting from their sole negligence; or

(b) "occurrence" that occurs, or offense that is committed, after the equipment lease ends.

j. Blanket Additional Insureds. Any person or organization required to be an additional insured under an "insured contract", if agreed to by you prior to the "bodily injury", "property damage", or "personal and advertising injury", caused in whole or in part, by your acts or omissions or the acts or omissions of those acting on your behalf:

(1) In the performance of your operations; or

(2) In connection with premises owned or rented by you.

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3. Any organization you newly acquire or form, other than a partnership, joint venture or limited liability company, and over which you maintain ownership or majority interest, will qualify as a Named Insured if there is no other similar insurance available to that organization. However:

   a. Coverage under this provision is afforded only until the 90th day after you acquire or form the organization or the end of the policy period, whichever is earlier;

   b. **COVERAGE A** does not apply to "bodily injury" or "property damage" that occurred before you acquired or formed the organization; and

   c. **COVERAGE B** does not apply to "personal and advertising injury" arising out of an offense committed before you acquired or formed the organization.

No person or organization is an insured with respect to the conduct of any current or past partnership, joint venture or limited liability company that is not shown as a Named Insured in the Declarations.

SECTION III. – LIMITS OF INSURANCE

1. The Limits of Insurance shown in the Declarations and the rules below fix the most we will pay regardless of the number of:

   a. Insureds;

   b. Claims made or "suits" brought; or

   c. Persons or organizations making claims or bringing "suits".

2. The General Aggregate Limit is the most we will pay for the sum of:

   a. Medical expenses under **COVERAGE C**;

   b. Damages under **COVERAGE A**, except damages because of "bodily injury" or "property damage" included in the "products-completed operations hazard"; and

   c. Damages under **COVERAGE B.**

3. The Products - Completed Operations Aggregate Limit is the most we will pay under **COVERAGE A** for damages because of "bodily injury" and "property damage" included in the "products-completed operations hazard".

4. Subject to Paragraph 2. above, the Personal and Advertising Injury Limit is the most we will pay under **COVERAGE B** for the sum of all damages because of all "personal and advertising injury" sustained by any one person or organization.

5. Subject to Paragraph 2. or 3. above, whichever applies, the Each Occurrence Limit is the most we will pay for the sum of:

   a. Damages under **COVERAGES A** and

   b. Medical expenses under **COVERAGE C**;

   because of all "bodily injury" or "property damage" arising out any one "occurrence".

6. Subject to Paragraph 5. above, the Damage To Premises Rented To You Limit is the most we will pay under **COVERAGE A** for damages because of "property damage" to any one premises, while rented to you, or in the case of damage by fire, while rented to you or temporarily occupied by you with permission of the owner.

7. Subject to Paragraph 5. above, the Medical Expense Limit is the most we will pay under **COVERAGE C** for all medical expenses because of "bodily injury" sustained by any one person.

The Limits of Insurance of this Coverage Form apply separately to each consecutive annual period and to any remaining period of less than 12 months, starting with the beginning of the policy period shown in the Declarations, unless the policy period is extended after issuance for an additional period of less than 12 months. In that case, the additional period will be deemed part of the last preceding period for purposes of determining the Limits of Insurance.

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SECTION IV. – CONDITIONS

The following conditions apply in addition to the Common Policy Conditions.

1. **Bankruptcy**

   Bankruptcy or insolvency of the insured or of the insured's estate will not relieve us of our obligations under this Coverage Form.

2. **Duties in the Event of an Occurrence, Offense, Claim or Suit**

   a. You must see to it that we are notified as soon as practicable of an "occurrence", or an offense which may result in a claim or "suit". To the extent possible, notice should include:

   (1) How, when and where the "occurrence" or offense took place;

   (2) The names and addresses of any injured persons and witnesses; and

   (3) The nature and location of any injury or damage arising out of the "occurrence" or offense.

   b. If a claim is made or "suit" is brought against any insured, you must:

   (1) Immediately record the specifics of the claim or "suit" and the date received; and

   (2) Notify us as soon as practicable

   You must see to it that we receive written notice of the claim or "suit" as soon as practicable.

   c. You and any other involved insured must:

   (1) Immediately send us copies of any demands, notices, summonses or legal papers received in connection with the claim or "suit";

   (2) Authorize us to obtain records and other information;

   (3) Cooperate with us in the investigation or settlement of the claim or defense against the "suit"; and

   (4) Assist us, upon our request, in the enforcement of any right against any person or organization which may be liable to the insured because of injury or damage to which this insurance may also apply.

   d. No insured will, except at that insured's own cost, voluntarily make a payment, assume any obligation, or incur any expense, other than for first aid, without our consent.

   e. If you report an "occurrence" or offense, to an insurer providing other than General Liability insurance, which later develops into a General Liability claim covered under this Coverage Form, failure to report such "occurrence" or offense to us at the time of the "occurrence" or offense shall not be deemed in violation of these conditions. However, you shall give notification to us, as soon as is reasonably possible, that the "occurrence" or offense is a General Liability claim.

   f. Knowledge of an "occurrence" or offense by any of your agents, "volunteer workers" or "employees" shall not constitute knowledge by you unless one of your officers or anyone responsible for administering your insurance program has received a notification from the agent, "volunteer worker" or "employee".

3. **Legal Action Against Us**

   No person or organization has a right under this Coverage Form:

   a. To join us as a party or otherwise bring us into a "suit" asking for damages from an insured; or

   b. To sue us on this Coverage Form unless all of its terms have been fully complied with.

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A person or organization may sue us to recover on an agreed settlement or on a final judgment against an insured; but we will not be liable for damages that are not payable under the terms of this Coverage Form or that are in excess of the applicable limit of insurance. An agreed settlement means a settlement and release of liability signed by us, the insured and the claimant or the claimant's legal representative.

4. Other Insurance

If other valid and collectible insurance is available to the insured, other than "volunteer workers", "employees", elected or appointed officers, directors, commissioners, trustees, or owners of commandeered equipment, for a loss we cover under **COVERAGES A or B** of this form, our obligations are limited as follows:

a. Primary Insurance

This insurance is primary except when Paragraph b. below applies. If this insurance is primary, our obligations are not affected unless any of the other insurance is also primary. Then, we will share with all that other insurance by the method described in Paragraph c. below.

b. Excess Insurance

(1) This insurance is excess over:

(a) Any of the other insurance, whether primary, excess, contingent or on any other basis:

(i) That is fire, extended coverage, builder's risk, installation risk or similar coverage for "your work";

(ii) That is fire insurance for premises rented to you or temporarily occupied by you with permission of the owner;

(iii) That is insurance purchased by you to cover your liability as a tenant for "property damage" to premises rented to you or temporarily occupied by you with permission of the owner;

(iv) That is insurance covering your liability for "bodily injury" or "property damage" arising out of the igniting or discharging of fireworks, including but not limited to firecrackers, aerial or ground displays, in conjunction with any demonstration or show conducted or sponsored by you. However, this coverage shall not be excess should the "bodily injury" or "property damage" result from an emergency response you provide in response to an emergency arising out of fireworks;

(vi) If the loss arises out of the maintenance or use of aircraft or watercraft to the extent not subject to exclusion a. of **COVERAGE A. BODILY INJURY AND PROPERTY DAMAGE LIABILITY**;

(vii) That is liability insurance available to an independent commission, board, or authority or to an individual serving on such independent commission, board, or authority at your request;

(viii) That is liability insurance available to participants in a mutual aid or similar agreement; or

(ix) That is liability insurance available to a partnership or joint venture.

(b) Any other primary insurance, including pools or self-insurance, covering your liability for damages arising out of the premises or operations or the products completed operations, for which you have been added as an additional insured.

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(2) When this insurance is excess, we will have no duty under **COVERAGES A or B** to defend the insured against any "suit" if any other insurer has a duty to defend the insured against that "suit". If no other insurer defends, we will undertake to do so, but we will be entitled to the insured's rights against all those other insurers.

(3) When this insurance is excess over other insurance, we will pay only our share of the amount of the loss, if any, that exceeds the sum of:

(i) The total amount that all such other insurance would pay for the loss in the absence of this insurance; and

(ii) The total of all deductible and self-insured amounts under all that other insurance.

(4) We will share the remaining loss, if any, with any other insurance that is not described in this excess insurance provision and was not bought specifically to apply in excess of the limits of insurance shown in the Declarations of this Coverage Form.

c. Method Of Sharing

If all of the other insurance permits contribution by equal shares, we will follow this method also. Under this approach each insurer contributes equal amounts until it has paid its applicable limit of insurance or none of the loss remains, whichever comes first.

If any of the other insurance does not permit contribution by equal shares, we will contribute by limits. Under this method, each insurer's share is based on the ratio of its applicable limit of insurance to the total applicable limits of insurance of all insurers.

5. Representations

By accepting this policy, you agree:

a. The information in the Declarations is accurate and complete;

b. The information is based upon representations you made to us; and

c. We have issued this policy in reliance upon your representations.

Your failure to disclose all hazards existing as of the inception date of the policy shall not prejudice you with respect to the coverage afforded, provided such failure or omission is not intentional. This Coverage Form is void if any material fact or circumstance relating to this insurance is intentionally omitted or misrepresented.

6. Separation of Insureds

Except with respect to the Limits of Insurance, and any rights or duties specifically assigned in this Coverage Form to the first Named Insured, this insurance applies:

a. As if each Named Insured were the only Named Insured; and

b. Separately to each insured against whom claim is made or "suit" is brought.

7. Transfer of Rights of Recovery Against Others to Us

If the insured has rights to recover all or part of any payment we have made under this Coverage Form, those rights are transferred to us. The insured must do nothing after loss to impair them. At our request, the insured will bring "suit" or transfer those rights to us and help us enforce them.

8. When We Do Not Renew

If we decide not to renew this Coverage Form, we will mail or deliver to the first Named Insured shown in the Declarations written notice of the nonrenewal not less than 30 days before the expiration date. If notice is mailed, proof of mailing will be sufficient proof of notice.

SECTION V. – DEFINITIONS

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1. "Administration" means any of the following acts that you do or authorize a person to do:
   a. Counseling "employees" or "volunteer workers", other than giving legal advice, on "employee benefit plans";
   b. Interpreting your "employee benefit plans";
   c. Handling records for your "employee benefit plans"; and
   d. Effecting enrollment, termination or cancellation of "employees" or "volunteer workers" under your "employee benefit plans".
2. "Advertisement" means a notice that is broadcast or published to the general public or specific market segments about your goods, products or services for the purpose of attracting customers or supporters. For the purposes of this definition:
   a. Notices that are published include material placed on the Internet or on similar electronic means of communication; and
   b. Regarding web-sites, only that part of a web-site that is about your goods, products or services for the purposes of attracting customers or supporters is considered an advertisement.
3. "Auto" means a land motor vehicle, trailer or semi-trailer designed for travel on public roads, including any attached machinery or equipment; or any other land vehicle that is subject to a compulsory or financial responsibility law or other motor vehicle insurance law in the state where it is licensed or principally garaged. However, "auto" does not include "mobile equipment".
4. "Bodily injury" means bodily injury, sickness or disease sustained by a person, including death resulting from any of these at any time.
5. "Coverage territory" means:
   a. The United States of America (including its territories and possessions), Puerto Rico and Canada;
   b. International waters or airspace, but only if the injury or damage occurs in the course of travel or transportation between any places included in Paragraph a. above; or
   c. All other parts of the world if the injury or damage arises out of:
      (1) Goods or products made or sold by you in the territory described in Paragraph a. above;
      (2) The activities of a person whose home is in the territory described in Paragraph a. above, but is away for a short time on your business; or
      (3) "Personal and advertising injury" offenses that take place through the Internet or similar electronic means of communication provided the insured's responsibility to pay damages is determined in a "suit" on the merits, in the territory described in Paragraph a. above or in a settlement we agree to.
6. "Employee" includes a "leased worker". "Employee" does not include a "temporary worker".
7. "Employee benefit plans" means a formal program or programs of employee benefits you maintain, such as group life insurance plans, group accident or health insurance plans, savings plans, or vacation plans, provided that no one other than an "employee" or "volunteer worker" or their dependents may subscribe to or benefit from such plans. This term also includes unemployment insurance, social security, workers' compensation, statutory disability benefits, or similar statutorily required plans.
8. "Employment practices" means an actual or alleged improper employment related practice, policy, act or omission involving an actual, prospective, or former "volunteer worker" or "employee", including:
   a. Failing to hire or refusing to hire;

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b. Wrongful dismissal, discharge, or termination of employment or membership, whether actual or constructive;

c. Wrongful deprivation of a career opportunity, or failure to promote;

d. Wrongful discipline of "volunteer workers" or "employees";

e. Negligent evaluation of "volunteer workers" or "employees";

f. Retaliation against "volunteer workers" or "employees" for the exercise of any legally protected right or for engaging in any legally protected activity;

g. Failure to adopt adequate workplace or employment-related policies and procedures;

h. Harassment, including "sexual harassment"; or

i. Violation of any federal, state or local laws (whether common law or statutory) concerning employment or discrimination in employment.

9. "Executive Officer" means a person holding any of the officer positions created by your charter, constitution, by-laws or any other similar governing document.

10. "Fungi" means any type or form of fungus, including mold or mildew and any mycotoxins, spores, scents or by-products produced or released by "fungi".

11. "Hostile fire" means one which becomes uncontrollable or breaks out from where it was intended to be.

12. "Impaired property" means tangible property, other than "your product" or "your work", that cannot be used or is less useful because:

a. It incorporates "your product" or "your work" that is known or thought to be defective, deficient, inadequate or dangerous; or

b. You have failed to fulfill the terms of a contract or agreement;

if such property can be restored to use by the repair, replacement, adjustment or removal of "your product" or "your work" or your fulfilling the terms of the contract or agreement.

13. "Insured contract" means:

a. A contract for a lease of premises. However, that portion of the contract for a lease of premises that indemnifies any person or organization for damage by fire to premises while rented to you or temporarily occupied by you with permission of the owner is not an "insured contract";

b. A sidetrack agreement;

c. Any easement or license agreement, except in connection with construction or demolition operations on or within 50 feet of a railroad;

d. An obligation, as required by ordinance, to indemnify a municipality, except in connection with work for a municipality;

e. An elevator maintenance agreement;

f. That part of any other contract or agreement pertaining to your operations (including an indemnification of a municipality in connection with work performed for a municipality) under which you assume the tort liability of another party to pay for "bodily injury" or "property damage" to a third person or organization. Tort liability means a liability that would be imposed by law in the absence of any contract or agreement.

Paragraph f. does not include that part of any contract or agreement:

(1) That indemnifies a railroad for "bodily injury" or "property damage" arising out of construction or demolition operations, within 50 feet of any railroad property and affecting any railroad bridge or trestle, tracks, road-beds, tunnel, underpass or crossing;

(2) That indemnifies an architect, engineer or surveyor for injury or damage arising out of:

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(a) Preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or

(b) Giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage; or

(3) Under which the insured, if an architect, engineer or surveyor, assumes liability for an injury or damage arising out of the insured's rendering or failure to render professional services, including those listed in (2) above and supervisory, inspection, architectural or engineering activities.

14. "Leased worker" means a person leased to you by a labor leasing firm under an agreement between you and the labor leasing firm, to perform duties related to the conduct of your operations. "Leased worker" does not include a "temporary worker".

15. "Loading or unloading" means the handling of property:

a. After it is moved from the place where it is accepted for movement into or onto an aircraft, watercraft or "auto";

b. While it is in or on an aircraft, watercraft or "auto"; or

c. While it is being moved from an aircraft, watercraft or "auto" to the place where it is finally delivered;

but "loading or unloading" does not include the movement of property by means of a mechanical device, other than a hand truck, that is not attached to the aircraft, watercraft or "auto".

16. "Mobile equipment" means any of the following types of land vehicles, including any attached machinery or equipment:

a. Bulldozers, farm machinery, forklifts and other vehicles designed for use principally off public roads;

b. Vehicles maintained for use solely on or next to premises you own or rent;

c. Vehicles that travel on crawler treads;

d. Vehicles, whether self-propelled or not, maintained primarily to provide mobility to permanently mounted:

(1) Power cranes, shovels, loaders, diggers or drills; or

(2) Road construction or resurfacing equipment such as graders, scrapers or rollers;

e. Vehicles not described in Paragraph a., b., c. or d. above that are not self-propelled and are maintained primarily to provide mobility to permanently attached equipment of the following types:

(1) Air compressors, pumps and generators, including spraying, welding, building cleaning, geophysical exploration, lighting and well servicing equipment; or

(2) Cherry pickers and similar devices used to raise or lower workers;

f. Vehicles not described in Paragraph a., b., c. or d. above maintained primarily for purposes other than the transportation of persons or cargo.

However, self-propelled vehicles with the following types of permanently attached equipment are not "mobile equipment" but will be considered "autos":

(1) Equipment designed primarily for:

(a) Snow removal;

(b) Road maintenance, but not construction or resurfacing; or

(c) Street cleaning;

(2) Cherry pickers and similar devices mounted on automobile or truck chassis and used to raise or lower workers; and

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(3) Air compressors, pumps and generators, including spraying, welding, building cleaning, geophysical exploration, lighting and well servicing equipment.

However, "mobile equipment" does not include any land vehicles that are subject to a compulsory or financial responsibility law or other motor vehicle insurance law in the state where it is licensed or principally garaged. Land vehicles subject to a compulsory or financial responsibility law or other motor vehicle insurance law are considered "autos".

17. "Occurrence" means an accident, including continuous or repeated exposure to substantially the same general harmful conditions.

18. "Personal and advertising injury" means injury, including consequential "bodily injury", arising out of one or more of the following offenses:

a. False arrest, detention or imprisonment;

b. Malicious prosecution;

c. The wrongful eviction from, wrongful entry into, or invasion of the right of private occupancy of a room, dwelling or premises that a person occupies, committed by or on behalf of its owner, landlord or lessor;

d. Oral or written publication in any manner of material that slanders or libels a person or organization or disparages a person's or organization's goods, products or services;

e. Oral or written publication in any manner of material that violates a person's right of privacy;

f. The use of another's advertising idea in your "advertisement"; or

g. Infringing upon another's copyright, trade dress or slogan in your "advertisement".

19. "Personal watercraft" means a vessel you own, rent, or borrow which uses an inboard motor powering a water jet pump as its primary source of motive power, and which is designed to be operated by a person sitting, standing, or kneeling on the vessel, rather than the conventional manner of sitting or standing inside the vessel.

20. "Pollutants" mean any solid, liquid, gaseous or thermal irritant or contaminant, including smoke, vapor, soot, fumes, acids, alkalis, chemicals and waste. Waste includes materials to be recycled, reconditioned or reclaimed.

21. "Potable water" means water intended and provided for human consumption.

22. "Products-completed operations hazard":

a. Includes all "bodily injury" and "property damage" occurring away from premises you own or rent and arising out of "your product" or "your work" except:

(1) Products that are still in your physical possession; or

(2) Work that has not yet been completed or abandoned. However, "your work" will be deemed completed at the earliest of the following times:

(a) When all of the work called for in your contract has been completed.

(b) When all of the work to be done at the job site has been completed if your contract calls for work at more than one job site.

(c) When that part of the work done at a job site has been put to its intended use by any person or organization other than another contractor or subcontractor working on the same project.

Work that may need service, maintenance, correction, repair or replacement, but which is otherwise complete, will be treated as completed.

b. Does not include "bodily injury" or "property damage" arising out of:

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(1) The transportation of property, unless the injury or damage arises out of a condition in or on a vehicle not owned or operated by you, and that condition was created by the "loading or unloading" of that vehicle by any insured;

(2) The existence of tools, uninstalled equipment or abandoned or unused materials; or

(3) Products or operations for which the classification, listed in the Declarations or in a policy schedule, states that products-completed operations are subject to the General Aggregate Limit.

23. "Property damage" means:

a. Physical injury to tangible property, including all resulting loss of use of that property. All such loss of use shall be deemed to occur at the time of the physical injury that caused it; or

b. Loss of use of tangible property that is not physically injured. All such loss of use shall be deemed to occur at the time of the "occurrence" that caused it.

For the purposes of this insurance, electronic data is not tangible property.

As used in this definition, electronic data means information, facts or programs stored as or on, created or used on, or transmitted to or from computer software, including systems and applications software, hard or floppy disks, CD-ROMS, tapes, drives, cells, data processing devices or any other media which are used with electronically controlled equipment.

24. "Sexual abuse" means any actual, attempted or alleged sexual conduct by a person, or by persons acting in concert, which causes injury. "Sexual abuse" includes sexual molestation, sexual assault, sexual exploitation, or sexual injury, but does not include "sexual harassment".

25. "Sexual harassment" means any actual, attempted or alleged unwelcome sexual advances, requests for sexual favors, or other conduct of a sexual nature by a person, or by persons acting in concert, which causes injury, but only when:

a. Submission to or rejection of such conduct is made either explicitly or implicitly a condition of a person's employment, or a basis for employment decisions affecting a person; or

b. Such conduct has the purpose or effect of interfering with a person's work performance or creating an intimidating, hostile or offensive work environment.

26. "Suit" means a civil proceeding in which damages because of "bodily injury", "property damage", "personal and advertising injury", "medical incident", "law enforcement wrongful act", or a "water or wastewater professional activity" to which this insurance applies are alleged. "Suit" includes:

a. An arbitration proceeding in which such damages are claimed and to which the insured must submit or does submit with our consent; or

b. Any other civil alternative dispute resolution proceeding in which such damages is claimed and to which the insured submits with our consent.

27. "Temporary worker" means a person who is furnished to you to substitute for a permanent "employee" on leave or to meet seasonal or short-term workload conditions.

28. "Volunteer worker" means a person who is not your "employee", and who donates his or her work and acts at the direction of and within the scope of duties determined by you, and is not paid a fee, salary or other compensation by you or anyone else for their work performed for you.

29. "Water or wastewater professional activity" means an act, error or omission which arises from your activities as a water or wastewater district, water utility, or any other entity whose primary duty is the treatment and distribution of "potable water", or the collection and treatment of wastewater.

30. "Your product" means:

a. Any goods or products, other than real property, manufactured, sold, handled, distributed or disposed of by:

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(1) You;

(2) Others trading under your name; or

(3) A person or organization whose business or assets you have acquired; and

b. Containers (other than vehicles), materials, parts or equipment furnished in connection with such goods or products.

"Your product" includes:

a. Warranties or representations made at any time with respect to the fitness, quality, durability, performance or use of "your product"; and

b. The providing of or failure to provide warnings or instructions.

"Your product" does not include vending machines or other property rented to or located for the use of others but not sold.

31. "Your work" means:

a. Work or operations performed by you or on your behalf; and

b. Materials, parts or equipment furnished in connection with such work or operations.

"Your work" includes:

a. Warranties or representations made at any time with respect to the fitness, quality, durability, performance or use of "your work"; and

b. The providing of or failure to provide warnings or instructions.

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AMENDMENT – CALIFORNIA CLAIMS

THIS ENDORSEMENT CHANGES THE POLICY.

PLEASE READ IT CAREFULLY.

THIS ENDORSEMENT MODIFIES INSURANCE PROVIDED UNDER THE FOLLOWING:

COMMERCIAL GENERAL LIABILITY COVERAGE FORM

With respect to any claim for damages arising out of your California operations:

1. If a conflict of interest arises which creates a duty on our part to provide the insured independent counsel, we will provide such counsel unless, at the time we inform the insured of possible conflict, the insured expressly waives, in writing, the right of such counsel.
2. When the insured has selected independent counsel:
   a. We require that the selected counsel have at least five (5) years of tort litigation practice which includes substantial defense experience in the subject at issue in the litigation, and they must carry errors and omissions coverage.
   b. It shall be the duty of such counsel and the insured to disclose to us all information concerning the action, except privileged materials relevant to coverage disputes, and to inform and consult with us in all matters relating to the action. Any claim of privilege asserted is subject to in camera review in the appropriate law and motion department of the Superior Court. Any information disclosed by the insured or by such counsel is not a waiver of privilege as to any other party; and
   c. Both the counsel provided by us and the counsel the insured has selected shall be allowed to participate in all aspects of the litigation. Counsel shall cooperate fully in the exchange of information consistent with each counsel's ethical and legal obligation to the insured. Nothing in this section shall relieve the insured of their duty to cooperate with us under the terms of this insurance policy.
3. Our obligation to pay fees to counsel selected by the insured is limited to the rates which we actually pay to counsel we retain in the ordinary course of business in the defense of similar actions in the community where the claim is being defended. Any dispute concerning counsel fees shall be resolved by final and binding arbitration by a single neutral arbitrator selected by the parties in the dispute.
4. No conflict of interest shall be deemed to exist to the allegations of punitive damages or be deemed to exist solely because an insured is sued for an amount in excess of the insurance policy limits.
5. You are required to see to it that records pertinent to the counsel fees are maintained. These records will be used to determine the allocation of any counsel fees for which you may be solely responsible, including for the investigation, defense or settlement of an allegation not covered by this insurance.

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

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CALIFORNIA CHANGES – SPOUSE

THIS ENDORSEMENT CHANGES THE POLICY.

PLEASE READ IT CAREFULLY.

THIS ENDORSEMENT MODIFIES INSURANCE PROVIDED UNDER THE FOLLOWING:

COMMERCIAL GENERAL LIABILITY COVERAGE FORM

The term spouse is replaced by the following:

Spouse or registered domestic partner under California law.

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ADDITIONAL INSURED – AUTOMATIC

THIS ENDORSEMENT CHANGES THE COVERAGE FORM.

PLEASE READ IT CAREFULLY.

THIS ENDORSEMENT MODIFIES INSURANCE PROVIDED UNDER THE FOLLOWING:

COMMERCIAL GENERAL LIABILITY COVERAGE FORM

SECTION II. – WHO IS AN INSURED is amended to include as an insured any person or organization but only with respect to the following:

A. Liability for "bodily injury", "property damage", or "personal and advertising injury" caused , in whole or in part, by your acts or omissions or the acts or omissions of those acting on your behalf:

1. in the performance of your ongoing operations; or
2. in connection with premises owned by or rented to you;

B. Liability arising out of the ownership, maintenance or use of premises leased to you and subject to the following additional exclusions:

1. any "occurrence" which takes place after you cease to be a tenant at that premises.
2. structural alterations, new construction or demolition operations performed by or on behalf of the person or organization you have leased from.

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FELLOW EMPLOYEE

THIS ENDORSEMENT CHANGES THE COVERAGE FORM.

PLEASE READ IT CAREFULLY.

THIS ENDORSEMENT MODIFIES INSURANCE PROVIDED UNDER THE FOLLOWING:

COMMERCIAL GENERAL LIABILITY COVERAGE FORM

Paragraph **2.b.**(1) of **SECTION II. – WHO IS AN INSURED** is replaced by the following:

(1) "Bodily injury" or "personal and advertising injury":

(a) To you, to your partners or members (if you are a partnership or joint venture), or to your members (if you are a limited liability company);

(b) To the brother, child, parent, sister or spouse of such injured person as a consequence of any "injury" described in subparagraph (1)(a) above;

(c) For which there is any obligation to share damages with or repay someone else who must pay damages because of the injury described in Paragraphs (1)(a) or (1)(b) above.

(d) Arising out of his or her providing or failing to provide professional health care services.

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AMENDMENT – AGGREGATE LIMITS OF INSURANCE (PER LOCATION)

THIS ENDORSEMENT CHANGES THE COVERAGE FORM.

PLEASE READ IT CAREFULLY.

THIS ENDORSEMENT MODIFIES INSURANCE PROVIDED UNDER THE FOLLOWING:

COMMERCIAL GENERAL LIABILITY COVERAGE FORM

The General Aggregate Limit under **SECTION III. – LIMITS OF INSURANCE** applies separately to each of your "locations" owned by or rented to you.

For the purpose of this endorsement only, "location" means premises involving the same or connecting lots, or premises whose connection is interrupted only by a street, roadway, waterway or right-of-way of a railroad.

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CAP ON LOSSES FROM CERTIFIED ACTS OF TERRORISM

THIS ENDORSEMENT CHANGES THE POLICY.

PLEASE READ IT CAREFULLY.

THIS ENDORSEMENT MODIFIES INSURANCE PROVIDED UNDER THE FOLLOWING:

COMMERCIAL GENERAL LIABILITY COVERAGE FORM

If aggregate insured losses attributable to terrorist acts certified under the federal Terrorism Risk Insurance Act exceed $100 billion in a Program Year (January 1 through December 31) and we have met our insurer deductible under the Terrorism Risk Insurance Act, we shall not be liable for the payment of any portion of the amount of such losses that exceeds $100 billion, and in such case insured losses up to that amount are subject to pro rata allocation in accordance with procedures established by the Secretary of the Treasury.

"**Certified act of terrorism**" means an act that is certified by the Secretary of the Treasury, in concurrence with the Secretary of State and the Attorney General of the United States, to be an act of terrorism pursuant to the federal Terrorism Risk Insurance Act. The criteria contained in the Terrorism Risk Insurance Act for a "certified act of terrorism" include the following:

1. The act resulted in insured losses in excess of $5 million in the aggregate, attributable to all types of insurance subject to the Terrorism Risk Insurance Act; and
2. The act is a violent act or an act that is dangerous to human life, property or infrastructure and is committed by an individual or individuals as part of an effort to coerce the civilian population of the United States or to influence the policy or affect the conduct of the United States Government by coercion.

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Allied World Assurance Company (U.S.), Inc.
199 Water Street, 24th Floor
New York, NY 10038
(646) 794-0500

PUBLIC OFFICIALS AND MANAGEMENT LIABILITY WITH EMPLOYMENT PRACTICES AND EMPLOYEE BENEFITS COVERAGE FORM (OCCURRENCE) SUPPLEMENTAL DECLARATIONS

NAMED INSURED: Hemet-San Jacinto Watermaster	POLICY NUMBER: 5105-1266
	EFFECTIVE DATE: 4/1/2014

THIS COVERAGE FORM PROVIDES COVERAGE ON AN OCCURRENCE BASIS FOR WRONGFUL ACTS OR OFFENSES THAT TAKE PLACE DURING THE POLICY PERIOD. DEFENSE EXPENSES PAID UNDER COVERAGE A, ARE PAID IN ADDITION TO THE LIMITS OF LIABILITY. DEFENSE EXPENSES PAID UNDER COVERAGE B, WILL REDUCE AND MAY EXHAUST THE LIMITS OF LIABILITY AVAILABLE TO PAY LOSS. DEFENSE EXPENSES ARE APPLIED AGAINST THE DEDUCTIBLE.

LIMITS OF INSURANCE

Coverage A.			
Wrongful Acts	$	1,000,000	Each Wrongful Act
Employment Practices	$	N/A	Each Offense
Employee Benefit Plans	$	N/A	Each Offense
Coverage A. Deductible	$	1,000	Each Wrongful Act or Offense
Coverage B.			
Injunctive Relief	$	5,000	Each Action for Injunctive Relief
	$	5,000	Aggregate for Coverage B
All Coverages Aggregate Limit	$	3,000,000	In the Aggregate for all Wrongful Acts and Offenses, and all Actions for Injunctive Relief, under Coverage A and Coverage B

Retroactive Date	N/A

ENDORSEMENTS ATTACHED TO THIS POLICY:

WA-PO 00001 00 (03/12)
WA-PO 00005 00 (03/12)
WA-PO 00014 00 (03/12)

THESE DECLARATIONS, TOGETHER WITH THE COMMON POLICY CONDITIONS AND COVERAGE FORM(S) AND ANY ENDORSEMENT(S), COMPLETE THE ABOVE NUMBERED POLICY.

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In Witness Whereof, the Insurer has caused this Policy to be executed by its authorized officers.

Karen Colvin
Asst. Secretary

W. K. Knight
President

Paul R. Ludden
AUTHORIZED REPRESENTATIVE

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PUBLIC OFFICIALS AND MANAGEMENT LIABILITY WITH EMPLOYMENT PRACTICES and EMPLOYEE BENEFITS COVERAGE FORM (OCCURRENCE)

Various provisions in this policy restrict coverage. Read the entire policy carefully to determine rights, duties and what is and is not covered.

Throughout this Coverage Form the words "you" and "your" refer to the named insured shown in the declarations, and any other person or organization qualifying as a named insured under this Coverage Form. The words "we," "us" and "our" refer to the company providing this insurance. The word "insured" means any person or organization qualifying as such under **SECTION III. – WHO IS AN INSURED.**

Other words and phrases that appear in quotation marks have special meaning. Refer to **SECTION VII. – DEFINITIONS.**

SECTION I. – COVERAGES

COVERAGE A. INSURING AGREEMENT - LIABILITY FOR MONETARY DAMAGES

1. We will pay those sums that the insured becomes legally obligated to pay as "damages" arising out of a "claim" for:

   a. a "wrongful act," or

   b. an "employment practices" offense, or

   c. an offense in the "administration" of your "employee benefit plans"

   to which this insurance applies.

   We will have the right and duty to defend any "claim" seeking those "damages". However, we will have no duty to defend any "insured against any "claim" seeking "damages" for a "wrongful act" or an "employment practices" offense or an offense in the "administration" of your "employee benefit plans" to which this insurance does not apply. We may, at our discretion, investigate any "wrongful act," "employment practices" offense or an offense in the "administration" of your "employee benefit plans," and settle any "claim" that may result.

   However:

   The amount we will pay for "damages" is limited as described in **SECTION IV. – LIMITS OF INSURANCE**; and

   Our right and duty to defend ends when we have used up the applicable limit of insurance in the payment of "damages" or "defense expenses" under **Coverages A.** and **B.**

   No other obligation or liability to pay sums or perform acts or services is covered under this insurance unless explicitly provided for below under **Coverage A. Supplementary Payments.**

2. This insurance applies to "claims" for "wrongful acts" or offenses only if:

   a. The "wrongful act" or offense takes place in the "coverage territory" and during the Policy Period; and

   b. Prior to the policy period, no insured listed in Paragraph 1. and 2.a. of **SECTION III. – WHO IS AN INSURED,** and no insured authorized by you to give or receive notice of a "wrongful act," offense or "claim," knew, that the "wrongful act" or offense had taken place, in whole or in part. If such a listed insured knew, prior to the Policy Period, that the "wrongful act" or offense had taken place, then any continuation, change or resumption of such "wrongful act" or offense during or after the Policy Period will be deemed to have been known prior to the Policy Period.

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3. "Wrongful acts" or offenses will be deemed to have been known to have taken place at the earliest time when any insured listed in Paragraphs 1. and 2.a. of **SECTION III. – WHO IS AN INSURED** or any insured authorized by you to give or receive notice of a "wrongful act," offense or claim:

   a. Reports all, or any part, of the "wrongful act" or offense to any other insurer;

   b. Receives a written or verbal demand or "claim" for "damages" because of the "wrongful act" or offense; or

   c. Becomes aware, by any other means, that the "wrongful act" or offense has taken place or has begun to take place.

4. All "damages" from all claims based on or arising out of the same or related "wrongful acts" or offenses, or the same act or interrelated acts of one or more Insureds, regardless of the number of:

   a. Insureds;

   b. Plaintiffs; or

   c. "Claims" made;

   shall be subject to one "Each Wrongful Act" or "Each Offense" Limit of Insurance, and one Deductible.

   Related "wrongful acts" or offenses shall include "wrongful acts" or offenses which are the same, related or continuous, or which arise from a common nucleus of facts, and shall be deemed to have taken place at the time of the first such "wrongful act" or offense.

COVERAGE A. SUPPLEMENTARY PAYMENTS

We will pay, with respect to any "claim" we investigate, settle, or defend:

1. All expenses we incur.
2. The cost of bonds to release attachments, but only for bond amounts within the applicable Limit of Insurance. We do not have to furnish these bonds.
3. All reasonable expenses incurred by the insured at our request to assist us in the investigation or defense of the "claim," including actual loss of earnings up to $500 a day because of time off from work.
4. All court costs taxed against the insured in the "claim." However, these payments do not include attorneys' fees or attorneys' expenses taxed against the insured.
5. Prejudgment interest awarded against the insured on that part of the judgment we pay. If we make an offer to pay the applicable limit of insurance, we will not pay any prejudgment interest based on that period of time after the offer.
6. All interest earned on that part of any judgment within our limit of insurance after entry of the judgment and before we have paid, offered to pay, or deposited in court the part of the judgment that is within the applicable Limit of Insurance.

   These payments will not reduce the limits of insurance.

COVERAGE B. INSURING AGREEMENT - DEFENSE EXPENSES FOR INJUNCTIVE RELIEF

1. We will pay those reasonable sums the insured incurs as "defense expenses" to defend against an action for "injunctive relief" because of a "wrongful act," an "employment practices" offense, or an offense in the "administration" of your "employee benefit plans" to which this insurance applies.

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However:

a. The amount we will pay for "defense expenses" is limited as described in **SECTION IV. – LIMITS OF INSURANCE**; and

b. We have no obligation to arrange for or provide the defense for any action for "injunctive relief."

No other obligation or liability to pay sums or perform acts or services is covered.

2. This insurance applies only if:

a. The action seeking "injunctive relief" is brought in a legally authorized court or agency of the United States, any of its states or commonwealths, or any governmental subdivision of any of them;

b. Such action is filed during the Policy Period; and

c. The insured:

(1) First notifies us as soon as practicable after retaining counsel to respond to such action but in no case later than 60 days after the end of the Policy Period; and

(2) Is reasonably expedient in requesting us to reimburse any "defense expenses" incurred.

3. Related "wrongful acts" or offenses shall include "wrongful acts" or offenses which are the same, related or continuous, or which arise from a common nucleus of facts, and shall be deemed to have taken place at the time of the first such "wrongful act" or offense.

All "defense expenses" from all actions for "injunctive relief" based on or arising out of the same or related "wrongful acts" or offenses, or the same act or interrelated acts of one or more Insureds, regardless of the number of:

a. Insureds;

b. Plaintiffs;

c. Demands asserted or actions brought; or

d. Injunctions, temporary restraining orders or prohibitive writs;

shall be subject to one "Each Action for Injunctive Relief" Limit of Insurance.

SECTION II. – EXCLUSIONS

This insurance does not apply under either **Coverage A** or **Coverage B** to:

1. Other Applicable Coverage

Any "wrongful act" or offense which is insured by any other policy or policies except:

a. A policy purchased to apply in excess of this Coverage Form; or

b. That portion of "damages" otherwise covered by this Coverage Form which exceeds the limits of liability of such other policy or policies, subject to the Other Insurance Condition in **SECTION VI. – CONDITIONS.**

2. Asbestos

Any injury, "damages," "defense expenses," costs, loss, liability or legal obligation arising out of or in any way related to asbestos or asbestos-containing materials or exposure thereto, or for the costs of abatement, mitigation, removal, elimination or disposal of any of them.

3. Attorney's Fees and Court Costs

Any award of court costs or attorney's fees which arises out of an action for "injunctive relief."

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4. **Bodily Injury, Property Damage or Personal and Advertising Injury**

"Damages," "defense expenses," costs or loss, based upon, attributed to, arising out of, in consequence of, or in any way related to "bodily injury," "property damage," or "personal and advertising injury," other than mental anguish or mental injury resulting from a covered "employment practices" offense.

5. **Bonds**

Any obligation related to a fidelity bond or a surety bond.

6. **Claims Against Other Insureds**

Any actions for "injunctive relief" or "claims" brought:

a. By a Named Insured against any other insured; or

b. By one Named Insured against another Named Insured.

7. **Compliance with ADA Requirements**

"Damages," "defense expenses," costs or loss incurred as a result of physical modifications made to accommodate persons with disabilities as required by:

a. The Americans with Disabilities Act of 1990; or

b. Any federal, state, or local disability discrimination or accommodation laws or regulations; including subsequent amendments or any regulations promulgated thereunder.

8. **Sums Due Under Contract**

Any amount actually or allegedly due under the terms of any contract for the purchase of goods or services or any payment or performance contract.

9. **Contractual Liability**

"Damages," "defense expenses," costs or loss based upon, attributed to, arising out of, in consequence of, or in any way related to any contract or agreement to which the insured is a party or a third-party beneficiary, including, but not limited to, any representations made in anticipation of a contract or any interference with the performance of a contract.

10. **Criminal Acts**

"Damages," "defense expenses," costs or loss arising out of or contributed to by any fraudulent, dishonest, criminal or malicious act of the insured (except for "sexual abuse" which is excluded in the Sexual Abuse exclusion below), or the willful violation of any statute, ordinance or regulation committed by or with the knowledge of the insured. However, we will defend the insured for covered civil action subject to the other terms of this Coverage Form until either a judgment or final adjudication establishes such an act, or the insured confirms such act.

11. **Debt Financing**

"Damages," "defense expenses," costs or loss arising out of or contributed to by any debt financing, including but not limited to bonds, notes, debentures and guarantees of debt.

12. **Employment Contracts**

Any amount actually or allegedly due under the terms of any contract to commence or to continue employment, or as severance pay under any contract relating to the termination of employment.

13. **ERISA, COBRA and WARN Act Liability**

"Damages," "defense expenses," costs or loss arising out of or contributed to by any insured's obligations under:

a. The Employee Retirement Income Security Act of 1974 (ERISA);

b. The Comprehensive Omnibus Budget Reconciliation Act (COBRA);

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c. The Worker Adjustment and Retraining Notification Act (WARN); or

d. Any similar federal, state, or local laws or regulations;

including subsequent amendments or any regulations promulgated thereunder.

14. Failure to Maintain Insurance

"Damages," "defense expenses," costs or loss arising out of or contributed to by the failure to effect or maintain:

a. Insurance of any kind, including adequate limits of insurance; or

b. Suretyship or bonds.

This exclusion does not apply to the extent coverage is provided under this Coverage Form for the "administration" of "employee benefit plans."

15. Fines

Fines, penalties and taxes, including but not limited to those imposed by the Internal Revenue Service code or any similar state or local code.

16. Fungi or Bacteria

a. Any liability, loss, injury or "damages" which would not have occurred or taken place, in whole or in part, but for the actual, alleged or threatened inhalation of, ingestion of, contact with, exposure to, existence of, or presence of, any "fungi" or bacteria on or within a building or structure, including its contents, regardless of whether any other cause, event, material or product contributed concurrently or in any sequence to such injury or damage.

b. Any "damages," "defense expenses, costs or loss arising out of the abating, testing for, monitoring, cleaning up, removing, containing, treating, detoxifying, neutralizing, remediating or disposing of, or in any way responding to, or assessing the effects of, "fungi" or bacteria, by any insured or by any other person or entity.

17. Violation of Law

"Damages," "defense expenses," costs or loss arising from an insured's willful violation of any federal, state, or local law, rule, or regulation.

18. Law Enforcement

"Damages," "defense expenses," costs or loss arising out of any "law enforcement activity." This exclusion does not apply to an "employment practices" offense or an offense in the administration of "employee benefit plans" involving your law enforcement agency.

19. Lead, Electromagnetic Radiation, Nuclear

a. Any injury, "damages," "defense expenses," costs, loss, liability or legal obligation arising out of or in any way related to:

(1) The toxic properties of lead, or any material or substance containing lead; or

(2) Electromagnetic radiation;

or exposure thereto, or for the costs of abatement, mitigation, removal, elimination or disposal of any of them.

b. Any "damages," "defense expenses," costs or loss arising out of any actual, alleged or threatened injury or damage to any person or property from any radioactive matter or nuclear material.

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20. Performance of Employee Benefit Plans

"Damages," "defense expenses," costs or loss arising from an "employment practices" offense or any offense in the "administration" of "employee benefit plans" arising out of:

a. The failure of any investment program, individual securities or savings program to perform as held forth by or represented by an insured;

b. Advice given by an insured in connection with participation or non-participation in any stock subscription plans, savings programs or any other "employee benefit plan";

c. Errors in providing information or failing to provide information on past performance of investment vehicles;

d. Failure of the insured, or any insurer, fiduciary, trustee or fiscal agent, to perform any of their duties or obligations or to fulfill any of their guarantees with respect to the payment of benefits under "employee benefit plans" or the providing, handling or investment of funds;

e. The liability of others which is assumed by the insured under a contract or agreement, except to the extent the insured would have been liable in the absence of the contract or agreement;

f. Any "claim" for the return of compensation paid by the insured if a court determines that the payment was illegal; or

g. Any "claim" for benefits that are lawfully paid or payable to a beneficiary from the funds of an "employee benefit plan."

21. Pollution

a. Any injury, "damages," "defense expenses," costs, loss, liability or legal obligation arising out of or in any way related to pollution, however caused. Pollution includes the actual, alleged, or potential presence in or introduction into the environment of any substance if such substance has, or is alleged to have, the effect of making the environment impure, harmful or dangerous. Environment includes any air, land, structure (or the air therein), watercourse or other body of water, including underground water.

b. This insurance does not apply to any "damages," "defense expenses," costs or loss arising out of any:

(1) Request, demand, order or statutory or regulatory requirement that any insured or others test for, monitor, clean up, remove, contain, treat, detoxify or neutralize, or in any way respond to, or assess the effects of, "pollutants"; or

(2) "Claim" by or on behalf of a governmental authority for "damages" because of testing for, monitoring, cleaning up, removing, containing, treating, detoxifying or neutralizing, or in any way responding to, or assessing the effects of, "pollutants."

22. Preparation of Bid Specifications

"Damages," "defense expenses," costs or loss arising out of estimates of probable costs or cost estimates being exceeded or faulty preparation of bid specifications or plans including architectural plans.

23. Professional Healthcare

"Damages," "defense expenses," costs or loss arising out of providing or failing to provide "professional healthcare services."

24. Professional Liability

"Damages," "defense expenses," costs or loss arising out of the rendering of, or failure to render of professional services by a lawyer, engineer, architect, surveyor or medical professional; except that this exclusion will not apply to "claims" made against insureds while acting solely as public

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officials or "employees" on behalf of the Named Insured and in the conduct of its business, and not in their professional capacities as a lawyer, engineer, architect, surveyor, or medical professional.

25. Profit, Advantage or Remuneration

Any "Damages," "defense expenses," costs or loss based upon or attributable to the insured gaining any profit, advantage or remuneration to which the insured is not legally entitled.

26. Public Use of Property

"Damages," "defense expenses," costs or loss arising from any method or proceeding used to take control of private property for public use including condemnation, adverse possession, and dedication by adverse use or inverse condemnation.

27. Publications and Pronouncements

"Damages," "defense expenses," costs or loss based upon, attributable to, or arising out of "wrongful acts" resulting from:

a. Publications or pronouncements, including material placed on the Internet or on similar electronic means of communication, concerning any organization or business enterprise or their products or services made by or at the direction of the insured with the knowledge of its falsity; or

b. Printing of periodicals, advertising matter, or any or all jobs taken by any insured to be printed for a third party when the periodicals, advertising matter or other printing is not within the scope of the organization's own activities.

28. Sexual Abuse

"Damages," "defense expenses," costs or loss, based upon, attributed to, arising out of, in consequence of, or in any way related to:

a. "Sexual abuse" of any person; or

b. The negligent:

(1) Employment;

(2) Investigation;

(3) Supervision;

(4) Reporting to the proper authorities, or failing to so report; or

(5) Retention;

of a person for whom any insured is or ever was legally responsible and whose conduct would be excluded by paragraph (a) above.

29. Specific Operations

"Damages," "defense expenses," costs or loss, arising out of or contributed to by the ownership, operation, maintenance, entrustment to others, or use of any:

a. Gas or electric generation facility; or

b. Sanitary landfill, dump, or other permanent waste disposal facility.

30. Strikes, Riot, Civil Commotion or Mob Action

"Damages," "defense expenses," costs or loss arising out of or contributed to by any lockout, strike, picket line, replacement or other similar actions resulting from labor disputes or labor negotiations or any act or omission in connection with the prevention or suppression of a riot, civil commotion or mob action.

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31. Tax Assessments

"Damages," "defense expenses," costs or loss arising out of or contributed to by any tax assessments or adjustments, or the collection, refund, disbursement or application of any taxes. This exclusion does not apply to the use or prioritization of your operating funds.

32. Wage and Hour Laws

"Damages," "defense expenses," costs or loss arising out of or contributed to by any actual or alleged violation of the Fair Labor Standards Act of 1938, as amended, or any other federal, state or local law related to wage and hour policies, improper payroll practices or the payment of overtime or vacation pay, including but not limited to back wages or other similar "damages," or any monetary or non-monetary compensation or benefits that may be owed to a past or present "employee" based upon misclassification of their job status, title or duties.

33. Water or Wastewater Professional Activity

"Damages," "defense expenses," costs or loss arising out of an act, error or omission in the performance of or failure to perform your "water or wastewater professional activities," that also results in "bodily injury" or "property damage."

34. Workers' Compensation and Similar Laws

Any obligation of the insured under a workers' compensation, disability benefits or unemployment compensation law, or any similar law.

35. Private and Confidential Information

"Damages," "defense expenses," costs or loss arising out of or contributed to by any misuse or improper release of confidential, private or proprietary information.

SECTION III. – WHO IS AN INSURED

1. If you are designated in the Declarations as:

   a. An individual, you and your spouse are insureds, but only with respect to the conduct of a business of which you are the sole owner.

   b. A partnership or joint venture, you are an insured. Your members, your partners, and their spouses are also insureds, but only with respect to the conduct of your business. However, if you are a public entity, you are insured as a partner in a partnership or as a joint venturer in a joint venture, but only if the partnership or joint venture is between you and another governmental organization or non-profit entity. Coverage does not extend to a partnership or joint venture that operates, controls, or funds a school, hospital or medical clinic, nursing home, airport, port, public housing, gas or electric generation facility.

   c. A limited liability company, you are an insured. Your members are also insureds, but only with respect to the conduct of your business. Your managers are insureds, but only with respect to their duties as your managers.

   d. An organization other than a partnership, joint venture or limited liability company, you are an insured. Your "executive officers" and directors are insureds, but only with respect to their duties as your officers or directors. Your stockholders are also insureds, but only with respect to their liability as stockholders.

   e. A public entity, you are an insured. Your operating authorities, boards, commissions, districts or any other governmental units are insureds, provided that you operate, control, and fund the authority, board, commission, district, or other governmental unit. Coverage does not extend to an authority, board, commission, district, or other governmental unit that operates, controls, or funds a school, hospital or medical clinic, nursing home, airport, port, public housing, gas or electric generation facility.

   f. A trust, you are an insured. Your trustees are also insureds, but only with respect to their duties as trustees.

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2. Each of the following is also an insured:

   a. **Elected or appointed officials.** Your elected and appointed officials, including elected and appointed officials of your operating authorities, boards, commissions, districts, or other governmental units but only for acts within the course and scope of their duties for the insured public entity or its operating authorities, boards, commissions, districts or other governmental units.

   b. **Volunteer workers or employees.** Your "volunteer workers" only while performing duties related to the conduct of your operations, or your "employees", other than either your "executive officers" (if you are an organization other than a partnership, joint venture or limited liability company) or your managers (if you are a limited liability company), but only for acts within the scope of their employment by you or while performing duties related to the conduct of your operations.

   However, none of these "employees" or "volunteer workers" are insureds for:

   (1) "Bodily injury" or "personal and advertising injury":

   (a) To you, to your partners or members (if you are a partnership or joint venture), to your members (if you are a limited liability company), to a co-"employee" while in the course of his or her employment or performing duties related to the conduct of your operations, or to your other "volunteer workers" while performing duties related to the conduct of your operations;

   (b) To the spouse, child, parent, brother or sister of that co-'employee" or "volunteer worker" as a consequence of Paragraph (1)(a) above; or

   (c) For which there is any obligation to share "damages" with or repay someone else who must pay "damages" because of the injury described in Paragraphs (1)(a) or (1)(b) above.

   (2) "Property damage" to property:

   (a) Owned, occupied or used by,

   (b) Rented to, in the care, custody or control of, or over which physical control is being exercised for any purpose by, you, any of your "employees," "volunteer workers", any partner or member (if you are a partnership or joint venture), or any member (if you are a limited liability company).

   c. **Mutual Aid Agreements.** Any persons or organizations providing service to you under any mutual aid or similar agreement.

3. Any organization you newly acquire or form, other than a partnership, joint venture or limited liability company, and over which you maintain ownership or majority interest, will qualify as a Named Insured if there is no other similar insurance available to that organization.

   However:

   a. Coverage under this provision is afforded only until the 90th day after you acquire or form the organization or the end of the Policy Period, whichever is earlier; and

   b. Coverage does not apply to a "wrongful act," "employment practices" offense or offense in the "administration" of "employee benefit plans" that took place before you acquired or formed the organization or of which you had notice or knowledge before you acquired the organization.

   No person or organization is an insured with respect to the conduct of any current or past partnership or joint venture that is not shown as a Named Insured in the Declarations.

4. Your director, officer, "employee," "volunteer worker" or appointee, while serving on the board of directors of an organization that is a separate and distinct entity not subject to your direction and control, provided that the primary purpose of such organization is to support and further the efforts and welfare of individuals or organizations that provide water, sewer, or wastewater treatment.

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SECTION IV. – LIMITS OF INSURANCE

1. The Limits of Insurance shown in the Declarations and the rules below establish the most we will pay regardless of the number of:

   a. Insureds;

   b. "Claims" made; or

   c. Persons or organizations making "claims."

2. The Aggregate Limit of Insurance set forth in the Declarations for **Coverage A** applies to all "damages" from all "wrongful acts", "employment practices" offenses and offenses in the "administration" of your "employee benefit plans," and all "defense expenses" arising out of all actions for "injunctive relief" under **Coverage B**.

3. Subject to the Aggregate Limit of Insurance, the "Each Wrongful Act" or "Each Offense" Limit of Insurance set forth in the Declarations for **Coverage A**, is the most we will pay under **Coverage A** for all "damages" from all "claims" based upon or arising out of the same or related "wrongful acts" or offenses.

4. Subject to the Aggregate Limit of Insurance, the "Each Action for Injunctive Relief" Limit of Insurance set forth in the Declarations is the most we will pay under **Coverage B** for all "defense expenses" from all actions for "injunctive relief" based upon or arising out of the same or related "wrongful acts" or offenses.

5. The Aggregate Limit of Insurance applies separately to each Policy Period, starting with the effective date of the Policy Period shown in the Declarations, unless the Policy Period is extended after issuance for an additional period of less than 12 months. In that case, the additional period will be deemed part of the last preceding Policy Period for purposes of determining the Limits of Insurance.

6. Our obligations to pay "damages" or "defense expenses" or to defend or continue to defend any "claim" under this Coverage Form ends when the Aggregate Limit of Insurance is exhausted by the payment of "damages" or "defense expenses." If we pay amounts for "damages" or "defense expenses" in excess of that Limit of Insurance, you agree to promptly reimburse us for such amounts upon our demand.

7. If the Aggregate Limit of Insurance as set forth in the Declarations is exhausted by the payment of "damages" or "defense expenses" the entire premium for this Coverage Form will be deemed fully earned.

SECTION V. – YOUR DEDUCTIBLE

Our obligation to pay "damages" or "defense expenses" on your behalf will only be in excess of the Deductible amount set forth in the Declarations for **Coverage A**.

1. The Limits of Insurance set forth in the Declarations will not be reduced by the application of the Deductible.

2. The Deductible applies to "damages" and "defense expenses" from all "claims" arising out each "wrongful act," each "employment practices" offense, or each offense in the "administration" of your "employee benefit plans" regardless of the number of insureds, the number of persons or organizations making "claims," or the number of "claims" made.

3. The terms of this insurance, including those with respect to:

   a. Our right and duty to defend any "claims" seeking "damages"; and

   b. Your duties in the event of a "wrongful act," offense or "claim";

   apply irrespective of the application of the Deductible.

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4. We may pay all or any part of the Deductible to effect settlement of any "claim" and, upon notification of the action taken, you shall promptly reimburse us for such part of the Deductible paid by us.

SECTION VI. – CONDITIONS

The following conditions apply in addition to the Common Policy Conditions.

1. **Bankruptcy**

   Bankruptcy or insolvency of the insured or of the insured's estate will not relieve us of our obligations under this Coverage Form.

2. **Duties in the Event of a "Wrongful Act", Offense or "Claim"**

   a. You must see to it that we are notified as soon as practicable in writing of a "wrongful act" or offense which may result in a "claim."

      To the extent possible, notice should include the following information:

      (1) How, when and where the "wrongful act" or offense took place; and

      (2) The names and addresses of any persons seeking "damages" or of any witnesses.

      If a "claim" is made against any insured, you must:

      (1) Immediately record the specifics of the "claim" and the date received; and

      (2) Notify us in writing as soon as practicable.

      You must see to it that we receive written notice of the "claim" as soon as practicable.

   b. You and any other insured named or identified in such "claim" must:

      (1) Immediately send us copies of any demands, notices, summonses or legal papers received in connection with the "claim" or "suit";

      (2) Authorize us to obtain records and other information;

      (3) Cooperate with us in the investigation, settlement or defense of the "claim" or "suit"; and

      (4) Assist us, upon our request, in the enforcement of any right against any person or organization which may be liable to the insured because of "damages" to which this insurance may also apply.

   c. No insureds will, voluntarily make a payment, assume any obligation, or incur any expense, without our written consent. Such payment, obligation or expenses will be at their own cost.

   d. Notice shall be deemed given as soon as practicable, if it is given to us by any person to whom you have delegated such responsibility as soon as practicable after they become aware of a "wrongful act" or offense.

3. **Duties in the Event of a Request to Pay "Defense Expenses" for "Injunctive Relief"**

   a. You must see to it that we are notified as soon as practicable of an action for "injunctive relief" which may give rise to a request for us to provide coverage for "defense expenses."

      To the extent possible, notice should include the following information:

      (1) The plaintiff in the action;

      (2) The court or agency involved;

      (3) The relief being sought; and

      (4) The date of the action and any underlying demand.

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b. You and any other insureds named or identified in such action must:

(1) Immediately send us copies of any legal papers received in connection with the action and any underlying demand;

(2) Cooperate with us in the determination of any "defense expenses" which may be covered by this insurance; and

(3) Promptly submit a written request for us to reimburse any covered "defense expenses."

4. Legal Action Against Us

No person or organization has a right under this Coverage Form:

a. To join us as a party or otherwise bring us into a "claim" seeking "damages" or "defense expenses" from an insured; or

b. To sue us on this Coverage Form unless all of the terms and conditions of this policy have been fully complied with.

A person or organization may sue us to recover on an agreed settlement or on a final judgment against an insured; but we will not be liable for "damages" or "defense expenses" that are not payable under the terms of this Coverage Form or that are in excess of the applicable Limit of Insurance. Under **Coverage A**, an agreed settlement means a settlement and release of liability signed by us, the insured and the claimant or the claimant's legal representative.

5. Other Insurance

If other valid and collectible insurance is available to the insured for "damages," loss or "defense expenses" we cover under this Coverage Form, this insurance is excess over any of the other insurance and its deductible or self-insured retention, whether such other insurance is issued on a primary, excess, contingent or on any other basis.

6. Representations

By accepting this policy, you agree:

a. The information in the application for this insurance is accurate and complete;

b. That the Coverage Form has been issued to you based upon the information provided by you and the representations you made to us in the application for this insurance. The application forms the basis of our obligations under this Coverage Form; and

c. This Coverage Form is void if any material fact or circumstance relating to this insurance is intentionally omitted or misrepresented in the application for this insurance.

7. Separation of Insureds

Except with respect to the Limits of Insurance as described in **SECTION IV**, and any rights or duties specifically assigned to the first Named Insured, this insurance applies:

a. As if each Named Insured were the only Named Insured; and

b. Separately to each insured against whom "claim" is made.

8. Transfer of Rights of Recovery Against Others to Us

If the insured has rights to recover all or part of any payment we have made under this Coverage Form, those rights are transferred to us. The insured must do nothing after loss to impair them. At our request, the insured will bring "claim" or transfer those rights to us and help us enforce them.

9. When We Do Not Renew

If we decide not to renew this Coverage Form, we will mail or deliver to the first Named Insured shown in the Declarations written notice of such non-renewal not less than thirty (30) days before

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the expiration date. We will mail or deliver our notice to the first Named Insured's last mailing address known to us. If notice is mailed, proof of mailing will be sufficient proof of notice.

1. **Your Right to Claim Information**

   Upon request, we will provide the first Named Insured shown in the Declarations the following information relating to this and any preceding Coverage Form we have issued to you during the previous three years:

   a. A list or other record of each "wrongful act" or other offense not previously reported to any other insurer, of which we were notified in accordance with paragraph 2.a. or paragraph 3.a. of this section. We will include the date and a brief description of such "wrongful act" or offense if that information was in the notice we received.

   b. A summary, by policy year, of payments made and amounts reserved.

   Amounts reserved are based on our judgment. They are subject to change and should not be regarded as ultimate settlement values. You must not disclose this information to any claimant or any claimant's representative without our consent.

   We compile claim and related information for our own business purposes and exercise reasonable care in doing so. In providing this information to the first Named Insured, we make no representations or warranties to insureds, insurers, or others to whom this information is furnished by or on behalf of any insured. Cancellation or non-renewal will be effective even if we inadvertently provide inaccurate information.

SECTION VII. – DEFINITIONS

1. "Administration" means any of the following acts that you do or authorize a person to do:

   a. Counseling "employees" or "volunteer workers", other than giving legal advice, on "employee benefit plans";

   b. Interpreting your "employee benefit plans";

   c. Handling records for your "employee benefit plans"; and

   d. Effecting enrollment, termination or cancellation of "employees" or "volunteer workers" under your "employee benefit plans".

2. "Bodily injury" means bodily injury, mental anguish or mental injury, sickness or disease sustained by a person, including death resulting from any of these at any time.

3. "Claim" means:

   a. written notice, from any party, that it is their intention to hold the insured responsible for "damages" arising out of a "wrongful act" or offense by the insured;

   b. a civil proceeding in which "damages" arising out of an offense or "wrongful act" to which this insurance applies are alleged;

   c. an arbitration proceeding in which "damages" arising out of an offense or "wrongful act" to which this insurance applies are claimed and to which the insured must submit or does submit with our consent;

   d. any other civil alternative dispute resolution proceeding in which "damages" arising out of an offense or "wrongful act" to which this insurance applies are claimed and to which the insured submits with our consent; or

   e. a formal proceeding or investigation with the Equal Employment Opportunity Commission, or with an equivalent state or local agency.

   A "claim" does not mean any ethical conduct review or enforcement action, or disciplinary review or enforcement action.

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4. "Coverage territory" means the United States of America (including its territories and possessions), Puerto Rico and Canada.

5. "Damages" means monetary damages.

6. "Defense expenses" means reasonable and necessary fees or expenses incurred by or on behalf of the insured for:

   a. Legal fees charged by the insured's attorney;

   b. Court costs;

   c. Expert witnesses; and

   d. The cost of court bonds, but we do not have to furnish these bonds.

   "Defense expenses" do not include:

   (1) Any salaries, charges or fees for any insured, insured's "volunteer workers" or "employees," or former "volunteer workers" or "employees"; or

   (2) Any expenses other than a., b., c. and d. above.

7. "Employee" means natural persons who are past, present or future, full-time and part-time employees, but only while acting with the scope of their employment for the Named Insured, including "leased workers." "Employee" does not include a "temporary worker."

8. "Employee benefit plans" mean group life insurance, group accident or health insurance, profit sharing plans, pension plans, "employee" stock subscription plans, "employee" travel, vacation, or savings plans, workers compensation, unemployment insurance, social security and disability benefits insurance, and any other similar benefit program applying to "employees" or "volunteer workers."

9. "Employment practices" means the following, when alleged by a "volunteer worker," "employee" or applicant for employment, in connection with that person's actual or proposed employment relationship with the "Named Insured":

   any actual or alleged improper employment-related act, error or omission, including:

   a. Failing to hire or refusing to hire;

   b. Wrongful dismissal, discharge, or termination of employment or membership, whether actual or constructive;

   c. Wrongful deprivation of a career opportunity, or failure to promote;

   d. Wrongful discipline or demotion of "volunteer workers" or "employees";

   e. Negligent evaluation of "volunteer workers" or "employees";

   f. Retaliation against "volunteer workers" or "employees" for the exercise of any legally protected right or for engaging in any legally protected activity;

   g. Failure to adopt adequate workplace or employment-related policies and procedures, or the breach of any manual or employment-related policies of procedures;

   h. Harassment, including "sexual harassment";

   i. Libel, slander, defamation or invasion of privacy; or

   j. Violation of any federal, state or local laws (whether common law or statutory) concerning discrimination in employment.

10. "Executive Officer" means a person holding any of the officer positions created by your charter, constitution, by-laws or any other similar governing document.

11. "Fungi" means any type or form of fungus, including mold or mildew and any mycotoxins, spores, scents or by-products produced or released by "fungi".

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12. "Injunctive relief" means equitable relief sought through a demand for the issuance of a permanent, preliminary or temporary injunction, restraining order, or similar prohibitive writ against an insured, or order for specific performance by an insured.

13. "Law enforcement activity" means the activities of any insured while acting as a law enforcement official, officer, auxiliary officer, "employee," or "volunteer worker" of the law enforcement agency or department of the Named Insured. "Law enforcement activity" does not include your operations related to any building, code, license, permit, health, sanitation, animal control, safety, planning or zoning enforcement.

14. "Leased worker" means a person leased to you by a labor leasing firm under an agreement between you and the labor leasing firm, to perform duties related to the conduct of your business. "Leased worker" does not include a "temporary worker".

15. "Personal and advertising injury" means injury, including consequential "bodily injury," arising out of one or more of the following offenses:

    a. False arrest, detention or imprisonment;

    b. Malicious prosecution;

    c. The wrongful eviction from, wrongful entry into, or invasion of the right of private occupancy of a room, dwelling or premises that a person occupies, or any other interference with real property rights;

    d. Oral or written publication in any manner of material that slanders or libels a person or organization or disparages a person's or organization's goods, products or services;

    e. Oral or written publication in any manner of material that violates a person's right of privacy;

    f. The use of another's advertising idea in your advertisement; or

    g. Infringing upon another's copyright, trade dress or slogan in your advertisement.

16. "Policy Period" means the term of duration of the policy shown in the declarations.

17. "Pollutants" mean any solid, liquid, gaseous or thermal irritant or contaminant, including smoke, vapor, soot, fumes, acids, alkalis, chemicals and waste. Waste includes materials to be recycled, reconditioned or reclaimed.

18. "Professional healthcare services" means:

    a. Providing medical or nursing services;

    b. Providing professional services of any other healthcare professional, including emergency medical technicians and paramedics;

    c. Furnishing or dispensing drugs or medical, surgical or dental supplies or appliances;

    d. Handling of patients:

        (1) From the place where they are accepted for movement into or onto the means of transport,

        (2) During transport, and

        (3) From the means of transport to the place where they are finally delivered;

    e. Dispatching of, including the failure or refusal to dispatch, personnel to provide any of the above services;

    f. Serving on, or carrying out the orders of, a healthcare accreditation board or similar professional board or committee; and

    g. Establishing medical protocol, creating medical training curricula, providing medical training, conducting medical quality assurance programs, and carrying out similar duties.

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19. "Property damage" means:

    a. Physical injury to tangible property, including all resulting loss of use of that property; and

    b. Loss of use of tangible property that is not physically injured but results from a. above.

20. "Sexual abuse" means any actual, attempted or alleged sexual conduct by a person, or by persons acting in concert, which causes injury. "Sexual abuse" includes sexual molestation, sexual assault, sexual exploitation or sexual injury, but does not include "sexual harassment".

21. "Sexual harassment" means any actual, attempted or alleged unwelcome sexual advances, requests for sexual favors, or other conduct of a sexual nature by a person, or by persons acting in concert, which causes injury, but only when:

    a. Submission to or rejection of such conduct is made either explicitly or implicitly a condition of a person's employment, or a basis for employment decisions affecting a person; or

    b. Such conduct has the purpose or effect of interfering with a person's work performance or creating an intimidating, hostile or offensive work environment.

22. "Temporary worker" means a person who is furnished to you to substitute for a permanent "employee" on leave or to meet seasonal or short-term workload conditions.

23. "Volunteer worker" means a person who is not your "employee", and who donates his or her work and acts at the direction of and within the scope of duties determined by you, and is not paid a fee, salary or other compensation by you or anyone else for their work performed for you.

24. "Water or wastewater professional activities" means your activities as a water or wastewater district, water utility, or as any other entity whose primary duty is the treatment and distribution of potable water, or the collection and treatment of wastewater.

25. "Wrongful act" means any actual or alleged error, act, omission, neglect, misfeasance, nonfeasance, or breach of duty, including violation of any civil rights law, by any insured in the discharge of their duties for the Named Insured, individually or collectively, that results directly but unexpectedly and unintentionally in "damages" to others.

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EXCLUSION – EMPLOYMENT PRACTICES

THIS ENDORSEMENT CHANGES THE COVERAGE FORM.

PLEASE READ IT CAREFULLY.

THIS ENDORSEMENT MODIFIES INSURANCE PROVIDED UNDER THE FOLLOWING:

PUBLIC OFFICIALS AND MANAGEMENT LIABILITY COVERAGE FORM (OCCURRENCE

PUBLIC OFFICIALS AND MANAGEMENT LIABILITY COVERAGE FORM (CLAIMS-MADE)

SECTION I. – COVERAGES, COVERAGE A. INSURING AGREEMENT – LIABILITY FOR MONETARY DAMAGES and **COVERAGE B. INSURING AGREEMENT – DEFENSE EXPENSE FOR INJUNCTIVE RELIEF** do not apply to, and no coverage is available under this Coverage Form for, any "wrongful act," "employment practices" offense, offense, damage, loss or expense arising from "employment practices".

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

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EXCESS LIABILITY POLICY

Alteris

Allied World Assurance Company (U.S.), Inc.
199 Water Street, 24th Floor
New York, NY 10038
(646) 794-0500

COMMERCIAL EXCESS LIABILITY POLICY
DECLARATIONS

ITEM 1. NAMED INSURED AND MAILING ADDRESS:	POLICY NUMBER: 5107-1266
Hemet-San Jacinto Watermaster c/o EMWD, PO Box 8300, 2270 Trumble Road Perris, CA 92572	EFFECTIVE DATE: 4/1/2014

THIS POLICY PROVIDES BOTH CLAIMS MADE AND OCCURRENCE COVERAGE

IF THE UNDERLYING INSURANCE IS WRITTEN ON A CLAIMS MADE BASIS, THEN THIS IS POLICY PROVIDES CLAIMS MADE COVERAGE WHICH APPLIES ONLY TO CLAIMS FIRST MADE DURING THE POLICY PERIOD.

IF THE UNDERLYING INSURANCE IS WRITTEN ON AN OCCURRENCE BASIS, THEN THIS POLICY PROVIDES OCCURRENCE COVERAGE WHICH APPLIES ONLY TO CLAIMS ARISING OUT OF OCCURRENCES WHICH TAKE PLACE DURING THE POLICY PERIOD.

READ THE ENTIRE COVERAGE FORM AND ENDORSEMENTS CAREFULLY.

IN RETURN FOR THE PAYMENT OF THE PREMIUM, AND SUBJECT TO ALL THE TERMS OF THIS COVERAGE FORM, WE AGREE WITH YOU TO PROVIDE THE INSURANCE AS STATED IN THIS COVERAGE FORM.

ITEM 2. POLICY PERIOD: FROM: 4/1/2014 TO 4/1/2015		
at 12:01 a.m. Standard Time at the Named Insured's Address Stated above.		
ITEM 3. LIMITS OF LIABILITY		
	LIMITS OF LIABILITY	
(FOR OCCURRENCE COVERAGE) EACH OCCURRENCE LIMIT:	$	$4,000,000
(FOR CLAIMS MADE COVERAGE) EACH CLAIM LIMIT:	$	
GENERAL AGGREGATE LIMIT:	$	$4,000,000
ITEM 4. FORMS AND ENDORSEMENTS ATTACHED TO THIS COVERAGE FORM AND MADE A PART OF THIS POLICY AT TIME OF ISSUANCE ARE LISTED BELOW: WA-XS 00001 00 (03/12), WA-XS 00003 00 (03/12), WA-XS 00004 00 (03/12) O, WA-XS 00005 00 (03/12), WA-XS 00008 00 (03/12), WA-XS 00020 00 (03/12)		
ITEM 5. ANNUAL PREMIUM DUE:	$	2,000
ITEM 6. NOTICES TO THE COMPANY		
(a) ALL NOTICES OF CLAIM, OCCURRENCE OR SUIT:	Trident Insurance Services ATTN: Bruce Stewart 250 Summer St, 3rd Fl Boston, MA 02210	

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(b) ALL OTHER NOTICES:	**Allied World Assurance Company (U.S.) Inc. ATTN: US Programs UW 199 Water St, 24th Fl New York, NY 10038 (646) 794-0500**

In Witness Whereof, the Insurer has caused this Policy to be executed by its authorized officers.

Asst. Secretary

President

AUTHORIZED REPRESENTATIVE

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COMMERCIAL EXCESS LIABILITY POLICY

THIS POLICY PROVIDES BOTH CLAIMS MADE AND OCCURRENCE COVERAGE

IF THE UNDERLYING INSURANCE IS WRITTEN ON A CLAIMS MADE BASIS, THEN THIS IS POLICY PROVIDES CLAIMS MADE COVERAGE WHICH APPLIES ONLY TO CLAIMS FIRST MADE DURING THE POLICY PERIOD.

IF THE UNDERLYING INSURANCE IS WRITTEN ON AN OCCURRENCE BASIS, THEN THIS POLICY PROVIDES OCCURRENCE COVERAGE WHICH APPLIES ONLY TO CLAIMS ARISING OUT OF OCCURRENCES WHICH TAKE PLACE DURING THE POLICY PERIOD.

Various provisions in this policy restrict coverage. Read the entire policy carefully to determine rights, duties and what is and is not covered.

Throughout this policy, the words "you" and "your" refer to the Named Insured shown in **Item 1.** the Declarations, and any other person or organization qualifying as a Named Insured under this policy. The words "we," "us" and "our" refer to the company providing this insurance. The words "policy period" mean the term of duration of the policy shown in the Declarations.

WE AGREE WITH YOU TO PROVIDE COVERAGE AS FOLLOWS:

INSURING AGREEMENT

To indemnify you for that amount of loss which exceeds the amount of loss payable by underlying policies described in the Schedule of Underlying Insurance, but our obligation hereunder shall not exceed the Limit of Liability stated in **Item 3.** of the Declarations. The amount we will pay for loss is limited as described in **C. Loss Payable** below.

CONDITIONS

A. Application of Underlying Insurance.

Except for the terms, definitions, conditions and exclusions of this policy, the insurance afforded by this policy shall apply exactly as the underlying insurance described in the Schedule of Underlying Insurance attached to this policy.

B. Maintenance of Underlying Insurance.

It is warranted by you that the underlying policy or policies listed in the Schedule of Underlying Insurance, or renewals or replacements thereof not more restrictive in coverage or limits of liability, shall be maintained in force during the currency of this policy, except for any reduction of the aggregate limit(s) contained therein solely by payment of claims to which this policy applies. In the event of failure by you to so maintain such policy or policies in force or to meet all conditions and warranties subsequent to loss under such policy(ies), the insurance afforded by this policy shall apply exactly as it would have applied had such policies been so maintained in force. Notice of exhaustion of underlying insurance shall be given to us within 30 days of such exhaustion.

The limits of liability of an underlying policy listed in the Schedule of Underlying Insurance will not be reduced by the existence of a sublimit of liability in such policy, nor shall this policy apply excess over any coverage subject to a sublimit of liability in such policy.

C. Loss Payable.

(a) The Limit of Liability shown in **Item 3.** of the Declarations and the rules below fix the most we will pay regardless of the number of:

(1) Insured's;

(2) Claims made or suits brought or number of vehicles involved; or

(3) Persons or organizations making claims or bringing suits.

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(b) The Annual Aggregate Limit is the most we will pay for the sum of all loss payable under this policy. However, the Annual Aggregate Limit does not apply to those coverages included under the Schedule of Underlying Insurance to which no underlying aggregate limit applies.

(c) Subject to the Annual Aggregate Limit, described in paragraph (b) above, the Any One Occurrence Limit or Any One Claim is the most we will pay for the sum of all loss arising out of any one occurrence or claim.

(d) The Annual Aggregate Limit, as described in paragraph (b) above, applies separately to each consecutive annual period and to any remaining period of less than 12 months, starting with the beginning of the policy period shown in the Declarations, unless the policy period is extended after issuance for an additional period of less than 12 months. In that case, the additional period will be deemed part of the last preceding period for purposes of determining the Limits of Liability.

(e) Our liability with respect to any one occurrence or any one claim shall not attach unless and until you, or your underlying insurer, has paid the amount of underlying insurance stated in the Schedule of Underlying Insurance.

(f) You shall make a definite claim for any loss for which we may be liable under this policy within 12 months after you have paid an amount of loss in excess of the amount borne by you or your underlying insurer(s) or after your liability has been made certain either by final judgment against you after actual trial or by written agreement by you, the claimant and us. Any subsequent payments made by you on account of the same occurrence shall be payable by us within 30 days after additional claim is made by you, and after you have shown proof in conformity with this policy.

D. Assistance and Cooperation.

We shall not be called upon to assume charge of the settlement or defense of any claim made or proceeding instituted against you; but we shall have the rights and opportunity to associate with you in the defense and control of any claim or proceeding reasonably likely to involve us. In such event, you shall cooperate fully.

E. Expenses.

Expenses incurred with our consent of in the investigation or defense of claims, including court costs and interest, shall be borne by us in the proportion that our share of loss bears to the total amount of such loss. Salaries and expenses of the Insured's or our employees or officials shall not be considered as part of the above expenses. Expenses thus paid by us shall be paid in addition to the Limit of Liability stated in **Item 3.** of the Declarations. Notwithstanding the foregoing, no further expenses shall be paid by us after the Limit of Liability as stated in **Item 3.** of the Declarations have been exhausted by payment of losses.

F. Notice of Claim, Occurrence or Suit; Other Notices.
As a condition precedent to our obligations under this Policy, the Insured will provide us with written notice of any claim or suit under any underlying policy, or any circumstance that could give rise to a claim under any underlying policy.

Upon the happening of an occurrence reasonably likely to involve us hereunder, written notice shall be given as soon as practicable to us or any of our authorized agents. Such notice shall contain particulars sufficient to identify the Insured and the fullest information obtainable at the time. The Insured shall give like notice of any claim made on account of such occurrence.

If legal proceedings are begun, the Insured, when requested by us, shall forward to it each and every demand, notice, summons, or other process, or a copy thereof, received by the Insured or the Insured's representatives, together with copies of reports or investigations made by the Insured with respect to such claim proceedings.

The Insured will also provide us with prompt notice of:

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(a) any settlement offers that the Insured intends to make or any settlement demands made by any claimant, even if such offers or demands would not implicate coverage under this Policy;

(b) the payment of any claims under any underlying policy;

(c) the cancellation of any underlying policy;

(d) the modification of any underlying policy by endorsement or otherwise; or

(e) any additional or return premiums charged or allowed in connection with any underlying policy.

The first Named Insured in **Item. 1.** of the Declarations will be the sole agent for, and will act on behalf of, all Insureds with respect to all matters under this Policy, including, but not limited to, giving notice of claim, communications regarding coverage, the issuance of any endorsements, notice of cancellation or non-renewal, and any notice regarding the payment or return of any premium for this Policy.

Notice given to any of the underlying policy of any occurrence, claim or circumstance that could give rise to a claim under any underlying policy will not be deemed notice to us. Notice of any occurrence, claim or circumstance that could give rise to a claim under any underlying policy must be sent by certified mail or prepaid courier to us at the address specified in Item 6. of the Declarations.

G. Appeals.

In the event you or your underlying insurer elects not to appeal a judgment which exceeds the underlying insurance, we may elect to do so at our own expense, and shall be liable for the taxable costs, disbursements and interest incidental thereto, but in no event shall our liability for excess loss exceed the amount set forth in **Item 3.** of the Declarations.

H. Subrogation.

In the event of payment under this policy, we will participate with you in the exercise of all your rights of recovery against any person or organization liable therefore. Recoveries shall be applied first to reimburse any interest (including the Insured) that may have paid any amount, with respect to liability in excess of the limit of our liability hereunder, then to reimburse us up to the amount paid hereunder, and lastly to reimburse such interests (including the Insured), to whom this insurance is excess as are entitled to claim the remainder, if any. Such expenses incurred in the exercise of rights of recovery shall be apportioned among all interests in the ratio of their respective losses for which recovery is sought.

I. Cancellation

(a) You may cancel this policy. You must mail or deliver advance written notice to us stating when the cancellation is to take effect.

(b) We may cancel this policy at any time by providing the first Named Insured in **Item 1.** of the Declarations written notice of cancellation:

(1) At least ten (10) days in advance if we cancel for non-payment of premium; or

(2) At least thirty (30) days in advance if we cancel for any other reason.

(c) Mailing the written notice of cancellation to you at your mailing address shown in **Item 1.** of the Declarations will be sufficient to prove notice.

(d) The policy period will end on the day and hour stated in the cancellation notice.

(e) The first Named Insured in **Item 1.** of the Declarations shall act on behalf of all other Insureds with respect to the giving and receiving of notice of cancellation and the receipt of any refund that may become payable under this policy.

(f) Any of these provisions that conflict with a law that controls the cancellation of the insurance in this policy is changed by this statement to comply with that law.

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J. Nonrenewal.

We are not obligated to renew this policy. If we decide not to renew, we will mail or deliver to the first Named Insured in **Item 1.** of the Declarations, written notice of the non-renewal at least thirty (30) days prior to the expiration date. If notice is mailed, proof of mailing will be sufficient proof of notice.

K. Other Insurance.

If other valid and collectible insurance is available to you which covers a loss also covered by this policy, other than insurance that is specifically purchased as being in excess of this policy, this policy shall operate in excess of, and not contribute with, such other insurance.

L. Bankruptcy or Insolvency of Underlying Insurer.

The insolvency, bankruptcy, receivership, or any refusal or inability to pay of the Insured and/or any insurer shall not operate to:

(a) Deplete or reduce the underlying insurance described in the Schedule of Underlying Insurance;

(b) Increase our liability under this policy;

(c) Increase our share of liability under this policy.

In no event shall we assume responsibility and/or obligations of the Insured or those of any other insurer.

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SCHEDULE OF UNDERLYING INSURANCE

NAMED INSURED: Hemet-San Jacinto Watermaster	POLICY NUMBER: 5107-1266
	EFFECTIVE DATE: 4/1/2014

UNDER THE TERMS AND CONDITIONS OF THE COMMERCIAL EXCESS LIABILITY COVERAGE FORM, YOU ARE REQUIRED TO MAINTAIN THE SCHEDULED UNDERLYING INSURANCE IN FULL FORCE AND EFFECT (EXCEPT FOR REDUCTION OF LIMITS DUE TO THE PAYMENT OF CLAIMS). READ THE COVERAGE FORM CAREFULLY.

COVERAGE	INSURER POLICY PERIOD / POLICY NUMBER RETROACTIVE DATE (IF ANY)	APPLICABLE LIMITS OF INSURANCE
Business Auto Liability	N/A	Combined Single Limit Liability $ N/A Each Accident Split Limit Liability $ N/A Bodily Injury Each Person $ N/A Bodily Injury Each Accident $ N/A Property Damage Each Accident
Commercial General Liability Coverage A & B	Allied World Assurance Company, Inc. 4/1/2014– 4/1/2015 / 5105-1266	$ 3,000,000 General Aggregate $ 3,000,000 Products / Completed Operations Aggregate $ 1,000,000 Personal & Advertising Injury Limit $ 1,000,000 Each Occurrence Limit
*The General Aggregate Does Not Apply To Products / Completed Operations.		
Coverage B Employers Liability ☐ Occurrence ☐ Claims Made	N/A – / ☐ Retroactive Date, (If Any): N/A	$ N/A Each Accident $ N/A Policy Limit – Disease $ N/A Each Employee - Disease
Public Officials & Management Liability ☒ Occurrence ☐ Claims Made	Allied World Assurance Company, Inc. 04/01/2014-04/01/2015/ 5105-1266 ☐ Retroactive Date (If Any): N/A	$ 3,000,000 Aggregate Limit of Liability $ 1,000,000 Each Wrongful or Offense Limit (if Occurrence) $ N/A Each Claim Limit (if Claims-Made)

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EXCLUSION – DEFENSE EXPENSE FOR INJUNCTIVE RELIEF

THIS ENDORSEMENT CHANGES THE POLICY.

PLEASE READ IT CAREFULLY.

It is hereby agreed that, regardless of any other provision of this policy, in no event will this policy be excess over or follow form the following coverage in the underlying policy:

> **SECTION I. – COVERAGES, COVERAGE B. INSURING AGREEMENT – DEFENSE EXPENSE FOR INJUNCTIVE RELIEF** of the Public Officials and Management Liability with Employment Practices and Employee Benefits Coverage Form.

No coverage shall be available under this policy for any "claim," action or proceeding seeking "injunctive relief" or any other form or equitable relief or remedy.

Terms in quotations, as used in this endorsement, shall have the meaning set forth in the underlying policy identified herein.

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

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EXCLUSION – MEDICAL EXPENSE

THIS ENDORSEMENT CHANGES THE POLICY.

PLEASE READ IT CAREFULLY.

It is hereby agreed that the insurance afforded under this policy does not apply to any medical expense. Additionally, it is hereby agreed that, regardless of any other provision in this policy, in no event will this policy be excess over or follow form the following coverage in the underlying policy:

SECTION I.-COVERAGES, COVERAGE C. MEDICAL EXPENSE of the Commercial General Liability Coverage Form does not apply and none of the references to it in the Coverage Form apply.

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

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CAP ON LOSSES FROM CERTIFIED ACTS OF TERRORISM

THIS ENDORSEMENT CHANGES THE POLICY.

PLEASE READ IT CAREFULLY.

If aggregate insured losses attributable to terrorist acts certified under the federal Terrorism Risk Insurance Act exceed one hundred billion dollars ($100,000,000,000)in a Program Year (January 1 through December 31) and we have met our insurer deductible under the Terrorism Risk Insurance Act, we shall not be liable for the payment of any portion of the amount of such losses that exceeds one hundred billion dollars ($100,000,000,000), and in such case insured losses up to that amount are subject to pro rata allocation in accordance with procedures established by the Secretary of the Treasury.

As used in this endorsement, "certified act of terrorism" means an act that is certified by the Secretary of the Treasury, in concurrence with the Secretary of State and the Attorney General of the United States, to be an act of terrorism pursuant to the federal Terrorism Risk Insurance Act. The criteria contained in the Terrorism Risk Insurance Act for a "certified act of terrorism" include the following:

(i) The act resulted in insured losses in excess of five million dollars ($5,000,000) in the aggregate, attributable to all types of insurance subject to the Terrorism Risk Insurance Act; and

(ii) The act is a violent act or an act that is dangerous to human life, property or infrastructure and is committed by an individual or individuals as part of an effort to coerce the civilian population of the United States or to influence the policy or affect the conduct of the United States Government by coercion.

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11 Appendices

11.1 Watermaster Board Meeting Minutes

11.2 Technical Advisory Committee Meeting Notes

11.3 Agreements

11.4 Resolutions

11.5 Task Orders

11.6 Independent Auditor's Report

11.7 References

HEMET-SAN JACINTO WATERMASTER

RESOLUTION NO. 1.2

RESOLUTION OF THE WATERMASTER BOARD AMENDING DESIGNATION OF DATE, TIME, AND LOCATION OF REGULAR MEETINGS

WHEREAS, the Watermaster Board, by Resolution No. 1.1 designated the fourth Monday of alternating month at 4:00 P. M. at the Eastern Municipal Water District Board Room as the date, time and place for the Watermaster's regular meetings; and

WHEREAS, the volume of business or other matters requiring discussion and possible action by the Watermaster varies periodically.

NOW, THEREFORE, BE IT RESOLVED, that the Watermaster Board designates the fourth Monday of February, May, August, and November at 4:00 P. M. at the Eastern Municipal Water District Board Room as the date, time and place for the Watermaster's regular meetings, subject, however, to the Watermaster's right to approve a temporary change in the date, time and/or place for a subsequent meeting adopted by motion at a regular Watermaster meeting.

ADOPTED on 22nd day of December, 2014

_____
Frank D. Gorman, Chairperson

ATTEST:

_____
Philip E. Paule, Secretary and Treasurer

HEMET–SAN JACINTO WATERMASTER

RESOLUTION NO. 7

RESOLUTION OF THE WATERMASTER BOARD RE ADDITION OF BASE PRODUCTION RIGHTS TO THE VAN DAM FAMILY TRUST

WHEREAS, Donald Dick Van Dam and Frances L. Van Dam, Trustees of the Donald Dick & Frances L. Van Dam Revocable Family Trust (the Van Dams), are Class B participants, and

WHEREAS, since the entry of Judgment, the Van Dams have acquired additional property, described as A.P.N. 432-180-002-6, the Base Production Rights of which are calculated at 139 acre-feet. The Van Dams have submitted a written request that this property and the associated Base Production Rights be added to their rights under the Judgment, and

WHEREAS, section 4.4.1.2 of the Judgment provides that upon written request by a Class B Participant, the Watermaster shall have the authority to adjust the Class B Participant's Base Production Rights for such period, and on such terms and conditions, as the Watermaster deems appropriate under the circumstances.

NOW, THEREFORE, BE IT RESOLVED AS FOLLOWS:

The Watermaster hereby adjusts the properties and Base Production Rights of the Van Dams to account for the new property. Their Class B Base Production Rights now total 670 acre-feet.

ADOPTED THIS 23rd day of June, 2014.

_____
Frank Gorman, Chairperson

ATTEST:

_____
Phil Paule, Secretary

HEMET–SAN JACINTO WATERMASTER

RESOLUTION NO. 8

RESOLUTION OF THE WATERMASTER BOARD
RE DEFERRAL OF REPLENISHMENT ASSESSMENT

WHEREAS, the Judgment in Eastern Municipal Water District vs. City of Hemet, et al., requires the Watermaster to levy Replenishment Assessments on each Public Agency and Class B Participant, and

WHEREAS, the first year of pumping under the Judgment was a partial year, which might not accurately reflect what the pumping would be over a full year. In addition, parties have not yet had an opportunity to accumulate Carry-Over Credits, which can be used to offset Replenishment Assessments. Finally, the grace period for Class A Participants to convert to Class B Participants has not yet expired. For these reasons, it would be inequitable to impose a Replenishment Assessment on the first year's pumping alone.

NOW, THEREFORE, BE IT RESOLVED AS FOLLOWS:

Replenishment Assessments are hereby deferred until after 2015, at which time they will be imposed on the cumulative excess pumping from entry of judgment through 2015, as provided in section 1.31 of the Judgment.

ADOPTED THIS 23rd day of June, 2014

_____
Frank Gorman, Chairperson

ATTEST:

_____
Phil Paule, Secretary

11 Appendices

11.1 Watermaster Board Meeting Minutes

11.2 Technical Advisory Committee Meeting Notes

11.3 Agreements

11.4 Resolutions

11.5 Task Orders

11.6 Independent Auditor's Report

11.7 References

TASK ORDER NO. 6

HEMET-SAN JACINTO WATERMASTER SUPPORT SERVICES

2014 Water Resources Monitoring Program Support

This Task Order is issued by the Hemet-San Jacinto Watermaster ("Watermaster"), a judicial creation of the Superior Court of the State of California in and for the County of Riverside through the Judgment entered on April 18, 2013, and accepted by EASTERN MUNICIPAL WATER DISTRICT, a California municipal water district ("EMWD") pursuant to the mutual promises, covenants and conditions contained in the AGREEMENT between the above named parties dated _____, 2014 in connection with the Hemet-San Jacinto Watermaster Support Services.

PURPOSE

The purpose of this Task Order is to describe EMWD's services, time of performance, payment, and effective date to provide services for the Watermaster.

SCOPE OF SERVICES

The purpose of the Water Resources Monitoring Program ("Monitoring Program") is to collect, analyze, and compile groundwater level, water quality, and groundwater production data to meet the reporting requirements of the Judgment. The Monitoring Program provides the information necessary for a comprehensive view of the groundwater management zones and includes the following elements:

- Groundwater Extraction Monitoring
- Groundwater Level Monitoring
- Water Quality Monitoring
- Inactive Well Capping and Sealing
- Meter Installation, Repair, and Replacement
- Data Management, Documentation, and Reporting

Groundwater level and groundwater extraction data will be used to quantify basin stresses and to provide data for estimation of overdraft conditions within any given year and to provide the basis for replenishment in the following year. Water quality information will be used to track basin water quality trends. Such data allows for characterization of basin hydrology, evaluation of groundwater flow conditions, and monitoring of water quality improvement or degradation. In addition, inactive or unused wells will be capped and sealed as they are potential sources of groundwater contamination and present hazardous conditions. The groundwater level and extraction monitoring will allow for a more accurate estimation of the amount of groundwater in storage, changes in storage, and the identification of overdraft conditions. The information gained from these efforts will be used for decision making for the Hemet/San Jacinto Groundwater Management Area Water Management Plan ("Management Plan") area.

In conjunction with existing and planned groundwater l monitoring, accurate monitoring of groundwater extraction will allow participants to understand how groundwater conditions are changing and make informed decisions on how best to manage and replenish the groundwater resources. To improve the records of pumped groundwater, meters will be replaced on the private wells that are no longer working.

Data management, documentation, and reporting are also key elements. All water level and groundwater extraction data collected will be recorded on Field Data Sheets by EMWD field staff. The Field Data Sheets will be provided to the Watermaster Advisor ("Advisor") at the end of each calendar month and contain data collected during the preceding month (may be rounded to the nearest week). The field data shall be read from the Field Data Sheets and entered into EMWD's Data Entry Form (to be provided to Advisor as soon as available after execution of this Task Order) by Watermaster consultants after performing various quality assurance/quality control ("QA/QC") checks on the data. The completed Data Entry Form shall be returned to EMWD for EMWD staff to upload into EMWD's Regional Water Resources Database ("RWRD"). Watermaster consultants shall return the completed Data Entry Form (with the field data entered and checked) to EMWD staff within two (2) weeks of receipt of the Field Data Sheets and Data Entry Form. All of the data will be made accessible to the Watermaster. An annual report will summarize the monitoring activities and results of the analyses of the monitoring data, as well as provide other pertinent information regarding activities in the local groundwater management zones.

By undertaking an extensive data gathering effort, all parties involved in the Management Plan can be assured that operational yield e mates are based on the best available information. Continuation of the current monitoring effort will augment the database used in making decisions on implementation of the Management Plan and contribute to successful management of the groundwater management zones.

TASK 1.0 – Groundwater Extraction Monitoring Program

Groundwater extraction monitoring involves metering of wells producing 25 or more acre-feet of groundwater per year. In conjunction with groundwater level and water quality monitoring, accurate metering of groundwater extraction will allow for a better understanding of how groundwater conditions are changing and can be used by the Watermaster to quantify basin stresses.

The program participants must provide permission for meter installation and access to their wells. EMWD staff will work closely with the private well owners' representatives to acquire necessary permissions from the existing private well owners in the Management Plan area to install and maintain meters and to read the meters. All meter installation activities will be scheduled at the convenience of the well owner. Installed meters shall remain the property of EMWD as a representative of the Watermaster. Meters are to be read monthly and EMWD will periodically schedule meter maintenance and calibration with the well owner. Such activities will be at the well owners' convenience and will not impact agricultural operations.

Well owners wishing to maintain their own meters may do so. Upon the request of the well owner, EMWD will consider providing maintenance and calibration of privately owned meters, contingent upon the needs of the program and the availability of funding.

When installation of a meter on a well is not physical sible, or when a well cannot be metered for other reasons, groundwater production from that well will be estimated using one or more of the following: acreage, crop type, number of animals in the case of dairies, or electricity usage. These estimates will be compared with metered groundwater usage at sites of similar size with similar usage as a QA/QC measure.

Extraction data from one-hundred eight (108) wells with meters installed by EMWD will be monitored monthly by EMWD under this Task Order.

Extraction data from nine (9) wells with privately owned meters will be monitored monthly by EMWD under this Task Order.

Extraction data from twenty-eight (28) wells will be monitored monthly by other entities and reported to EMWD under this Task Order.

Extraction data for thirty-four (34) wells will be estimated monthly by EMWD under this Task Order.

All data collected will be entered by Watermaster consultants after performing various QA/QC checks on the data and forwarded to EMWD for upload into EMWD's RWRD.

TASK 2.0 – Groundwater Level Monitoring Program

Groundwater levels are to be measured twice a year, during the spring and fall, to capture the high and low groundwater levels and to det ine seasonal effects on groundwater levels. The measurements will be taken prior to warm weather when groundwater production is low, and following warm weather when groundwater production is high. General steps that are required for measuring groundwater levels are as follows:

- A site inspection for potential hazards including open drive shafts, automatic machinery, and motor operations including farm equipment is conducted
- The status of the well pump, i.e., pumping or static, is confirmed. The well should have been in static mode (non-operational) for at least 12 hours, preferably 24 hours, prior to measuring the level
- The depth to groundwater is measured using an electric water level indicator
- The measured depth to groundwater is recorded with the status of the pump
- If the well pump is running and cannot be turned off, then no level is recorded and collection of the level may be attempted at another time
- The recorded depth is compared with previous levels for data quality control
- A final site inspection is performed

Three-hundred twelve (320) groundwater levels will be measured by EMWD from one-hundred sixty (160) wells semi-annually following the above protocol under this Task Order.

Four-hundred eighty (480) groundwater levels will be measured by other entities from forty (40) wells monthly and reported to EMWD following the above protocol under this Task Order.

All data collected will be entered by Watermaster consultants after performing various QA/QC checks on the data and forwarded to EMWD for upload into EMWD's RWRD.

TASK 3.0 – Water Quality Monitoring Program

Water quality samples are to be collected once a year from the groundwater management zones within the San Jacinto Basin, generally in the warmer months when the wells are operating. Constituents to be routinely monitored include general minerals, metals, and total nitrogen as described in Table 1.

Table 1: Constituents Tested in a Typical Water Quality Sample

Type	Constituent:	Type	Constituent:
Cations	Calcium (Ca)	Metals	Boron (B)
	Magnesium (Mg)		Copper (Cu)
	Potassium (K)		Iron (Fe)
	Silica (SiO_3)		Manganese (Mn)
	Sodium (Na)		Zinc (Zn)
	Hardness (Calculated from Ca/Mg)	Alkalinity	Bicarbonate (HCO_3)
Anions	Chloride (Cl)		Carbonate (CO_3)
	Fluoride (F)		Hydroxide (OH)
	Nitrate as Nitrogen (NO_3-N)		Total Alkalinity as Ca CO_3
	Sulfate (SO_4)	Misc.	Electrical Conductance (EC)
Nitrogens	Ammonia as Nitrogen (NH_3-N)		Temperature at Collection
	Nitrite as Nitrogen (NO_2-N)		pH
			Total Dissolved Solids (TDS)

The procedures for taking water quality samples differ depending on whether the well has existing pumping equipment or not. The sampling procedure is lengthier and more complicated if the well does not have an existing pump.

TASK 3.1 – Water Quality Sampling of Operating Wells

When the well to be sampled has a pump and is operating, the sampling procedure will be as follows:

- A site inspection for potential hazards including open drive shafts, automatic machinery, and motor operations including farm equipment is conducted
- The status of the well, i.e., pumping or static, is confirmed. If the well is not operating, it is turned on with the permission of the well owner
- The sampling port on the well is located, opened, and flushed or purged

- The water sample is taken using standard methods and proper protocol for the constituents to be sampled
- A final site inspection is conducted

Sixty-seven (67) water quality samples will be taken by EMWD from wells with existing pumping equipment following the above protocol and analyzed by EMWD's Laboratory under this Task Order.

Twenty-nine (29) water quality samples will be taken by other entities from wells with existing pumping equipment following the above protocol and delivered to EMWD for analysis by EMWD's Laboratory under this Task Order.

All data collected will be entered into EMWD's RWRD from the EMWD LIMS system.

TASK 3.2 – Water Quality Sampling of Non-operating Wells
When the well does not have an existing pump, a mobile pump must be set in the well and the procedure is as follows:

- A site inspection for potential hazards including open drive shafts, automatic machinery, and motor operations including farm equipment is conducted
- The depth to groundwater in the well is measured to determine the pump setting depth
- The water volume in the casing is calculated to determine the length of time necessary to purge the well for a minimum of three ful well volumes
- The pump is set using either continuous reel or column pipe and all electrical and discharge lines connected
- The well is purged a minimum of three well volumes
- The water sample is taken using standard methods and proper protocol for the constituents being sampled
- Electrical and discharge lines are disconnected and the pump is pulled
- The well is closed or sealed
- A final site inspection is conducted

Twenty-seven (27) water quality samples will be taken by EMWD from wells without existing pumping equipment following the above protocol and analyzed by EMWD's Laboratory under this Task Order.

All data collected will be entered into EMWD's RWRD from the EMWD LIMS system.

TASK 4.0 – Inactive Well Capping and Sealing Program
The purpose of this program is to prevent groundwater contamination and eliminate hazards by capping and sealing inactive and/or unused ls. Open casings are especially vulnerable to contamination from surface flows or vandalism, such as the dumping of oil or other waste products. Large open casings, 16 to 18 inches in diameter, also present a hazard to small children and animals. It is not known how many open casings or unused wells exist in the area. To protect groundwater supplies,

EMWD staff will use available monitoring program funds to cap and seal inactive wells or open casings at no charge to the well owner. Priority will be given to those wells that are potentially dangerous open holes to small children and animals, 16 to 18 inches in diameter, or those located in areas where flooding resulting from precipitation might carry manure, fertilizers, or other contaminants into the well. These wells may still be used for water level and, in some cases, water quality monitoring.

Three (3) wells are estimated to be capped and sealed by EMWD under this Task Order.

TASK 5.0 – Meter Installation, Repair, and Replacement
The program participants must provide permission for meter installation and access to their wells. EMWD staff works closely with the private well owners' representatives to acquire necessary permissions from the existing private well owners in the Management Plan area to install and maintain the meters. All meter installation activities will be scheduled at the convenience of the well owner. Installed meters shall remain the property of EMWD as a representative of the Watermaster. The procedure for meter installation and replacement by EMWD will be as follows:

- Well owner's permission for meter installation is verified
- A preliminary site inspection is conducted to review piping and well configuration to determine equipment and supplies needed
- An installation design is prepared and a meeting is he with the well owner for approval/acceptance of the design
- As much as possible, off-site fabrication is prepared to minimize inconvenience to the owner's operation of the well
- The installation is approved by the well owner and scheduled for a time that is convenient to the well owner
- The meter is installed and all piping appurtenances are returned to normal operation
- A final site inspection is conducted

Four (4) meters are estimated to be replaced by EMWD under this Task Order.

TASK 6.0 – Data Management, Documentation, and Reporting
Combined with existing available data, new data generated by the Monitoring Program will be used by the Watermaster to analyze how conditions are changing in local groundwater management zones. All data collected will be used in the 2014 Annual Report. The data may be used in the following ways:

- Trend analyses of the relationship between groundwater pumping, groundwater levels, and water quality
- Analysis of the volume of groundwater contained in local groundwater management zones and determination of the rate of natural recharge of these management zones

- Preparation of mathematical models of groundwater systems for use in analyzing management alternatives
- Development of accurate water consumption figures for agricultural land use
- Protection of private water rights through the documentation of individual groundwater use
- Quantification of replenishment requirements for the following year

TASK 6.1 – 2014 Annual Report
Data reporting by EMWD to the Watermaster will include the 2014 Annual Report documenting groundwater level and water quality trends, and groundwater extraction quantities for each groundwater management zone. The 2014 Annual Report will contain the results of regional analyses performed on data collected during calendar year 2014 and a summation of any issues noted. The 2014 Annual Report will serve as the report required by the Judgment.

TASK 6.2 – Annual Well Owners' Reports
EMWD shall prepare and distribute Annual Well Owners' Reports to all private well owners participating in the Monitoring Program. These Annual Well Owners' Reports will include copies of water quality analyses, groundwater level measurements, and groundwater extraction amounts for their wells. Recordation of groundwater extraction with the State is a fundamental means of protecting private groundwater rights and all well owners are encouraged to participate.

TIME OF PERFORMANCE
EMWD shall prepare and distribute one (1) electronic copy of the Preliminary Draft 2014 Annual Report to the Advisor by March 16, 2015 for review and comment. The Advisor shall provide comments on the Preliminary Draft 2014 Annual Report to EMWD by March 30, 2015. EMWD shall prepare five (5) hard copies of the Draft 2014 Annual Report (that addresses comments received from the Advisor) by April 14, 2015 for Advisor's distribution to the Technical Advisory Committee (TAC) at the April 2015 TAC meeting for review and comment. The TAC shall provide comments on the Draft 2014 Annual Report to EMWD by April 21, 2015. EMWD shall prepare twenty (20) copies of the Final 2014 Annual Report (that addresses the comments received from the TAC) by April 27, 2015 (or as soon as practical) for Advisor's use at the April 2015 Watermaster Board meeting for receipt and filing. Backup information and files for the Final 2014 Annual Report will also be provided to the Advisor as part of this Task Order.

INVOICING
The costs of this Task Order will be borne by the Administrative Assessments of the Watermaster. The annual cost of the Monitoring Program is estimated at One-Hundred Thirty Thousand Nine-Hundred Eighty Dollars ($130,980) based on the Fee Schedule (Exhibit A) and Estimated Work Effort (Exhibit B). Payment for the work under this Task Order shall be based on Table 2 with invoicing to be sent upon completion of the work, which amount shall not be exceeded without prior writt n from Watermaster.

Table 2: Estimated Monitoring Program Costs

Category	Costs
1 – Groundwater Extraction Monitoring	$ 21,376
2 – Groundwater Level Monitoring	$ 14,784
3 – Water Quality Monitoring	$ 53,306
4 – Inactive Well Capping and Sealing	$ 5,490
5 – Direct Costs	$ 12,468
6 – Documentation and Reporting	$ 23,556
Total Monitoring Program Costs	$130,980

TERMINATION

Either Party may terminate this Task Order at any time by giving the other party thirty (30) days written notice. Upon termination, EMWD shall be paid for that portion of the work performed through termination of the Task Order.

EFFECTIVE DATE

This Task Order No. 6 is effective as of _____, 2014.

IN WITNESS WHEREOF, duly authorized representatives of the Watermaster and of the EMWD have executed this Task Order No. 6 evidencing its issuance by Watermaster and acceptance by EMWD.

Hemet-San Jacinto Watermaster

By: _____
Frank Gorman
Chairman

ATTEST:

By: _____
Phil Paule
Board Secretary-Treasurer

Approved as to Form:

By: _____
Andrew Turner
General Counsel

EASTERN MUNICIPAL WATER DISTRICT

By: _____
Paul D. Jones II
General Manager

ATTEST:

By: _____
Rosemarie V. Howard
Board Secretary

Approved as to Form:

By: _____
Steven O'Neil
General Counsel

EXHIBIT A
EASTERN MUNICIPAL WATER DISTRICT
FEE SCHEDULE 2013-14
(This fee schedule is subject to annual revisions due to labor adjustments.)

	Hourly Rate
MANAGERIAL	
Deputy General Manager (02002-DGM)	$ 285.00
Assistant General Manager (02005-AGM)	265.00
Director (02030-97)	172.00
ENGINEERS/TECHNICAL	
Senior Civil Engineer (22007-96)	160.00
Senior Engineering Geologist (28011-96)	160.00
Civil Engineer I/II (22027-94)	138.00
Sr. Water Res Planning Analyst (28017-92)	120.00
Civil Engineering Associate I/II (22010-91)	111.00
Water Resources Supervisor (28010-90)	104.00
Sr. Engineering Technician (22013-88)	90.00
Water Resources Technician (28016-87)	84.00
FINANCIAL	
Accounting Supervisor (06003-91)	111.00
Senior Accountant (06004-89)	97.00
Accountant (06005-88)	90.00
Accounting Operations Spvr (06007-86)	78.00
Accounting Technician I/II (06009-83)	67.00
ADMINISTRATIVE	
Executive Assistant (18005-86)	78.00
Administrative Assistant I/II (18006-84)	71.00
DIRECT EXPENSES	
Direct Costs	at cost

Legend: Position Title (Job Code-Salary Range)
Hourly Rate = (Annual Salary[max range]) * (2.0 fully burdened) / (1,700 hrs/yr)

HEMET-SAN JACINTO WATERMASTER
CHANGE ORDER NO. 1
EMWD SUPPORT SERVICES TASK ORDER No. 6

CONTRACTOR: EMWD

PROJECT: 2014 Water Resources Monitoring Program Support

CHANGE ORDER COST: $4,333.80

FINANCIAL SOURCE: 2014 Administrative Assessment

BOARD AUTHORIZATION REQUIRED FOR THIS CHANGE: Yes( ) No (X)

Contractor is hereby directed to provide the extra work necessary to comply with this change order.

DESCRIPTION/JUSTIFICATION OF CHANGE:

There is a need to replace meters at the Pastime Lakes Dairy and the Boersma Dairy. Both are Class B Participants in the Judgment.

The Pastime Lakes Dairy has 3 wells:

1. Pastime Lakes Dairy Middle – New well drilled in 2007, which is when the meter was installed. Meter is a bolt-on saddle, which is considered to be less accurate meter based on manufacturers published data. This is the main production well for the dairy and rarely shuts off. Recommend replacing meter with a 6" flanged top-plate meter.
2. Pastime Lakes Dairy West – Well does not run and has pump stuck in the well. No need to replace the meter.
3. Pastime Lakes Dairy East – Rarely runs and is a back-up well to the "Middle" well. EMWD has a replacement meter in stock for this well, so no need to purchase a new meter but EMWD will refurbish the old meter for future use.

The Boersma Dairy has two wells:

1. Boersma Dairy – Meter and pipe are leaking water and require replacement. This is the main production well for the dairy and rarely shuts off. Recommend replacing meter with a 6" flanged top-plate meter.
2. Boersma Dairy Ag – This well has not run in many years, but has now been refurbished and is back in operation without a meter. Recommend installing a 4" flanged top-plate meter.

EMWD recommends purchase of the following meters to replace those described above:

- 2 – 6" Flanged Tube Meters with Over-run Bearing Assemblies.
- 1 – 4" Flanged Tube Meter with Over-run Bearing Assembly.

Manufacturer's cost is $4,472.75 for the three meters identified above. Also, materials from the EMWD Warehouse in the amount of $477.80 will be required to install the three meters identified above. In addition, a meter was already ordered replaced in April of this year in the amount of $983.25 at the Hettinga Dairy.

The total cost equals $5,933.80 for these meter replacements and materials. However, this amount is much more than the $1,600.00 that was budgeted in Task Order No. 6 for meter replacement requiring this change order for $4,333.80

CHANGE IN CONTRACT TIME: None

CHANGE IN TASK ORDER PRICE:

Original Task Order Amount:	$130,980.00
Change Order Amount:	$ 4,333.80
Amended Contract Total:	$135,313.80

ACCEPTANCE:
Contractor accepts the terms and conditions stated above as full and final statement of any and all claims arising from or related to this Change Order. Contractor agrees to perform the above described work in accordance with terms and in compliance with applicable sections of the Contract Specified. This Change Order is hereby agreed to, accepted and approved, all in accordance with the General Provisions of the Contract Specified.

Hemet-San Jacinto Watermaster

By: _____ Date: _____
Behrooz Mortazavi
Watermaster Advisor

EASTERN MUNICIPAL WATER DISTRICT

By: _____ Date: _____
Paul D. Jones II
General Manager

McCALL'S METER SALES & SERVICE
1498 MESA VIEW STREET
HEMET, CA 92543
PH: 951-654-3799

QUOTATION

DATE	ESTIMATE #
7/1/2014	17450E

CUSTOMER
EASTERN MUNICIPAL WATER DISTRICT P.O. BOX 8300 PERRIS, CA 92572 ATTN: STEVE SHOCKEY

TERMS	REP	FOB
Net 30	DRD	ORIGIN

QTY	ITEM	DESCRIPTION	COST	TOTAL
2	MW506	6" FLANGED TUBE METER, 150 PSI	1,353.75	2,707.50T
2	OT110	OVER-RUN BEARING ASSEMBLY, 4" - 16"	40.50	81.00T
1	MW504	4" FLANGED TUBE METER, 150 PSI	1,167.75	1,167.75T
		SUBTOTAL		3,956.25
1	FRT	FREIGHT APPROX.	200.00	200.00
		TAX	316.50	316.50

THANK YOU FOR THE INQUIRY... DOUG

TOTAL $4,472.75

All Returned Goods Are Subject To 25% Restocking Fee

SIGNATURE _____

Item	Amount Needed	Cost Per Unit	Units	Total Cost
4" Close Nipple	3	$7.26	ea	$21.78
4" Weld Flange	2	$13.63	ea	$27.26
4" Threaded Flange	2	$24.82	ea	$49.64
4" Weld Saddle	1	$43.44	ea	$43.44
6" Weld Saddle	2	$43.45	ea	$86.90
1 1/4" Bushing	3	$5.61	ea	$16.83
6" Long 3/4 Nipple	3	$5.39	ea	$16.17
3/4 Hose Bibs	3	$4.91	ea	$14.73
6" Steel Pipe	6	$14.12	per foot	$84.72
6" Weld Flange	5	$18.44	ea	$92.20
6" Gaskets	5	$1.96	ea	$9.80
6" Nuts and Bolts	5	$1.17	per set	$5.85
4" Nuts and Bolts	4	$0.75	per set	$3.00
4" Gaskets	4	$1.37	ea	$5.48
				$477.80

Invoice

McCALL'S METER SALES & SERVICE
1498 Mesa View Street
Hemet, California 92543
Phone (951) 654-3799

RECEIVED
APR 24 2014
MWD - MAIL ROOM

DATE	INVOICE #
4/18/2014	25392

BILL TO:
EASTERN MUNICIPAL WATER DISTRICT
P.O BOX 8300
PERRIS, CA 92572

SHIP TO:
EASTERN MUNICIPAL WATER DISTRICT
2270 TRUMBLE ROAD
PERRIS, CA 92570

P.O. NUMBER	TERMS	REP	SHIP	VIA	F.O.B.	PROJECT
88311	Net 30	DRD	4/18/2014	UPS	ORIGIN	

QUANTITY	ITEM CODE	DESCRIPTION	PRICE EACH	AMOUNT
NR 1	MW503	3" FLANGED TUBE METER, 150 PSI TOT: A.F. IND: GPM NO VANES IN TUBE SN: 14-06851-03	983.25	983.25
1	MW508	8" FLANGED TUBE METER, 150 PSI W/OT110, OVERRUN BEARING ASSEMBLY TOT; A.F. IND: GPM NO VANES IN TUBE SN: 14-06852-08	* 1,716.00	1,716.00
	FRT	SUBTOTAL FREIGHT TAX	101.39 8.00%	2,699.25 101.39 215.94

0110-12420-010010 DR

* $1675.50 + 40.50 = 1716.00

NR $40.50

5/14

NR

0110-54123-07370

WE APPRECIATE YOUR BUSINESS

TOTAL $3,016.58

OK 5/14
Mapping/Steve 5/6 - email - 5/20

HEMET-SAN JACINTO WATERMASTER
CHANGE ORDER NO. 2
EMWD SUPPORT SERVICES TASK ORDER No. 6

CONTRACTOR: EMWD

PROJECT: 2014 Water Resources Monitoring Program Support

CHANGE ORDER COST: $13,651.24

FINANCIAL SOURCE: 2014 Administrative Assessment

BOARD AUTHORIZATION REQUIRED FOR THIS CHANGE: Yes(X) No ( )

Contractor is hereby directed to provide the extra work necessary to comply with this change order.

DESCRIPTION/JUSTIFICATION OF CHANGE:

There is a need to replace the following seven meters that are no longer functioning properly in the Hemet/San Jacinto Groundwater Management Area.

Rancho Casa Loma (Lauda) – Class B Participant:

1. Lauda 12 Well. Current meter is a 10" Flange installed by the owner prior to the implementation of the monitoring program in 2004. This meter was determined to be broken in September 2014, and no production has been measured since August 2014. Recommend replacing meter with a 10" flanged top-plate meter so that just the top-plate assembly can be replaced in the future for less cost.

DeAnza Ranch (Record) – Class A Participant:

1. Record Doe Canyon Well. Current meter is a 2" Precision installed on 8/1/2007. This meter was determined to be broken in September 2014, and no production has been measured since August 2014. There is concern regarding the accuracy of this type of meter. Recommend replacing meter with a more accurate 2" McCrometer flanged top-plate meter so that just the top-plate assembly can be replaced in the future for less cost.

2. Record Doe Canyon West Well. Current meter is a 2" Precision installed prior to the implementation of the monitoring program in 2004. This meter was determined to be broken in September 2014, no production has been measured since August 2014. There is concern regarding the accuracy of this type of meter. Recommend replacing meter with a more accurate 2" McCrometer flanged top-plate meter so that just the top-plate assembly can be replaced in the future for less cost.

Oostdam Dairy – Class A Participant:

1. Oostdam Dairy South Well. Current meter is a 3" flanged top-plate installed on 1/1/2007. This meter was determined to be broken in September 2014, and no production has been measured since January 2014. Recommend replacing the top-plate assembly.

Marvo Holsteins II (Sybrandy) – Class A Participant:

1. Marvo Holsteins II Well. Current meter is a 6" Bolt-on Saddle installed on 7/25/2006. This meter was determined to be broken in September 2014, and no production has been measured since July 2014. This type of meter is considered to be a less accurate meter based on manufacturers published data. Recommend replacing meter with a more accurate 6" flanged top-plate meter so that just the top-plate assembly can be replaced in the future for less cost.

Hollandia Farms – Non-participant:

1. Hollandia Farms North Well. Current meter is a 4" Bolt-on Saddle installed on 3/12/2012. This meter was determined to be broken in September 2014, and no production has been measured since July 2014. This type of meter is considered to be a less accurate meter based on manufacturers published data. Recommend replacing meter with a more accurate 4" flanged top-plate meter so that just the top-plate assembly can be replaced in the future for less cost.

Agri Empire – Non-participant:

1. Agri Park Hill Well. Current meter is a 6" flanged top-plate installed on 10/2/2012. This meter was determined to be broken in September 2014, and no production has been measured since January 2014. Recommend replacing the top-plate assembly.

EMWD recommends purchase of the following meters to replace those described above:

- 2 – 2" Flanged Tube Top Plate Meters.
- 1 – 4" Flanged Tube Top Plate Meter.
- 1 – 6" Flanged Tube Top Plate Meter with Over-run Bearing Assembly.
- 1 – 10" Flanged Tube Top Plate Meter with Over-run Bearing Assembly.
- 1 – 3" Top Plate Assembly.
- 1 – 6" Top Plate Assembly with Over-run Bearing Assembly.

Manufacturer's cost is $8,612.22 for the seven meters identified above. Also, materials from the EMWD Warehouse in the amount of $881.02, and labor from EMWD staff in the amount of $4,158, will be required to install the seven meters identified above. The total cost equals $13,651.24 for these meter replacements, materials, and labor.

CHANGE IN CONTRACT TIME: None

CHANGE IN TASK ORDER PRICE:

Original Task Order Amount:	$130,980.00
Change Order #1 Amount:	$ 4,333.80
Amended Contract Total:	$135,313.80
Change Order #2 Amount:	$ 13,651.24
Amended Contract Total:	$148,965.04

ACCEPTANCE:
Contractor accepts the terms and conditions stated above as full and final statement of any and all claims arising from or related to this Change Order. Contractor agrees to perform the above described work in accordance with terms and in compliance with applicable sections of the Contract Specified. This Change Order is hereby agreed to, accepted and approved, all in accordance with the General Provisions of the Contract Specified.

Hemet-San Jacinto Watermaster

By: _____ Date: _____
Frank Gorman
Chairman

EASTERN MUNICIPAL WATER DISTRICT

By: _____ Date: _____
Paul D. Jones II
General Manager

McCALL'S METER SALES & SERVICE

1498 MESA VIEW STREET
HEMET, CA 92543
PH: 951-654-3799

QUOTATION

DATE	ESTIMATE #
9/24/2014	17722E

CUSTOMER
EASTERN MUNICIPAL WATER DISTRICT P.O. BOX 8300 PERRIS, CA 92572 ATTN: STEVE SHOCKEY

TERMS	REP	FOB
Net 30	DRD	ORIGIN

QTY	ITEM	DESCRIPTION	COST	TOTAL
2	MW502	2" FLANGED TUBE METER, 150 PSI	983.25	1,966.50T
1	L0232-10	3" TOP PLATE ASSEMBLY	663.00	663.00T
1	MW504	4" FLANGED TUBE METER, 150 PSI	1,167.75	1,167.75T
1	MG904	4" GBE MAIN LINE TUBE METER, 150 PSI	991.50	991.50T
1	L0234-10	6" TOP PLATE ASSEMBLY, 150 PSI	753.75	753.75T
1	OT110	OVER-RUN BEARING ASSEMBLY, 4" - 16"	40.50	40.50T
1	MW510	10" FLANGED TUBE METER, 150 PSI	2,073.00	2,073.00T
1	OT110	OVER-RUN BEARING ASSEMBLY, 4" - 16"	40.50	40.50T
		SUBTOTAL		7,696.50
1	FRT	FREIGHT APPROX.	300.00	300.00
		TAX	615.72	615.72

THANK YOU FOR THE INQUIRY... DOUG

TOTAL $8,612.22

All Returned Goods Are Subject To 25% Restocking Fee

SIGNATURE _____

Warehouse Item	No.	Units	Cost/Unit	Total Cost
4" Pipe	20	ft	$9.38	$187.60
4" Vic Weld Nipple	2	ea	$117.65	$235.30
4" Vic Coupling	2	ea	$44.00	$88.00
4" Flange Weld On	2	ea	$13.00	$26.00
4" Gasket	2	ea	$1.38	$2.76
4" Bolts & Nuts	16	ea	$0.75	$12.00
10" Flange Weld On	2	ea	$39.00	$78.00
10" Gasket	2	ea	$4.68	$9.36
10" Nuts & Bolts	24	ea	$1.75	$42.00
2" Misc Meter Parts	1	ea	$200.00	$200.00
Total Cost				$881.02

Labor	No.	Units	Cost/Unit	Total Cost
Demo And Install New Meter	5	4 hrs for 2	$792.00	$3,960.00
Swap Top-Plate Assembly	2	1 hr	$99.00	$198.00
Total Cost				$4,158.00

EXHIBIT A
EASTERN MUNICIPAL WATER DISTRICT
FEE SCHEDULE 2014-15
(This fee schedule is subject to annual revisions due to labor adjustments.)

	Hourly Rate
MANAGERIAL	
Deputy General Manager (02002-DGM)	$ 291.00
Assistant General Manager (02005-AGM)	271.00
Director (02030-97)	176.00
ENGINEERS/TECHNICAL	
Senior Civil Engineer (22007-96)	164.00
Senior Engineering Geologist (28011-96)	164.00
Civil Engineer I/II (22027-94)	142.00
Water Res Planning Manager (28007-93)	132.00
Civil Engineering Associate I/II (22010-91)	114.00
Water Resources Supervisor (28010-90)	106.00
Water Resources Technician III (28018-89)	99.00
Sr. Engineering Technician (22013-88)	92.00
FINANCIAL	
Accounting Supervisor (06003-91)	114.00
Senior Accountant (06004-89)	99.00
Accountant (06005-88)	92.00
Accounting Operations Spvr (06007-86)	80.00
Accounting Technician I/II (06009-83)	69.00
ADMINISTRATIVE	
Executive Assistant (18005-86)	80.00
Administrative Assistant I/II (18006-84)	72.00
DIRECT EXPENSES	
Direct Costs	at cost

Legend: Position Title (Job Code-Salary Range)
Hourly Rate = (Annual Salary[max range]) * (2.0 fully burdened) / (1,700 hrs/yr)

11 Appendices

11.1 Watermaster Board Meeting Minutes

11.2 Technical Advisory Committee Meeting Notes

11.3 Agreements

11.4 Resolutions

11.5 Task Orders

11.6 Independent Auditor's Report

11.7 References

HEMET-SAN JACINTO WATERMASTER

INDEPENDENT AUDITORS' REPORT

FOR THE FISCAL YEAR ENDED
DECEMBER 31, 2014

HEMET-SAN JACINTO WATERMASTER

INTRODUCTORY SECTION

DECEMBER 31, 2014

HEMET-SAN JACINTO WATERMASTER
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DECEMBER 31, 2014

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HEMET-SAN JACINTO WATERMASTER

FINANCIAL SECTION

DECEMBER 31, 2014

INDEPENDENT AUDITORS' REPORT

Board of Directors
Hemet-San Jacinto Watermaster
Corona, California

Report on the Financial Statements

We have audited the accompanying financial statements of Hemet-San Jacinto Watermaster, which comprise the statement of net position as of December 31, 2014, and the related statements of revenues, expenditures, and changes in net position, and cash flows for the fiscal year then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States and the State Controller's minimum audit requirements for California Special Districts. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Hemet-San Jacinto Watermaster as of December 31, 2014, and the changes in its net assets and its cash flows for the fiscal year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements as a whole. The supplementary information as listed in the table of contents is presented for purposes of additional analysis and is not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the financial statements as a whole.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated January 19, 2015, on our consideration of Hemet-San Jacinto Watermaster 's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Hemet-San Jacinto Watermaster 's internal control over financial reporting and compliance.

San Diego, California
January 19, 2015

HEMET- SAN JACINTO WATERMASTER
MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE YEAR ENDED DECEMBER 31, 2014

This discussion and analysis of Hemet-San Jacinto Watermaster's (the Watermaster) financial performance provides an overview of the Watermaster's financial activities for the fiscal year ended December 31, 2014. Please read it in conjunction with the Watermaster's financial statements, which immediately follow this section.

FINANCIAL HIGHLIGHTS

Operating revenue for the Hemet-San Jacinto Watermaster (Watermaster) comes from municipal agencies based on an administrative assessment. Each municipal agency contributes a $50 per acre-foot charge levied for each acre-foot of groundwater pumped in excess of the public agency's adjusted production rights, its share of imported water, stored water, supplemental water, and applicable carry-over credits and recharge rights, and against each Class B participant for pumping in excess of its base production right.

- The Watermaster ended the year with a net position of $1,264,491.
- Operating revenues were nearly $2.0 million, while operating expenses were $545,788.

OVERVIEW OF THE FINANCIAL STATEMENTS

This annual report consists of two parts – management's discussion and analysis (this section) and the basic financial statements. The financial statements that accompany this report include a statement of net position, statement of revenues, expenses, and changes in net position, and statement of cash flows. These statements provide information about the activities and performance of the Watermaster using accounting methods similar to those used by private sector companies. The Statement of Net Position includes all of the Watermaster's investments in resources (assets) and the obligations to creditors (liabilities). It also provides the basis for computing a rate of return, evaluating the capital structure of the Watermaster and assessing the liquidity and financial flexibility of the Watermaster. All of the current year's revenue and expenses are accounted for in the Statement of Revenues, Expenses and Changes in Net Position. This statement measures the success of the Watermaster's operations over the past year and can be used to determine if the Watermaster has successfully recovered all of its costs through its rates and other charges. This statement can also be used to evaluate profitability and credit worthiness. The final required financial statement is the Statement of Cash Flows, which provides information about the Watermaster's cash receipts and cash payments during the reporting period. The Statement of Cash Flows reports cash receipts, cash payments and net changes in cash resulting from operations, investing, non-capital financing, and capital and related financing activities and provides answers to such questions as where did cash come from, what was cash used for, and what was the change in cash balance during the reporting period.

FINANCIAL ANALYSIS OF THE WATERMASTER

One of the most important questions asked about the Watermaster's finances is, "Is the Watermaster better off or worse off as a result of this year's activities?" The Statement of Net Position and the Statement of Revenues, Expenses and Changes in Net Position report information about the Watermaster in a way that helps answer this question. These statements include all assets and liabilities using the accrual basis of accounting, which is similar to the accounting method used by most private sector companies. All of the current year's revenues and expenses are taken into account regardless of when the cash is received or paid. These two statements report the Watermaster's *net position* and changes in net position. You can think of the Watermaster's net position – the difference between assets and liabilities – as one way to measure the Watermaster's financial health, or *financial position*. Over time, *increases or decreases* in the Watermaster's net position are one indicator of whether it's *financial*

The notes to the financial statements are an integral part of this statement.

FINANCIAL ANALYSIS OF THE WATERMASTER (CONTINUED)

health is improving or deteriorating. However, one will need to consider other non-financial factors such as changes in economic conditions, population growth, zoning and new or changed government legislation, such as changes in Federal and State water quality standards.

NOTES TO THE BASIC FINANCIAL STATEMENTS

The notes provide additional information that is essential to a full understanding of the data provided in the basic financial statements. The notes to the basic financial statements can be found on pages 10 through 12.

Statement of Net Position

ASSETS	
Current assets	$ 1,264,491
Total assets	$ 1,264,491
NET ASSETS	
Unrestricted	$ 1,264,491
Total net assets	$ 1,264,491

As noted earlier, net position may serve over time as a useful indicator of a government's financial position. In the case the case of the Watermaster, assets of the Watermaster exceeded liabilities by $1,264,491 as of December 31, 2014.

Statement of Revenues, Expenses and Changes in Net Position

REVENUES	
Operating revenues	$ 1,199,762
Total revenues	$ 1,199,762
EXPENSES	
Operating expenses	545,788
Change in net position	653,974
Net position - beginning of year	655,153
Prior period adjustment	(44,636)
Net position - end of year	$ 1,264,491

The notes to the financial statements are an integral part of this statement.

NOTES TO THE BASIC FINANCIAL STATEMENTS (CONTINUED)

Statement of Revenues, Expenses and Changes in Net Position (continued)

The statement of revenues, expenses and changes of net position shows how the Watermaster's net position changed during the fiscal year. In the case of the Watermaster, net position increased by $653,974 for the year ended December 31, 2014.

CONDITIONS AFFECTING CURRENT FINANCIAL POSITION

Management is unaware of any conditions which could have a significant impact on Management is unaware of any conditions which could have a significant impact on the Watermaster's current financial position, net position or operating results based on past, present and future events.

CONTACTING THE WATERMASTER'S FINANCIAL MANAGEMENT

This financial report is designed to provide our citizens, taxpayers, customers, and investors and creditors with a general overview of the Watermaster's finances and to demonstrate the Watermaster's accountability for the money it receives. If you have any questions about this report or need additional financial information, please contact the Hemet-San Jacinto Watermaster at 1295 Corona Point Court, Corona, CA 92879.

HEMET-SAN JACINTO WATERMASTER
STATEMENT OF NET POSITION
DECEMBER 31, 2014

ASSETS

Current assets:		
Cash	$	1,213,476
Accounts receivable		51,015
Total assets	$	1,264,491
NET POSITION		
Restricted		1,264,491
Total net position		1,264,491
Total liabilities and net position	$	1,264,491

The notes to the financial statements are an integral part of this statement.

HEMET-SAN JACINTO WATERMASTER
STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN NET POSITION
FOR THE FISCAL YEAR ENDED DECEMBER 31, 2014

Revenues	
Assessments	$ 1,198,966
Interest	796
Total revenues	1,199,762
Expenses	
Project	174,036
EMWD labor	158,849
Advisor	175,481
Legal	22,075
Financial support services	9,533
Insurance, supplies and other	5,814
Total expenses	545,788
Change in net position	653,974
Net position - beginning	655,153
Prior period adjustment	(44,636)
Net position - ending	$ 1,264,491

The notes to the financial statements are an integral part of this statement.

HEMET-SAN JACINTO WATERMASTER
STATEMENT OF CASH FLOWS
FOR THE FISCAL YEAR ENDED DECEMBER 31, 2014

Cash flows used by operating activities:		
Receipts from customers	$	1,192,587
Receipts from interest		796
Payment to suppliers and vendors		(545,788)
Net cash provided by operating activities		647,595
Change in cash and cash equivalents		647,595
Cash and cash equivalents - beginning		610,517
Prior Period Adjustment		(44,636)
Cash and cash equivalents - ending	$	1,213,476
Reconciliation of operating revenues to net cash used by operating activities		
Change in net position	$	653,974
Adjustment to reconcile net income to net cash used by operating activities		
(Increase) Decrease in:		
Accounts receivable		171,456
Net cash provided by operating activities	$	647,595

The notes to the financial statements are an integral part of this statement.

HEMET-SAN JACINTO WATERMASTER
NOTES TO FINANCIAL STATEMENTS
DECEMBER 31, 2014

NOTE 1 - ORGANIZATION

Nature of operations

The Hemet-San Jacinto Watermaster (Watermaster) was formed on April 13, 2013 in a judgement by the Riverside County Superior Court. The function of the Watermaster is to monitor groundwater production, levy replenishment assessments, monitor water transfers, and establish future same yields to ensure one long-term sustainability of the basin and surrounding region. The participating municipal agencies are the Eastern Municipal Water District, the Lake Hemet Municipal Water District, and the cities of Hemet and San Jacinto. The stipulated judgement establishes and prioritizes water rights, provides a physical way to eliminate overdrafts, and protects the water rights of the Soboba Band of Luiseño Indians.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Basis of accounting and measurement focus

The Watermaster reports its activities as an enterprise fund, which is used to account for operations that are financed and operated in a manner similar to a private business enterprise, where the intent of the Watermaster is that the costs of delivering wholesale water to its service area on a continuing basis be financed or recovered primarily through user charges (assessments). Revenues and expenses are recognized on the full accrual basis of accounting. Revenues are recognized in the accounting period in which they are earned and expenses are recognized in the period incurred, regardless of when the related cash flows take place.

Operating revenues and expenses, such as Watermaster assessments result from exchange transactions associated with the principal activity of the Agency. Exchange transactions are those in which each party receives and gives up essentially equal values. The principal operating revenues of the Watermaster are regulatory assessments to member water right holders. Management, administration and depreciation expenses are also considered operating expenses. Other revenues and expenses not included in the above categories are reported as non-operating revenues and expenses.

B. Cash and cash equivalents

Cash and cash equivalents are from time to time variously composed of cash in banks and liquid investments with original maturities of three months or less.

C. Accounts receivable

Watermaster considers accounts receivable to be fully collectible; accordingly, no allowance for doubtful accounts is required.

D. Use of estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

E. Classification of items

Certain items may have been classified different from one year to another.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

F. Income taxes

Watermaster was created by order of the Court and is exempt from taxation.

G. Investments

Changes in fair value that occur during a fiscal year are recognized as investment income reported for that fiscal year. Investment income includes interest earnings, changes in fair value, and any gains or losses realized upon the liquidation or sale of investments.

H. New GASB Pronouncements

The Watermaster implemented the following Governmental Accounting Standards Board pronouncements:

Governmental Accounting Standards Board Statement No. 60

In November 2010, the GASB issued Statement No. 60, *Accounting and Financial Reporting for Service Concession Arrangements*. This Statement address how to account for and report service concession arrangements, a type of public-private or public-public partnership that state and local governments are increasingly entering into. No service concession arrangements were noted in the fiscal years transactions.

Governmental Accounting Standards Board Statement No. 61

In November 2010, the GASB issued Statement No. 61, *The Financial Reporting Entity, Omnibus*. This Statement is designed to improve financial reporting for governmental entities by amending the requirements of GASB Statement No. 14, The *Financial Reporting Entity*, and GASB Statement No. 34, *Basic Financial Statement and Management's Discussion and Analysis for State and local Governments.*

Governmental Accounting Standards Board Statement No. 62

In December 2010, The GASB issued Statement No. 62 – *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements*. The objective of this Statement is to incorporate into the GASB's authoritative literature certain accounting and financial reporting guidance that is included in the following pronouncements issued on or before November 30, 1989, which does not conflict with or contradict GASB pronouncements:

- Financial Accounting Standards Board (FASB) Statements and Interpretations
- Accounting Principles Board Opinions
- Accounting Research Bulletins of the American Institute of Certified Public Accountatnts' (AICPA) Committee on Accounting Procedure

Hereinafter, these pronouncements collectively are referred to as the "FASB and AICPA pronouncements." This Statement also supersedes Statement No. 20, *Accounting and Financial Reporting for Proprietary Funds and Other Governmental Entities That Use Proprietary Fund Accounting*, thereby eliminating the election provided in paragraph 7 of that Statement for enterprise funds and business-type activities to apply post-November 30, 1989 FASB Statements

H. New GASB Pronouncements (continued)

Governmental Accounting Standards Board Statement No. 62 (Continued)

and Interpretations that do not conflict with or contradict GASB pronouncements. However, those entities can continue to apply, as other accounting literature, post November 30, 1989 FASB pronouncements that do not conflict with or contradict GASB pronouncements, including this Statement.

Governmental Accounting Standards Board Statement No. 63

In June 2011, the GASB issued Statement No. 63, *Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position*. This Statement is designed to improve financial reporting by standardizing the presentation of deferred outflows of resources and deferred inflows of resources into the definitions of the required components of the residual measure and by renaming that measure as net position, rather than net assets.

NOTE 3 - CASH AND CASH EQUIVALENTS

Cash and cash equivalents at December 31, 2014, consisted of the following:

Cash in banks	$ 1,213,476
Total cash and cash equivalents	$ 1,213,476

Custodial credit risk is the risk that in the event of a bank failure, the Watermaster's deposits may not be returned to it. Cash balances held in banks are insured up to $250,000 by the Federal Deposit Insurance Corporation (FDIC) and are collateralized by the respective financial institutions. In addition, the California Government Code requires that a financial institution secure deposits made by state or local governmental units by pledging securities in an undivided collateral pool held by a depository regulated under state law (unless so waived by the governmental unit). The market value of the pledged securities in the collateral pool must equal at least 110 percent of the total amount deposited by the public agencies. California law also allows financial institutions to secure public deposits by pledging first trust deed mortgage notes having a value of 150 percent of the secured public deposits and letters of credit issued by the Federal Home Lona Bank of San Francisco having a value of 105 percent of the secured deposits. As of December 31, 2014 $937,308 of the Watermaster's bank balance was exposed to custodial credit risk because it was uninsured by the FDIC.

NOTE 4 – SUBSEQUENT EVENTS

The Watermaster's management has evaluated events or transactions that may occur for potential recognition or disclosure in the financial statements throught January 19, 2015, which is the date the financial statements were available to be issued. Management has determined that there were no subsequent events or transactions that would have a material impact on the current year financial statements.

HEMET-SAN JACINTO WATERMASTER

SUPPLEMENTARY INFORMATION SECTION

DECEMBER 31, 2014

HEMET-SAN JACINTO WATERMASTER
STATEMENT OF ACTIVITIES - BUDGET AND ACTUAL
FOR THE FISCAL YEAR ENDED DECEMBER 31, 2014

	Original/ Final Budget	Actual	Variance Favorable (Unfavorable)
Revenues			
Assessments	$ 1,301,992	$ 1,198,966	$ 103,026
Interest	-	796	796
Total revenues	1,301,992	1,199,762	103,822
Expenses			
Project	288,965	174,036	114,929
EMWD labor	160,000	158,849	1,151
Advisor	216,000	175,481	40,519
Legal	33,000	22,075	10,925
Financial support services	18,000	9,533	8,467
Insurance, supplies and other	30,000	5,814	24,186
Total expenses	745,965	545,788	200,177
Change in net position	556,027	653,974	303,999
Net position - beginning	655,153	655,153	-
Prior period adjustment	(44,636)	(44,636)	-
Net position - ending	$ 1,166,544	$ 1,264,491	$ 303,999

HEMET-SAN JACINTO WATERMASTER

OTHER INDEPENDENT AUDITORS' REPORTS SECTION

DECEMBER 31, 2014

INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

Board of Directors
Hemet-San Jacinto Watermaster
Corona, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of Hemet-San Jacinto Watermaster, which comprise the statement of financial position as of December 31, 2014, and the related statements of activities and cash flows for the fiscal year then ended, and the related notes to the financial statements, and have issued our report thereon dated January 19, 2015.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered Hemet-San Jacinto Watermaster 's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of Hemet-San Jacinto Watermaster 's internal control. Accordingly, we do not express an opinion on the effectiveness of Hemet-San Jacinto Watermaster 's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Hemet-San Jacinto Watermaster's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the organization's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the organization's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

San Diego, California
January 19, 2015

HEMET-SAN JACINTO WATERMASTER

FINDINGS AND RECOMMENDATIONS SECTION

DECEMBER 31, 2014

HEMET-SAN JACINTO WATERMASTER
SCHEDULE OF AUDIT FINDINGS AND QUESTIONED COSTS
FOR THE FISCAL YEAR ENDED DECEMBER 31, 2014

A. Summary of Auditors' Results

1. Financial Statements

Type of auditors' report issued:	Unqualified
Internal control over financial reporting:	
One or more material weaknesses identified?	____ Yes __X__ No
One or more significant deficiencies identified that are not considered to be material weaknesses?	____ Yes __X__ None Reported
Noncompliance material to financial statements noted?	____ Yes __X__ No

2. Federal Awards

Internal control over major programs:	
One or more material weaknesses identified?	____ Yes __N/A__ No
One or more significant deficiencies identified that are not considered to be material weaknesses?	____ Yes __N/A__ None Reported
Type of auditors' report issued on compliance for major programs:	N/A
Any audit findings disclosed that are required to be reported in accordance with section .510(a) or Circular A-133?	____ Yes __N/A__ No
Identification of major programs:	

CFDA Number(s)	Name of Federal Program or Cluster

The Organization did not have over $500,000 in Federal Expenditures.

Dollar threshold used to distinguish between type A and type B programs:	N/A
Auditee qualified as low-risk auditee?	____ Yes __N/A__ No

HEMET-SAN JACINTO WATERMASTER
SCHEDULE OF AUDIT FINDINGS AND QUESTIONED COSTS (CONTINUED)
FOR THE FISCAL YEAR ENDED DECEMBER 31, 2014

A. Summary of Auditors' Results (continued)

3. State Awards

Internal control over state programs:

One or more material weaknesses identified?	____ Yes	N/A No
One or more significant deficiencies identified that are not considered to be material weaknesses?	____ Yes	N/A None Reported
Type of auditors' report issued on compliance for state programs:	N/A	

B. Financial Statement Findings

None

C. Federal Award Findings and Questioned Costs

None

D. State Award Findings and Questioned Costs

None

HEMET-SAN JACINTO WATERMASTER
SUMMARY SCHEDULE OF PRIOR AUDIT FINDINGS
DECEMBER 31, 2014

Findings/Recommendations	Current Status	Explanation If Not Implemented
None	N/A	N/A

Hemet-San Jacinto Watermaster

11 Appendices

11.1 Watermaster Board Meeting Minutes

11.2 Technical Advisory Committee Meeting Notes

11.3 Agreements

11.4 Resolutions

11.5 Task Orders

11.6 Independent Auditor's Report

11.7 References

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Appendix J

Stipulated Judgment

GERALD D. SHOAF, SBN 41084
REDWINE AND SHERRILL
1950 MARKET ST.
RIVERSIDE, CA 92501
(951) 684-2520

Attorneys for Plaintiff
EASTERN MUNICIPAL WATER DISTRICT

SUPERIOR COURT OF THE STATE OF CALIFORNIA

IN AND FOR THE COUNTY OF RIVERSIDE

EASTERN MUNICIPAL WATER DISTRICT, A California Municipal Water District, Plaintiff, vs. CITY OF HEMET; CITY OF SAN JACINTO; LAKE HEMET MUNICIPAL WATER DISTRICT; _____; _____; _____; and DOES 1 through 1,000, inclusive, Defendants.	CASE NO.: STIPULATED JUDGMENT

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FINDINGS

After consideration of the pleadings and the Stipulation for Entry of Judgment, the Court finds that:

1. **Complaint**. On _____, 2009, Plaintiff Eastern Municipal Water District ("Eastern") filed a Complaint against Defendants Lake Hemet Municipal Water District ("Lake Hemet"), City of Hemet ("Hemet"), City of San Jacinto ("San Jacinto"), _____, _____, _____. The Complaint requests a declaration of Plaintiff's and Defendants' individual and collective rights to surface water and groundwater in the Canyon Sub-basin, the San Jacinto Upper Pressure Sub-basin downstream to Bridge Street, and the Hemet Basin ("Management Area") and the imposition of a physical solution to achieve the optimum, reasonable, beneficial use of the waters of the Management Area

pursuant to section 2 of article X of the California Constitution. A map describing the boundaries of the Management Area is attached to this Judgment as Exhibit "A" and to the Complaint.

2. **Parties**.

A. **Eastern**. Eastern is a California municipal water district formed pursuant to the Municipal Water District Law, California Water Code Sections 71000-73001 (West 1966), with its principal place of business in Riverside County, California. Eastern diverts surface water from the San Jacinto River, and pumps groundwater from the Management Area for use by its customers within its boundaries.

B. **Lake Hemet**. Lake Hemet is a California municipal water district formed pursuant to the Municipal Water District Law, California Water Code Sections 71000-73001 (West 1966), with its principal place of business in Riverside County, California. Lake Hemet diverts surface water from the Santa Jacinto River and its tributaries, and pumps groundwater from the Management Area for use by its customers within its boundaries.

C. **Hemet**. Hemet is a California municipal corporation providing utility services pursuant to the California Constitution, article XI, section 9. Hemet pumps groundwater from the Management Area for use by its customers within its boundaries.

D. **San Jacinto**. San Jacinto is a California municipal corporation providing utility services pursuant to the California Constitution, article XI, section 9. San Jacinto pumps groundwater from the Management Area for use by its customers within its boundaries.

E. _____, _____, _____, _____ and _____ are persons who own farms or other property within the Management Area, and pump groundwater from the Management Area.

3. **Answers and Stipulation for Judgment**. On _____, 200_, Defendants filed Answers. On _____, 200_, the Parties filed a Stipulation for Entry of Judgment.

4. **Sole Producers**. Other than the Soboba Band of Luiseño Indians, and certain overlying users not parties to this litigation, the parties claim essentially all of the rights to produce surface water and groundwater in the Management Area.

5. **Importance of Surface Water and Groundwater**. Surface water and groundwater from the Management Area are important water supplies for agriculture, domestic and municipal use. The Parties have a mutual and collective interest in the coordinated management of such water resources to ensure that the common resource is used efficiently and reasonably, and that it is sustained and replenished.

6. **Overdraft**. It is estimated that the overdraft of the Management Area is at least 10,000 acre-feet per year. This estimate will be refined through further studies to be completed pursuant to the Water Management Plan, including data on the several sub-basins within the Management Area. Studies confirm that in recent years the total production from the Management Area, including pumping by those persons not parties to this litigation, has averaged approximately 63,800 acre-feet per year.

7. **Importance of Judgment**. The Parties have an interest in the physical solution imposed by this Judgment to promote the efficient and coordinated management of surface water and groundwater, to avoid problems from overdraft, to assist in protecting the rights of the Soboba Band of Luiseño Indians, to sustain and enhance water resources, and to resolve competing claims to surface water and groundwater.

8. **Jurisdiction**. This Court has jurisdiction to enter this Judgment declaring and adjudicating the rights of the Parties to the reasonable and beneficial

use of surface water and groundwater in the Management Area, and to impose a physical solution pursuant to law, including California Constitution, article X, section 2.

JUDGMENT

IT IS ORDERED, ADJUDGED AND DECREED:

1. DEFINITIONS.

1.1 Adjusted Production Right – the Base Production Right of each Public Agency, as adjusted pursuant to Sections 3.2 to 3.2.5.

1.2 Administrative Assessment – an acre-foot charge to be levied against each Public Agency for water pumped up to its Adjusted Production Right, including any unused amount of such Right that is pumped in a following year (Carry-Over Credit). Such assessments shall be used for Administrative Expenses, and for the purchase of Supplemental Water after Administrative Expenses have been paid. No Administrative Assessment shall be levied on a Party's pumping of its share of Imported, Supplemental, or Stored Water.

1.3 Administrative Expenses – Include, but are not limited to, Watermaster's expenses for office rental, personnel, supplies, office equipment, general overhead, preparing and collecting assessments, monitoring well pumping, measuring water levels, sampling and analyzing water quality, compiling and interpreting collected data, conducting special studies, litigation, and such other expenses as are reasonable and necessary for the Watermaster to carry out its duties under the Physical Solution and Water Management Plan.

1.4 Advisor. An independent engineering firm or qualified individual as provided in Section 9.6.3.

1.5 Annual Basin Yield – the quantity of Groundwater that Watermaster determines the Parties may Produce from the Management Area in a calendar year without a replenishment obligation under the Physical Solution.

1.6 Base Production Right – the water right of a Public Agency or Class B Participant as set forth in the attached Exhibit "C."

1.7 Carry-Over Credit – a Party's credit against the Replenishment Assessment in a Fiscal Year, based on the Party's Adjusted Production Right or share of Imported Water not produced in prior calendar years.

1.8 Class A Participant – a Private Pumper who stipulates to this Judgment and participates in the Water Management Plan as defined in Sections 4.3 to 4.3.5.

1.9 Class B Participant – a Private Pumper who stipulates to this Judgment and participates in the Water Management Plan as defined in Sections 4.4 to 4.4.6.

1.10 Fiscal Year – the period from July 1 through June 30 of the following calendar year.

1.11 Fruitvale Documents –

(a) Fruitvale Judgment – The Judgment and Decree entered in the Superior Court for the County of Riverside on June 4, 1954, in an action titled The City of San Jacinto, et al. v. Fruitvale Mutual Water Company, et al., Case No. 51-546;

(b) Fruitvale Mutual Water Company Sale of Assets to Eastern – That certain "Agreement for the Sale of Assets of the Fruitvale Mutual Water Company to Eastern Municipal Water District" dated September 10, 1971;

(c) Fruitvale Mutual Water Company Agency Agreements – The Agreement Between the City of San Jacinto and Eastern Municipal Water District dated June 15, 1972, the Agreement Between Lake Hemet Municipal Water District and Eastern Municipal Water District dated

June 9, 1972, and the Agreement Between the City of Hemet and Eastern Municipal Water District dated June 13, 1972, all providing for recognition of ownership of stock in Fruitvale Mutual Water Company by the Cities and by Lake Hemet, and making provision for the continued sale of water produced through the Fruitvale facilities by Eastern to the Cities and to Lake Hemet.

1.12 Groundwater – all water within and beneath the ground surface of the Management Area.

1.13 Groundwater Degradation (also "groundwater quality degradation" and "water quality degradation," "Degradation" and "Degraded Groundwater") – Water contamination as defined in state and/or federal law, and other conditions of reduced water quality as determined by the Watermaster to be harmful or undesirable for the operation of the Management Area.

1.14 Imported Water – An average of 7,500 acre feet annually of water sold by The Metropolitan Water District of Southern California to Eastern pursuant to Section 4.4 of the Soboba Band of Luiseño Indians "Settlement Agreement."

1.15 In-Lieu Water – Groundwater that is not pumped, but which would have otherwise been pumped by the holder of an Overlying or Appropriative Right within the Management Area, by virtue of the pumper's agreement with a Party or the Watermaster to receive and use Recycled Water or other nonpotable water in lieu of Groundwater.

1.16 Management Area –the Canyon Subbasin, the San Jacinto Upper Pressure Sub-basin downstream to Bridge Street, and the Hemet Basin, as delineated on the map attached as Exhibit "A."

1.17 Metropolitan – The Metropolitan Water District of Southern California.

1.18 Natural Recharge – Groundwater replenishment within the Management Area occurring from precipitation on the surface, percolation from

surface flows of the San Jacinto River and its tributaries, spreading or injection of such surface flows, return flows from irrigation, and subsurface inflows.

1.19 New Pumper – a Private Pumper who pumps for the first time after entry of Judgment herein.

1.2019 Non-Participant – a Private Pumper who elects not to participate in the Management Plan, or to be a party to this Judgment.

1.201 Overdraft – a condition whereby pumping in the Management Area exceeds the Safe Yield thereof.

1.221 Overlying Right – the appurtenant right of an owner of land overlying the Management Area to pump water from such land for beneficial use thereon.

1.223 Party or Parties – Eastern, Lake Hemet, Hemet, San Jacinto and the other Persons listed in the attached Exhibit "B."

1.234 Person – any individual, partnership, association, corporation, trust, government agency or other organization.

1.245 Physical Solution – the Court decreed method of managing the water supply of the Management Area to maximize the reasonable and beneficial use of the waters thereof pursuant to the California Constitution, article X, section 2, to eliminate overdraft pursuant to the provisions of this Judgment, to protect the prior rights of the Soboba Tribe, and to provide for the substantial enjoyment of all water rights recognizing their priorities.

1.256 Private Pumper – a Person who owns land with an Overlying Right or other right in the Management Area and pumps more than 25 acre-feet per year. Private Pumper includes first-time pumpers following entry of Judgment herein.

1.267 Public Agency or Agencies – Eastern, Lake Hemet, Hemet and San Jacinto.

1.2~~7~~8 Recharge or Replenish – to sink, spread or inject water directly or indirectly underground in the Management Area.

1.2~~8~~9 Recharge Right – the rights of Eastern and Lake Hemet to pump and use water previously replenished to the Management Area as provided in Section 6.7.4.

1.~~29~~30 Recycled Water – treated wastewater which is processed and suitable for controlled use in the Management Area, including Recharge.

1.3~~0~~ Replenishment Assessment – a charge to be levied against each Public Agency for each acre foot, or portion thereof, of Groundwater pumped in excess of the sum of its respective Adjusted Production Right, its share of Imported Water, Stored Water, Supplemental Water, and applicable Carry-Over Credits and Recharge Rights; and against each Class B Participant for pumping in excess of its 1995-99 average production, i.e., its Base Production Right. The rate of such assessments shall be determined by the Watermaster and shall be used for Replenishment Expenses.

1.3~~2~~1 Replenishment Expenses – Watermaster expenses, including, but not limited to, the acquisition of Supplemental Water supplies, development of In-Lieu Water projects, acquisition or improvement of land, and for the construction, maintenance and operation of facilities necessary to replenish Groundwater in the Management Area, or otherwise to provide water to Parties within the Management Area.

1.3~~3~~2 Safe Yield – the long term, average quantity of water supply in the Management Area that can be pumped without causing undesirable results, including the gradual reduction of natural groundwater in storage over long-term hydrologic cycles. The initial safe yield of the Management Area is estimated to be approximately 53,800 acre feet per year.

1.3~~4~~3 Settlement Agreement – that Agreement titled "The Soboba Band of Luiseño Indians Settlement Agreement" among the Soboba Tribe, the

United States, as Trustee for the Tribe, Eastern Municipal Water District, Lake Hemet Municipal Water District, and The Metropolitan Water District of Southern California.

1.354 Soboba Tribe (sometimes the "Tribe") – the Soboba Band of Luiseño Indians.

1.365 Soboba Action – the lawsuit entitled Soboba Band of Mission Indians, etc., v. Metropolitan, etc., et al, U.S. District Court, Central District of California, Case No. 00-84208 GAF (MANx).

1.376 Storage Agreement – an agreement between Watermaster and a Party to store Supplemental Water (other than a Party's share of Imported Water) by sinking, spreading, injecting or in-lieu procedures in the Management Area, and to establish a manner of accounting for the credit therefore and subsequently to recover such water, without payment of Administrative or Replenishment Assessments.

1.387 Storage Right – a Party's right to store and pump Supplemental Water (not required for a Party's share of Imported Water) pursuant to a Storage Agreement.

1.398 Stored Water – Supplemental Water (other than a Party's share of Imported Water) stored by a Party pursuant to a Storage Agreement.

1.4039 Supplemental Water – nontributary water imported into the Management Area, including imported water (i.e., other than or in addition to Imported Water), Recycled Water, In-Lieu Water, and other nonpotable water.

1.410 Surface Water – all water tributary to the Management Area and flowing above the ground surface.

1.421 Transfer – a temporary or permanent conveyance, assignment, sale, contract or lease of part or all of a Party's Adjusted Production Right, Carry-over Credit, Storage Right or Recharge Right to any other Party, or a

temporary assignment, contract, lease or sale of part of the Soboba Tribe's quantified water right.

1.432 Tribal Water Rights – the Soboba Tribe's rights to water set forth in Section 4.1 of the Settlement Agreement and Section 5 of this Stipulated Judgment.

1.443 Tunnel – the San Jacinto Tunnel in Riverside County, California, constructed by Metropolitan in the 1930s.

1.454 Watermaster – the Board with the powers and duties defined in Section 9.

1.465 Water Management Plan (sometimes the "Plan") – the Plan adopted by the Watermaster, as it may be modified from time to time, to implement the Physical Solution, to ensure an adequate and reliable source of future water supply for the Management Area, and to protect the prior rights of the Soboba Tribe.

2. EXHIBITS.

The following exhibits are attached to this Judgment and incorporated in it:

"A." Map of the Management Area and the Management Area Watershed.

"B." List of Parties to this Judgment.

"C." Description of each Public Agency's and Class B Participant's Base Production Right.

3. PUBLIC AGENCIES' WATER RIGHTS.

3.1 Base Production Right. The Public Agencies are owners of rights to pump groundwater from the Management Area as set forth in Exhibit "C." These rights are for a calendar year and were calculated as follows:

3.1.1 The Base Production Right of Eastern is based upon its respective average pumping for calendar years 1995-1999, less an adjustment of 1800 acre-feet representing a portion of a credit which it receives from Metropolitan for seepage into Metropolitan's San Jacinto tunnel, for Eastern's use of Fruitvale water elsewhere, and for use of Fruitvale water by Lake Hemet, San Jacinto, and Hemet. The 1995-1999 period was chosen to reflect recent production prior to the commencement of negotiations leading to this Stipulated Judgment.

3.1.2 The Base Production Right of Lake Hemet is based on its average production for calendar years 1995-1999.

3.1.3 The Base Production Right of Hemet is based on its average production for calendar years 1995-99, plus an adjustment of 900 acre feet per year representing a portion of the seepage credit referenced in Section 3.1.1.

3.1.4 The Base Production Right of San Jacinto is based upon its average Production for calendar years 1995-1999, plus 500 acre-feet per year, and plus an adjustment of 900 acre feet per year representing a portion of the seepage credit referenced in Section 3.1.1. The 500 acre-feet per year has been added because San Jacinto's recent pumping does not reflect its historic production, due to water purchases and other factors.

3.1.5 The Base Production Rights of Hemet and San Jacinto each include 900 acre-feet per year that have been added to their respective amounts of pumping for calendar years 1995-1999. These amounts have been added to provide Hemet and San Jacinto a fair share of water from, and to resolve disputes regarding, Eastern's use of tunnel seepage, Eastern's use of Fruitvale waters, and Lake Hemet's surface stream diversions. These additional amounts of 900 acre-feet per year shall be treated as the first amounts pumped by Hemet and San Jacinto, shall not be subject to reduction by the Watermaster as provided in Sections 3.2 to 3.2.2, and shall not be subject to any Administrative or

Replenishment Assessments as provided in Sections 3.3 to 3.3.2, or to any other fee or charge imposed under the Management Plan.

3.2 Adjusted Production Rights. It is the goal of the Physical Solution to adjust the Base Production Rights of the Public Agencies over time on a pro-rata basis to a level consistent with the Watermaster's determination of Safe Yield. The reduction will be based on periodic demand, hydrology, recharge, and the community's ability to pay for Supplemental Water, and protection of the Tribal Water Rights. In order to implement this reduction in a phased manner, each Public Agency's Base Production Right shall be subject to adjustment as follows:

3.2.1 Subject to Section 3.1.5, a 10% reduction from each Base Production Right in the first full year after entry of this Judgment.

3.2.2 Until Adjusted Production Rights are consistent with the Public Agencies' share of Safe Yield, Watermaster shall determine the required reductions in Adjusted Production Rights in each subsequent year to achieve Safe Yield within a reasonable period of time as determined by the Watermaster, considering the extent of the overdraft, the economic impact on the Parties bound by this Judgment, and other relevant factors. The goal is to achieve Safe Yield over a six (6) year period assuming an annual overdraft of 10,000 acre feet. In the event the extent of the overdraft is greater or lesser than assumed, then the period of time reasonably required to reach Safe Yield may be extended or reduced accordingly. However, in no event shall any reduction be more than 10% of the Adjusted Production Rights of the prior year.

3.2.3 A Public Agency party may pump in excess of its Adjusted Production Right, without any additional Administrative or Replenishment Assessment, by an amount equal to its share of the 7,500 acre feet of Imported Water that is not used by the Tribe provided such water has been previously delivered and is stored or will be delivered during the current water

year. The amount of the Tribe's unused portion of the 7,500 acre feet shall be determined annually by the Watermaster. Shares of unused Imported Water shall be allotted to the Public Agency Parties in proportion to Base Production Rights, and shall be acquired and paid for pursuant to contract with Eastern.

3.2.4 A Base Production Right of a Public Agency serving the land of a Class B Participant shall be increased in an amount equal to such Participant's Base Production Right, adjusted and reduced pursuant to Sections 3.2.1 and 3.2.2, when the Participant's land is converted from agricultural use to water service from the Public Agency, pursuant to Section 4.4.3.

3.2.5 The Adjusted Production Rights of the Public Agencies may be increased by the Watermaster on a prorata basis to the extent that pumping by Class A participants, or pumping by persons not parties to this Judgment, may decrease, and the Watermaster finds that achieving the goal of maintaining the Management Area in a Safe Yield condition can still be met.

3.3 Public Agency Production Assessments. Public Agency pumping shall be subject to the following assessments:

3.3.1 An Administrative Assessment as provided in Section 1.2. The Administrative Assessment will be $50.00 per acre-foot of a Party's Adjusted Production Right pumped in the first full year after entry of this Judgment. The Watermaster shall set the Administrative Assessment rate annually thereafter. The first 900 acre feet per year of Adjusted Production Right pumped by Hemet and San Jacinto shall not be subject to such assessment.

3.3.2 A Replenishment Assessment will be levied on each Public Agency as provided in Section 1.29. However, a Public Agency may pump Groundwater in excess of the sum of its Adjusted Production Right, its share of Imported Water, Supplemental Water applicable Carry-Over Credits per Section 6.9.2, Recharge Rights, and production of Stored Water, in order to meet

increasing demands, provided that such excess extractions shall be subject to Replenishment Assessments.

3.4 Surface Rights. Eastern holds License Number 016667 from the State Water Resources Control Board to divert, spread and recover surface flows of the San Jacinto River within the Management Area. Lake Hemet holds pre-1914 appropriative rights to divert and store surface flows in Lake Hemet, and to divert surface flows tributary to but outside of the Management Area from Strawberry Creek and from the North and South Forks of the San Jacinto River. All Parties acknowledge such Eastern and Lake Hemet rights, and the fact that they are not subject to any assessments under this Judgment; provided that any water pumped by Eastern under its License shall be included in its Adjusted Production Right.

3.5 Fruitvale Judgment, Sale of Assets, and Agreements. The Court hereby finds that Eastern purchased all of the water rights and assets of the Fruitvale Mutual Water Company ("Fruitvale") pursuant to the Agreement described in Section 1.11(b) hereof, and is now the owner thereof. Eastern, as the successor in interest to Fruitvale, is also a defendant in the action described in Section 1.11(a) hereof. The Court finds that the only other remaining party in such action is the plaintiff City of San Jacinto. The Court retained continuing jurisdiction in such action, and Eastern has made annual reports pursuant to the Fruitvale Judgment. Pursuant to stipulation between Eastern and San Jacinto, and in accord with the physical solution and terms of this Judgment, the Court hereby finds that the rights and obligations of the Fruitvale Judgment have been subsumed in, and superseded by, this Judgment and are no longer enforceable; that the limitations upon the place and amounts of water use in the Fruitvale Judgment, the sale Agreement, and the Agency Agreements described in Sections 1.11(a), (b), (c) are no longer applicable or enforceable; and that the continuing jurisdiction of the Court under the Fruitvale Judgment, and the obligation of Eastern to report

thereunder, are hereby terminated; provided, however, that none of the service area agreements included in the Fruitvale documents in Section 1.11, or any other agreements related to mutual aid, system interties, or service areas, shall be affected by this Judgment.

3.6 Fruitvale Agency Rights. The water rights of Hemet, San Jacinto and Lake Hemet under the several agreements with Eastern described in Section 1.11(c) hereof have been incorporated in their respective Base Production Rights under this Judgment.

4. PRIVATE PUMPERS' WATER RIGHTS

4.1 Recognition of Rights. The Private Pumpers are owners of Overlying or other water rights to pump from the Management Area. The Public Agencies recognize these rights, and do not intend to take or adversely impact these rights without an agreement with the owner of such rights. There is no intent to affect water use that is consistent with the historical use of the Private Pumpers.

4.2 Non-Participation. A current or past Private Pumper can elect not to participate in the Water Management Plan and not to formally acknowledge its existence. Such Pumpers are referred to as Non-Participants. Non-Participants shall continue to exercise whatever water rights they may hold under California law unaffected by the Plan. However, the Parties do not waive their rights to challenge any new or expanded use of water or water rights. Non-Participants will not have the option of intervening as a party under the Judgment at a later date.

4.3 Class A Participation. A Private Pumper can stipulate to be a party to the Judgment as a Class A Participant under the following terms:

4.3.1 A Class A Participant who or which approves this Physical Solution may vote for and/or be elected to serve as the Private Pumper representative on the Watermaster, but other than as set forth in Sections 4.3.4 and 4.3.5, shall not otherwise have any obligation for the implementation of the Physical Solution or the Water Management Plan.

4.3.2 A Class A Participant may, without any assessment by the Watermaster, pump from the Participant's property within the Management Area the amount of water that can be put to reasonable and beneficial use in the Participant's historic place of use or as authorized under California law.

4.3.3 A Class A Participant shall have the right to convert to Class B Participation during a grace period that shall end 3 years after the entry of this Judgment~~,~~ and upon payment of the total assessments, without interest, that the Class A Participant would have paid had the Class A Participant elected to be a Class B Participant from the later of the initial production of groundwater or the entry of the Judgment herein~~outset~~.

4.3.4 A Class A Participant hereby authorizes the installation of water meters, and the collection and reading of Groundwater production, level and water quality data from the Class A Participant's well(s) by personnel authorized by the Watermaster. The metering, meter reading, and other related monitoring efforts shall be at no cost to the Class A Participant, and the Class A Participant shall receive copies of the reports and information obtained upon request.

4.3.5 The Stipulation signed by a Class A Participant shall describe or otherwise identify the Participant's land and wells within the Management Area. The heirs, successors and assigns of such land and wells shall succeed to the benefits of the Participant's rights under the Judgment, and be bound by the obligations thereof, provided that such successor intervenes as a party under the Judgment. Absent such intervention, the successor will be treated as a Non-Participant.

4.4 Class B Participation. A Private Pumper can stipulate to be or intervene as a party under the Judgment as a Class B Participant on the following terms:

4.4.1 A Class B Participant's Base Production Right shall be equal to the Participant's average annual production during the calendar years 1995 through 1999, less any amount of water that had been used on land that was developed for non-agricultural purposes after 1999, subject to adjustments by the Watermaster pursuant to Section 4.4.1.1. Any in-lieu water used during said period in place of groundwater production shall be treated as part of the groundwater production for calculating base production rights. The Class B Participant shall pay Replenishment Assessments on amounts in excess of its Base Production Right, subject to any Carry-Over Credit adjustments pursuant to Section 6.9.2, but shall not be subject to Administrative Assessments, and until transfer to a Public Agency, such Base Production Right shall not be subject to reduction to Safe Yield. In the absence of production history for the entire~~this~~ period (1995-99), the Watermaster, using all available information including power consumption records and records of water use by similar farming operations in the area, will estimate the average annual production for the Participant.

4.4.1.1 In the event that the land of a Class B Participant or of a Class A Participant that requests conversion to Class B Participation did not go into production and/or began using groundwater for the first time after 1999, or in the absence of a sufficient production history or record, the Watermaster will determine the base production rights to be assigned to such Participant, using all information available to it.

4.4.1.2 Upon written request by a Class B Participant, the Watermaster shall have the authority to adjust the Class B Participant's base production rights for such period, and on such terms and conditions, as the Watermaster deems appropriate under the circumstances. For example, but not by way of limitation, the Watermaster could increase the Participant's base production rights on a temporary basis to permit increased groundwater production dry periods, or for frost protection, with or without a requirement that such increased

production be offset or "repaid" by a decrease in groundwater production during subsequent wet periods, or to account for added acreage or for a change in crops or use of the land or for a change in ownership. Where new trees were planted during the period 1995-1999, the Watermaster shall calculate the base production rights based on known or estimated water use at maturity of such trees.

4.4.2 The Class B Participant approves this Physical Solution and may vote for and/or be elected to serve as the Private Pumper's representative on the Watermaster.

4.4.3 Upon conversion of a Class B Participant's land from agricultural to a use that requires water service from a Public Agency, the Public Agency shall credit, to the extent legally permissible, the Class B Participant's Base Production Right, adjusted pursuant to the percentage reductions in Sections 3.2.1 and 3.2.2, against any requirement then in effect for any water supply assessment requirements, and shall also provide the Class B Participant a credit equal to the fair market value of the Class B Participant's base production rights, as determined by the Watermaster, ~~or~~ against any fees associated with water supply that the Public Agency may then have in effect. The Public Agency serving the converted land shall receive a credit added to its Base Production Right as set forth in Section 3.2.4.

4.4.4 A Class B Participant is eligible to enter into a contract with the Watermaster, or a participating Public Agency, to sell or lease for a defined period of time the unused portion of the Class B Participant's Base Production Right, under terms and conditions approved by the Watermaster. Criteria used in consideration of such contract shall include:

4.4.4.1 The Water Management Plan's need to acquire additional water supplies to address overdraft and recovery;

4.4.4.2 Submission of a water conservation plan, including use of In-Lieu Water, by the Class B Participant that will reasonably

guarantee conservation of water that would otherwise be produced from the Management Area; and the amount of conserved water transferred reflects a reduction pursuant to Sections 3.2.1 and 3.2.2.

4.4.4.3 Public policy considerations of local government jurisdictions, including economic, land use and community impacts of any proposed water conservation plan.

4.4.5 The Class B Participant hereby authorizes the installation of meters and the collection and reading of Groundwater production, water level and water quality data from the Class B Participant's well(s) by personnel authorized by the Watermaster. The metering, meter reading and other related monitoring efforts shall be at no cost to the Class B Participant, and the Class B Participant shall receive copies of the reports and information obtained upon request.

4.4.6 The Stipulation signed by a Class B Participant shall describe or otherwise identify the Participant's land and wells within the Management Area. The heirs, successors and assigns of such land and wells shall succeed to the benefits of the Participant's rights under the Judgment, and be bound by the obligations thereof, provided that such successor intervenes as a party under the Judgment. Absent such intervention, the successor will be treated as a Non-Participant. A Class B Participant may transfer base production rights to new or replacement land on terms and conditions established by the Watermaster.

4.5 In-Lieu Water Use. In the event any Private Pumper receives Supplemental Water from a Public Agency to serve an historic use in place of Groundwater, or otherwise engages in an in-lieu program after entry of the Judgment herein, the Overlying Right of the Private Pumper shall not be diminished by the receipt and use of such Supplemental Water or by engaging in an in-lieu program. In the event a Class B Participant received in-lieu water for use in place of groundwater during the period 1995-99, for purposes of

determining base production rights, said use shall be considered as groundwater use.

4.6 Future Production Participation. Any new pumper after the entry of this Judgment may intervene in this action and Judgment only as a Class A Participant.

4.7 Replacement Wells. Re-drilling of existing wells and the drilling of new wells to replace existing wells will not be considered new production as provided in Section 4.6.

5. TRIBAL WATER RIGHTS

The Tribal Water Rights have been determined as part of a settlement among the Soboba Tribe, the United States, Eastern, Lake Hemet and Metropolitan. The settlement is reflected in a Settlement Agreement, Congressional legislation and appropriation of funds, and a Judgment in the Soboba Action. Such settlement includes the following provisions, which shall be effective only upon fulfillment of all of the conditions precedent set forth in Article 3 of the Settlement Agreement, a copy of which is attached hereto.

5.1 Senior Right. The Soboba Tribe shall have a prior and paramount right, superior to all others, to pump 9000 acre-feet per year (3000 acre feet from the Canyon Subbasin and the remainder from a portion of the San Jacinto Upper Pressure Subbasin referred to as the Intake Subbasin), for use on the Reservation, as defined in Article 2.20 of the Settlement Agreement, and on lands now owned or hereafter acquired by the Soboba Tribe contiguous to the Reservation or within the Canyon and Intake Subbasins; provided, however, that such use shall be limited to amounts set forth in a development schedule from 2,900 acre feet per year to 4,100 acre-feet per year for the first 50 years after the Effective Date as set forth in Exhibit "I" to the Settlement Agreement. The Tribe's right to pump applies to all Groundwater, whether replenished by Natural Recharge or by Supplemental Water. In addition, the Tribe shall have the right to

purchase additional water from the Watermaster during the fifty years that its use is limited according to Exhibit "I" to the Settlement Agreement at the rate then being charged to the Public Agencies under the Water Management Plan. In the event the Soboba Tribe is unable, except for mechanical failure of its wells, pumps or water facililties, to produce from its existing wells or equivalent replacements up to 3,000 AFA production from the Canyon Sub-basin and the remainder of its Tribal Water Rights from the Intake Sub-basin, Eastern and Lake Hemet shall deliver any shortage to the Soboba Tribe as provided in Section 4.1C of the Settlement Agreement. Pumping for such purpose shall not be subject to Administrative or Replenishment Assessments, and shall not be counted as part of Adjusted Production Rights.

5.2 Metropolitan Water. The Soboba settlement provides, among other matters, that Metropolitan will use its best efforts to deliver sufficient Imported Water to yield 7,500 acre-feet per year, based upon 15 year averages, for recharge in the Management Area at its untreated replenishment water rate, or any successor rate of equivalent price as provided in Section 4.4A of the Settlement Agreement.

5.3 Settlement Payment. Subject to the Effective Date of the Settlement Agreement and funding by the United States, Eastern pursuant to the terms set forth in the Water Management Plan, will pay the Soboba Tribe $17 million dollars pursuant to Article 4.7A of the Settlement Agreement in consideration, in part, of the Tribe's agreement to limit its water use according to Exhibit "I" to the Settlement Agreement for the first 50 years after the Effective Date. Subject to contracts with Eastern, the Public Agencies shall have the right to pump and use all Imported Water not used by the Tribe, and the unused portion of the Tribal Water Rights shall be available for use by the Parties, pursuant to their rights herein.

5.4 Capital Facilities. Eastern on behalf of the Water Management Plan participants will receive $10 million from the United States, to be applied to the costs of constructing and operating the Phase I capital facilities necessary to import and recharge Supplemental Water as described in the Plan.

5.5 Additional grant funds from the State of California or the United States may also be available for such capital facilities. The rights of the Public Agencies to the use of such facilities will be affirmed by contract as set forth in Sections 9.6.4(1) and 9.6.4(3).

5.6 Acknowledgement of Soboba Tribe Settlement. The Parties to this Judgment hereby recognize the Tribal Water Rights, as set forth above, and the applicable provisions of the Soboba Tribe Settlement Agreement, and acknowledge that protection of Tribal Water Rights is one of the goals of the Water Management Plan.

6. PHYSICAL SOLUTION.

6.1 Purpose and Objective. Pursuant to California water law and the California Constitution, article X, section 2, the Court adopts this Physical Solution to maximize reasonable beneficial use of Surface Water, Groundwater and Supplemental Water for water users in or dependent upon the Management Area, to eliminate overdraft, to protect the prior rights of the Soboba Tribe, and to provide the Parties with the substantial enjoyment of their respective rights, including, the priorities thereof.

6.2 Need for Flexibility. In order to adapt to potential changes in hydrology, land use, and social and economic conditions, the Physical Solution must provide some degree of flexibility and adaptability. Accordingly, the Court retains broad jurisdiction to supplement the discretion granted to the Watermaster herein.

6.3 Rights to Groundwater. Groundwater in the Management Area may occur from: natural recharge; spreading operations of natural flows;

recharge with Supplemental Water acquired with Assessment funds; return flows, fallowing or in-lieu recharge programs financed with Assessment funds. All such Groundwater shall be available to support the pumping of the Parties as allowed herein, and shall not be the property of any individual Party. Subject to the provisions of Section 6.7.2, this Section does not preclude any Party, pursuant to a Storage Agreement, from storing Supplemental Water at its own cost, retaining title thereto, and pumping such water without Assessment.

6.4 Resolution of Priorities. By reason of the long and continuous overdraft of the Management Area, the contribution of all parties to the overdraft, the economies that have developed on the basis of the overdraft, the severe economic disruption that could occur under strict priorities and the doctrines of prescription and laches, the complexity of determining appropriative priorities, and the need to make the maximum beneficial use of the water resources of the State, the Parties are estopped and barred from asserting specific priorities or preferences to the pumping of groundwater in the Management area, except as provided in this Judgment, and the Court finds that the provisions of this Judgment provide for the substantial enjoyment of the respective rights of the Parties.

6.5 Water Management Plan. The Watermaster will approve and implement a Water Management Plan to enforce and implement the Physical Solution, and may modify such Plan as conditions require, subject to the provisions of the Settlement Agreement. The Plan will also facilitate and accommodate the settlement of the water rights of the Soboba Tribe, and shall be subject to the approval of the Soboba Tribe and the United States as trustee for the Tribe. The Parties agree that the Plan shall incorporate and serve to implement the following goals:

6.5.1 Groundwater levels within the Management Area have generally been declining for a number of years, and the Management Area is presently in a condition of Overdraft. The Watermaster shall calculate the safe

yield of the Management Area on an annual basis, at least until the overdraft is substantially eliminated. The Plan will, within a reasonable period, eliminate Groundwater Overdraft and provide for excess production by implementing a combination of available water resources management elements. These elements include: reduction in natural Groundwater production; enhanced Recharge with native and/or Supplemental Water; increased use of recycled water; in-lieu replenishment; acquisition and development of Supplemental Water; and water conservation programs.

6.5.2 The Management Area is expected to experience residential, commercial, and industrial growth and development over the next decade. The estimated amount of Supplemental Water that will be necessary to provide for and adequately serve this new growth and development is 15,000 acre feet per year. The Water Management Plan shall accommodate the orderly expansion of existing water production and service systems, and provide a clear planning process for meeting these projected growth trends.

6.5.3 The Plan should be implemented in a manner to protect and/or enhance Management Area water quality.

6.5.3.1 The Watermaster is authorized to undertake direct operations in connection with reducing, controlling or dealing with Groundwater Degradation, including development or purchase of water supplies of any nature (local private rights, imported water, recycled water, salvaged water, and/or low quality water).

6.5.3.2 The Watermaster is also authorized to provide incentives to the Public Agencies or other Groundwater producers to encourage production of Degraded Groundwater as the Watermaster deems appropriate. For example, the Watermaster could provide that all or some portion of such production would not be charged against the producer's Base Production Rights and/or could adjust or not impose the Administrative and/or Replenishment

Assessment otherwise due. The Watermaster may determine the appropriate incentives on a case-by-case basis or may establish a formula or schedule that would reflect or be based on benefits to the Management Area resulting from such production.

6.5.3.3 If implementation of certain elements of the Plan causes limited localized water quality Degradation and such Degradation impedes the then current beneficial uses of water by any Public Agency in the Management Area, the Watermaster shall implement appropriate mitigation measures to ensure the water supply to the affected Public Agency, and shall bear the associated cost.

6.5.3.4 The standards for local water quality Degradation shall be defined by the Watermaster, and such definitions may be amended from time to time.

6.5.4 The Water Management Plan should serve to support the pursuit of cost-effective water supply and water treatment by the Public Agencies, both individually and collectively.

6.5.5 The Water Management Plan should serve to protect Tribal Water Rights.

6.5.6 The Watermaster shall implement a monitoring program to ensure that Plan activities follow best management and engineering principles to protect Management Area water resources, and to compile and analyze data on groundwater production, water levels, water quality and groundwater in storage.

6.6 Replenishment Program. The groundwater replenishment program shall be administered by the Watermaster. The program shall include: the acquisition of Supplemental Water; the collection and expenditure of Replenishment Assessments; the recharge of the Management Area; and the construction and operation of all necessary facilities, including but not limited to, development of surface and sub-surface percolation and injection facilities. In

addition, a source of Recharge Water for agencies contributing to the Settlement Payment described in Section 5.3 will be Imported Water provided by Metropolitan under the Settlement Agreement, and not used by the Soboba Tribe.

6.6.1 Priority for replenishment will be based on an equitable apportionment of available replenishment water among the sub-basins after full consideration of:

6.6.1.1 The Public Agency's participation in the payment in the Settlement Payment described in Section 5.3.

6.6.1.2 Hydrologic conditions in the Management Area.

6.6.1.3 The Management Area's Water demands.

6.6.1.4 The availability of storage capacity to accommodate the Natural Recharge of surface flows.

6.6.1.5 The availability of appropriate conveyance facilities.

6.6.1.6 The availability of Supplemental Water,

6.6.1.7 Protection of Tribal Water Rights.

6.6.2 The Watermaster is encouraged to take advantage of surplus imported water from Metropolitan that occasionally may be available at low cost, and to use available Assessment funds to bank such Recharge Water against future production in excess of Adjusted Production Rights.

6.6.3 The Public Agencies shall independently or jointly operate their present facilities to maximize the existing spreading and Recharge operations of natural flow in the Management Area. Such Recharge Water shall be available to support the pumping of all users, and shall not be the property of the spreading Public Agency.

6.6.4 All water used to replenish any sub-basin in the Management Area shall meet the Regional Water Quality Control Board, Santa

Ana Region requirements, and the provisions of Article 4.2 of the Settlement Agreement, and may be used in any sub-basin where such requirements are met.

6.7 Storage Rights. Unused storage capacity may exist in the Management Area, and this capacity will be managed by the Watermaster conjunctively with natural and available Supplemental Water supplies.

6.7.1 Subject to availability of Assessment funds and unused storage capacity as determined by Watermaster, the Management Area may be Recharged when water is available, to be drawn upon by the Public Agencies in later years when such Supplemental Water may not be available.

6.7.2 Unused storage capacity, as determined by Watermaster, and pursuant to a Storage Agreement, may be used for "put and take" operations with Supplemental Water that is paid for by any Public Agency provided that:

6.7.2.1 Such operations do not interfere with the rights of any other pumper, or with the use of the storage capacity for recharge and storage under the Water Management Plan.

6.7.2.2 The Watermaster shall have the first right to purchase any water available for Recharge for use under the Plan.

6.7.2.3 Later recovery of Stored Water shall exclude losses, and shall not be subject to either Administrative or Replenishment Assessments.

6.7.2.4 Such recovered water may be used anywhere within the service area of the Party.

6.7.2.5 Such Stored Water may be transferred while still in storage.

6.7.3 Any conjunctive use programs within the Management Area for the benefit of territory outside of the Management Area shall be subject to the Watermaster's approval and the governance provisions herein. Any storage, conjunctive use programs by third parties, or in-lieu recharge programs financed

with assessment funds, shall be subject to the Watermaster's approval and the governance provisions herein; provided that Metropolitan has the right under the Soboba Settlement Agreement to use up to 40,000 acre-feet of storage capacity in the San Jacinto Upper Pressure Sub-basin for the pre-delivery of water required under Section 5.2.

6.7.4 Eastern and Lake Hemet have previously provided water for replenishment of the Management Area. As of May 1, 2005 these amounts, less losses, were 12,694 acre-feet for Eastern and 950 acre-feet for Lake Hemet Such Parties shall have Recharge Rights to recover these amounts, less any future losses, without either Administrative or Replenishment Assessments, and may use such Rights to offset excess pumping in lieu of Replenishment Assessments. The water available under such Recharge Rights shall be pumped within 15 years of the entry of this Judgment, but not more than 2000 acre-feet in a single year. The Public Agencies shall notify the Watermaster when such Recharged Water is being pumped, and in what amounts, and the Watermaster shall keep an accounting of the amounts remaining. The use of such credits shall be interpreted and administered so as not to increase the replenishment obligations or assessments of those parties without such past credits, or after such credits have been fully used.

6.7.5 The accounting for recovery of Stored Water or Recharge Water from the Management Area shall not include any water that escapes therefrom and migrates downstream beyond the Management Area. Losses will be calculated based upon best engineering principles.

6.8 Recycled Water. The use of Recycled Water produced by Eastern can be of substantial benefit in providing additional water in the Management Area. The Watermaster shall have a right of first refusal to purchase all recycled water produced from treatment facilities serving the Management Area that is not subject to then existing contracts. Such recycled water may be used for recharge or direct use within the Management Area..

6.8.1 Each Public Agency may implement its own Recycled Water program, for direct use, subject to the availability of recycled water. The Public Agency shall be responsible for financing, operating and maintaining the facilities necessary for that program. The Watermaster will support loan or grant applications, and the Public Agencies will work to integrate Recycled Water into the Water Management Plan, to the extent economically feasible while meeting regulatory standards.

6.8.2 Currently only Eastern has Recycled Water available for Recharge. To the extent such Recycled Water is not acquired by the Watermaster for use under the Plan, any such water recharged in the Management Area shall remain the property of Eastern and may be pumped (less losses) without Replenishment Assessments.

6.9 Assessment Program. The assessment program contemplated by the Water Management Plan and consisting of Administrative Assessments and Replenishment Assessments as described in Sections 1.2, 1.30, and 3.3, respectively, shall be administered by Eastern pursuant to a contract with the Watermaster pursuant to the provisions of Section 9.6.4(5).

6.9.1 All Assessments shall be used for Replenishment Expenses and Administrative Expenses.

6.9.2 Subject to the limitations in this Judgment, each Public Agency that produces less than its Adjusted Production Right and share of Imported Water, and any Class B Participant producing less than its Base Production Right, shall have the following Carry-Over Credit:

6.9.2.1 Carry-Over Credit shall be the difference in acre-feet between a Public Agency's Adjusted Production Right and share of Imported Water and Supplemental Water, and the Public Agency's actual production in a calendar year, or the Class B Participant's Base Production Right and the Class B Participant's actual production in a calendar year.

6.9.2.2 The Carry-Over Credit may be applied to reduce the amount of acre feet upon which a Public Agency or Class B Participant must pay a Replenishment Assessment either for the previous year or in any subsequent year. Carry-Over Credits are transferable among the Public Agencies and Class B Participants (i.e., by a Public Agency to another Public Agency or to a Class B Participant, or by a Class B Participant to a Public Agency or the Watermaster) and may be retained for more than one calendar year. The Public Agencies and/or Class B Participants shall notify the Watermaster if a Carry-Over Credit is being retained. The Public Agencies and Class B Participants shall notify the Watermaster if a Carry-Over Credit is being transferred and shall provide information requested by the Watermaster regarding the transfer.

6.9.2.3 The Watermaster shall keep an accounting of all Carry-Over Credits.

6.9.3 All Watermaster assessment invoices shall be payable to Watermaster within 60 days of notice. Any delinquent assessments shall bear interest at a rate to be set by the Watermaster. Watermaster is entitled to recover its reasonable expenses in collecting any assessment, including attorney's fees and costs.

6.9.4 The Watermaster is authorized to adjust assessments, where deemed appropriate, to provide incentives for production of Degraded Groundwater as described in Section 6.5.3.

6.10 Export. The Public Agencies may export water outside the Management Area, on a temporary basis, upon approval by the Watermaster. However, any water exported shall be replenished with an appropriate amount of similar or better quality water as determined by Watermaster. Water exports by the Public Agencies shall not interfere with the Water Management Plan or any other Public Agency's operations. The Water Management Plan will set forth the

specific criteria for the export of water, including, but not limited to, conjunctive use programs.

6.11 Capital Facilities. Each Public Agency shall continue to own its existing capital facilities for water supply and management, subject to the provisions of Section 9.6.6. However, the Phase I capital facilities necessary to implement the Water Management Plan shall be owned and operated by Eastern, pursuant to the Plan and in a fiduciary capacity for the benefit of all Parties under this Judgment, pursuant to Sections 5.4; 9.6.4(1); 9.6.4(3).

6.11.1 Financing of Water Management Plan facilities may be funded by Assessments, regional capital fees, loans and grants, contributions for storage rights by Metropolitan or other third-parties, and municipal bonds. Responsibility for the costs of future capital facilities necessary to implement the Plan, beyond the Phase I facilities, shall be determined by the Watermaster and apportioned based on relative benefit to be derived by each Public Agency.

6.11.2 Any of the participating Public Agencies may propose projects to be included in the Water Management Plan to increase the Management Area water supply. Such proposals, after evaluation by the Watermaster, shall be included or rejected. If the Watermaster chooses to reject the proposal, the proposing Public Agency may implement the rejected project at its own cost so long as it does not significantly impact the implementation of the Management Plan and/or interfere with the ongoing production by the Public Agencies.

7. INJUNCTION.

Each Party and his, her or its officers, agents, employees, successors and assigns, is enjoined and restrained from:

7.1 Producing water from the Management Area without payment of required Administrative Assessments.

7.2 Producing water from the Management Area in excess of the Party's Adjusted Production Right and share of Imported Water, or the Base

Production Right in the case of a Class B Participant, without payment of required Replenishment Assessments.

7.3 Transferring Production Rights except as authorized in this Judgment.

7.4 Recharging water in the Management Area except as authorized in this Judgment.

7.5 Storing or exporting water except as authorized in this Judgment.

8. CONTINUING JURISDICTION.

8.1 Full Jurisdiction. Full jurisdiction, power and authority is reserved to the Court as to all matters contained in this Judgment, including expedited intervention by successors in interest to Private Pumpers, except:

8.1.1 To redetermine Base Production Rights of the Public Agencies or Class B Participants.

8.1.2 As otherwise limited by law.

8.2 Motion to Interpret. By motion to the Court, upon 30 days written notice and after hearing, any Party or Watermaster may request the Court to make such further or supplemental orders to interpret, enforce, carry-out or amend this Judgment. Any such motion shall be reviewed de novo by the Court. Any such motion shall be served on all Parties and Watermaster at the addresses on the Watermaster's notice list.

9. WATERMASTER.

9.1 Composition. The Watermaster shall consist of a board composed of one elected official selected by each of the Public Agencies and one Private Pumper representative selected by the Class A and Class B Private Pumpers.

9.2 Terms. Each member of the Watermaster shall serve until replaced by the Public Agency or Private Pumpers that made the original appointment.

9.3 Removal and Replacement. Any Watermaster member may be removed and replaced by the same procedure used in his or her appointment.

9.4 Voting. Each member of the Watermaster shall have one vote. Four affirmative votes shall be required in order to constitute Watermaster action on each of the following matters. (1) any change sought in the form of governance; (2) any change in voting requirements; (3) retaining the services of legal counsel and Advisor; (4) establishing, levying, increasing or decreasing all assessment amounts; (5) adopting or amending an annual budget; (6) determining the extent of overdraft and quantifying safe yield; (7) determining Adjusted Production Rights; (8) decisions regarding the financing of Supplemental Water or facilities, other than any financing provisions included in this Stipulated Judgment as provided in Sections 5.3, 5.4, 5.5 hereof; (9) decisions regarding ownership of facilities, other than ownership of the Phase I facilities described in the Water Management Plan, which shall be owned by Eastern Municipal Water District, subject to a right of use by those parties participating in the financing thereof; (10) policies for the management of the Management Area; (11) and any decision that involves a substantial commitment by the Watermaster, including any contracts for conserved water. All other actions by the Watermaster shall require three affirmative votes.

9.5 Court Review. Any action by the Watermaster, or any failure to act by virtue of insufficient votes, may be reviewed by the Court on motion by any party, with notice to all other parties. The Court's review shall be de novo, and the Court's decision shall constitute action by the Watermaster.

9.6 Powers and Duties. In order to implement the provisions of this Judgment, the Watermaster shall have the following duties and powers:

9.6.1 Water Management Plan. Watermaster shall develop and implement a Water Management Plan, with such additions and modifications as may from time to time be appropriate, and shall administer the provisions of this Judgment. The Water Management Plan shall be subject to approval by the Court, by the Soboba Tribe, and by the United States.

9.6.2 Independent Counsel. The Watermaster shall retain independent legal counsel to provide such legal services as the Watermaster may direct.

9.6.3 Advisor. The Watermaster shall retain either an independent engineering firm or qualified individual experienced in hydrology to evaluate and analyze the data collected by Eastern, and any conclusions based thereon, and to make recommendations to the Watermaster, referred to herein as "Advisor." The Advisor shall also provide general coordination among Eastern, the Technical Advisory Committee and the Watermaster with respect to their respective functions, and perform such executive functions as the Watermaster may direct. The Watermaster reserves the right to refer any matter it may choose to any person it may select for assistance in carrying out its duties under this Judgment.

9.6.4 Operations and Other Functions.

9.6.4.1 Operations – Phase I Facilities. The Phase I Facilities (including capital facilities and spreading basins, as more particularly defined in the Water Management Plan) are either existing facilities of Eastern that will be expanded or improved as part of the Water Management Plan, or are new facilities that will be integrated into Eastern's existing facilities and will be owned by Eastern. Pursuant to the terms and conditions of contracts to be entered into between Eastern and the Watermaster, and Eastern and the other Public Agencies, Eastern shall construct, install, and operate the Phase I Facilities consistent with the Water Management Plan.

9.6.4.2 Operations – Other Facilities. The Water Management Plan anticipates the need for the construction and installation of other facilities in order to accomplish the goals of the Judgment. Such facilities may be constructed, installed and operated under contract with the Watermaster, by a member of the Watermaster or, in circumstances approved by the Watermaster, by other responsible entities.

9.6.4.3 Purchase of Water for Groundwater Recharge. The Soboba settlement requires Metropolitan to use its best efforts to deliver an average of 7500 acre-feet per year of Imported Water for recharge of the Management Area. This supply is dedicated first to satisfy the rights of the Soboba Tribe as provided in the Settlement Agreement. Such portion of the supply that is not used by the Soboba Tribe will be available to those Parties who have participated in the cost thereof. Subject to the approval of the Watermaster, Eastern shall enter into a contract with Metropolitan for the purchase and delivery of such Imported Water supply. Eastern shall also purchase as a member agency of Metropolitan, or otherwise acquire, such additional supplies of water as may be directed by the Watermaster to implement the Water Management Plan, subject to availability and transmission capacity. All such water delivered by Metropolitan, or otherwise acquired by Eastern, and all Eastern facilities used to deliver, recharge and recapture such water, shall be subject to rights of use by the Parties entitled thereto. Such rights of use shall be confirmed in detail in written contracts with Eastern. Recycled water is also available for direct and indirect groundwater recharge from Eastern's wastewater treatment facilities serving the Management Area. The Watermaster shall have a right of first refusal to purchase all recycled water produced from such plants that is not subject to then existing contracts. The Watermaster is authorized to use its funds, or funds provided by the Parties, to purchase Imported Water, Supplemental Water, or other water.

9.6.4.4 Data Collection. The Watermaster shall provide for the collection and maintenance of all production, water level, water quality, and other technical data necessary under or required by the Water Management Plan ("Data"). Pursuant to the terms and conditions of a contract to be entered into between Eastern and the Watermaster, Eastern shall collect and maintain all such Data and transmit such Data to the Watermaster, its Advisor, and the Technical Advisory Committee as directed by the Watermaster. The foregoing clause does not restrict the ability of the Watermaster to enter into other agreements with other members of the Watermaster and/or private firms and individuals for the collection of Data.

9.6.4.5 Accounting. The Watermaster shall provide for the levy, billing, and collection of all assessments provided for under the Judgment, for the payment of costs and expenses of the Watermaster, and for the performance of such accounting and related functions as may be required in connection with those functions ("Accounting Functions"). All funds collected shall be held in a segregated account. All expenses and disbursements shall be separately accounted for. Pursuant to the terms and conditions of a contract to be entered into between Eastern and the Watermaster, Eastern shall initially perform the Accounting Functions for Watermaster. The foregoing clause does not restrict the ability of the Watermaster to enter into other agreements with other members of the Watermaster and/or private firms and individuals to provide some or all of the Accounting Functions.

9.6.5 Technical Advisory Committee. There has been a Technical Advisory Committee that has functioned throughout the development of the Water Management Principles and Plan, and this Stipulated Judgment. That Committee has been composed of such managerial and technical representatives as the individual parties decide to appoint. Each party has paid the costs of its own representatives, and shall continue to do so in the future. The Technical Advisory

Committee shall continue to function, and to provide such technical assistance as the Watermaster may request. The Technical Advisory Committee shall make recommendations to the Watermaster's Advisor and to the Watermaster on all matters requiring four votes for Watermaster action, and shall receive from Eastern all data associated with such matters for its review and evaluation. The Technical Advisory Committee and its members shall also function as a way to keep the City Councils, Boards of Directors and participating Private Pumpers fully informed about the implementation of this Judgment.

9.6.6 Reservation of Rights. The Watermaster reserves the right to assume, on its own, any functions set forth in Section 9.6.4, except as provided in Section 9.6.4(1), and to undertake all other acts required to implement the Plan and this Judgment, so long as it is legally capable of performing such functions. The Watermaster, if it should choose, may also act through or in conjunction with the other Public Agencies, or through a Joint Powers Agency composed of all the Public Agencies hereunder. Except as specifically provided in Section 9.6.4(1) with respect to Eastern's facilities used in Phase I, the Watermaster shall have no right to use or acquire the water facilities of any of the Parties, without their consent, provided that it is the intent of the Parties that their individual facilities will be available where appropriate to implement the Water Management Plan, upon terms equitable to all parties, and consistent with their respective obligations to their own customers.

9.6.7 Rules and Regulations. The Watermaster may make such rules and regulations as may be necessary for its own operations as well as for the operation of the Plan and this Judgment, subject to Court approval. Meetings of the Watermaster shall be subject to the Brown Act .

9.6.8 Reports to Court. The Watermaster shall file annually with the Court, and serve on all Parties, a report regarding its activities during the

preceding year, including an audited statement of all accounts and financial activities.

9.6.9 Notice to Parties. Watermaster shall maintain a current list of the Parties and their addresses for notice purposes. Rules for service shall be governed by the California Code of Civil Procedure and the California Rules of Court. Each Party shall notify Watermaster in writing of the name and address for its receipt of notice and service under this Judgment. A Party may change this information by written notice to Watermaster. Notice shall be deemed sufficient if directed to the most recent address provided by the Watermaster.

9.7 Watermaster Records. Watermaster's records shall be kept at the office of Eastern unless changed by the Watermaster and approved by the Court. These records shall be treated as public records under the Public Records Act. California Government Code sections 6250-6277 (West 1995 and Supp. 2002).

10. MISCELLANEOUS.

10.1 Intervention After Judgment. A New Pumper can intervene in this action as a Class A Participant only, pursuant to Section 4.6. Any other person ~~Any Person who is not a Party and who proposes to Produce water from the Management Area, or~~ who is an heir, successor or assign of an existing party, may become a Party to this action and Judgment, subject to the conditions contained herein, by filing a petition in intervention. The petition may be filed and approved ex parte with notice to the Watermaster. Such intervener shall thereafter be a Party bound by this Judgment, and entitled to the rights and privileges accorded under this Judgment to the Party such person succeeds in this action.

10.2 Loss of Rights. No right adjudicated in this Judgment shall be lost by non-use, abandonment, forfeiture or otherwise, except upon a written election by the owner of the right filed with Watermaster, or by order of the Court upon noticed motion and after hearing.

10.3. <u>Attorney's Fees and Costs</u>. No Party shall recover any attorney's fees or costs in this proceeding from any Party.

DATED: _____ _____

JUDGE OF THE SUPERIOR COURT

EXHIBIT B

List of Parties to this Judgment

1. Parties

   A. Eastern Municipal Water District ("Eastern)
   B. Lake Hemet Municipal Water District ("Lake Hemet")
   C. City of Hemet ("Hemet")
   D. City of San Jacinto ("San Jacinto")

2. Class A Participants

   A.
   B.
   C.
   D.

3. Class B Participants

   A.
   B.
   C.

Exhibit C

Base Production Rights

1. Public Agencies

Agency Name	Base Production Rights (Acre-feet per year)
Eastern Municipal Water District	10,869
Lake Hemet Municipal Water District	11,063
City of Hemet	6,320
City of San Jacinto	4,031

2. Class B Participants

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Appendix K

Bulletin 118 [San Jacinto Groundwater Basin]

San Jacinto Groundwater Basin

- Groundwater Basin Number: 8-05
- County: Riverside
- Surface Area: 188,000 acres (293 square miles)

Basin Boundaries and Hydrology

The San Jacinto Groundwater Basin underlies San Jacinto, Perris, Moreno, and Menifee Valleys in western Riverside County. This basin is bounded by the San Jacinto Mountains on the east, the San Timoteo Badlands on the northeast, the Box Mountains on the north, the Santa Rosa Hills and Bell Mountain on the south, and unnamed hills on the west. Lake Perris is located in the eastern part of Perris Valley. The valleys are drained by the San Jacinto River and its tributaries. Average annual precipitation ranges from 10 to 18 inches.

Hydrogeologic Information

Water Bearing Formations

The San Jacinto Groundwater Basin contains sediments that have filled valleys and underlying canyons incised into crystalline basement rock. The valley fill deposits are generally divided into younger and older alluvium (TechLink 2002). Maximum depths of valley fill reach about 900 feet in the western and northern parts of the basin, but may exceed 5,000 feet in the eastern part of the basin between the Casa Loma and Claremont faults (TechLink 2002). Confined groundwater is found in the eastern part of the basin between the Casa Loma and Claremont fault (DWR 1959; TechLink 2002). Wells in this basin produce 200 to 2,600 gpm.

Younger Alluvium. The younger alluvium in the southeastern part of the basin is generally coarse and permeable with specific yield estimated to range from about 12 to 15 percent (TechLink 2002). In other parts of the basin, specific yield is estimated at about 5 to 10 percent.

Older Alluvium. The older alluvium may correlate to sediments of Pleistocene age that are exposed in the San Timoteo Badlands and underlies the San Jacinto River near the confluence of Bautista Creek (DWR 1959). These sediments generally contain more fine material and have lower specific yield and transmissivity values than the younger alluvium.

Restrictive Structures

The San Jacinto fault zone cuts through the eastern part of the basin and is composed of five northwest trending segments: the San Jacinto, Claremont, Hot Springs, Park Hill, and Casa Loma faults (DWR 1978). These active faults are barriers to groundwater movement (DWR 1959; TechLink 2002).

Recharge Areas

Natural recharge to the basin is primarily from percolation of flow in the San Jacinto River and its tributary streams; less recharge is from infiltration of rainfall on the valley floor. The primary recharge area for the confined aquifers is found where the San Jacinto River and Bautista Creek enter the San Jacinto Valley (DWR 1959). Natural recharge is augmented by

spreading of State Water Project (SWP) and reclaimed water through infiltration ponds in the upper reaches of the San Jacinto River (EMWD 2002; TechLink 2002). Percolation of water stored in Lake Perris has been an additional source of recharge since construction of the lake in the 1970s, and reclaimed water percolates through several storage ponds distributed throughout the valley. Artificial recharge can exceed natural recharge, particularly in years with low precipitation (EMWD 2003).

Groundwater Level Trends

Prior to the extraction of groundwater from the basin, groundwater flow was generally toward the course of the San Jacinto River and westward out of the basin (Techlink 2002). High extraction rates have produced groundwater depressions and locally reversed the historical flow pattern (TechLink 2002). During the 1960s, groundwater levels in the western and central parts of the basin declined; whereas, in the south-central part of the basin, they were moderately stable (DWR 1978). During the 1970s through the 1990s, groundwater levels declined about 20 to 40 feet in the northern and southeastern parts of the basin and were relatively stable in the southern part of the basin. During the 1970s through the 1980s, groundwater levels rose 80 to 200 feet in the western part of the basin because of infiltration from Lake Perris (Techlink 2002). During 2001 and 2002, groundwater levels generally rose in the central part of the basin and declined in the northeastern and southern parts of the basin (EMWD 2002; 2003).

Groundwater Storage

Groundwater Storage Capacity. The estimated groundwater storage capacity of the San Jacinto Basin is 3,070,000 af (DWR 1978).

Groundwater in Storage. In 1975, the calculated groundwater in storage was 2,700,000 af (DWR 1978).

Groundwater Budget (Type A)

Eastern Municipal Water District gathers and compiles groundwater production and artificial recharge amounts for this basin and reports these data annually (EMWD 2003). A model of the San Jacinto Valley Groundwater Basin was commissioned by EMWD to study groundwater flow and transport patterns and develop effective management strategies for the basin (TechLink 2002).

Groundwater production in the portion of the basin managed under the West San Jacinto Groundwater Management Plan is estimated at 18,880 af for 2001 and 20,058 af for 2002 (EMWD 2003). Estimates of extraction for the entire basin during 1984 through 1999 range from 60,361 to 100,137 af/yr and average about 78,714 af/yr (TechLink 2002). About 1,260 af of reclaimed water were recharged in 2001 and about 1,052 af in 2002. About 5,811 af of SWP water were recharged in 2002; however, no imported water was recharged in 2001 (EMWD 2003). Estimates of infiltration of San Jacinto River flow for 1984 through 1999 range from 4,504 to 191,590 af/yr and average 46,890 af/yr (TechLink 2002).

Groundwater Quality

Characterization. Historically, groundwater was of good quality for domestic, irrigation and industrial purposes (DWR 1978). The groundwater was typically sodium bicarbonate, calcium bicarbonate, or sodium chloride in character (DWR 1978). In 2002, depending on the part of the basin, average groundwater character was sodium chloride, sodium-calcium chloride, calcium-sodium chloride, or calcium-sodium chloride-bicarbonate (EMWD 2003). Historically, groundwater in the basin typically had a TDS content less than 1,000 mg/L (DWR 1978). In 2002, TDS content ranged from 230 to 12,580 mg/L; maximum TDS content exceeded 1,000 mg/L in most parts of the basin (EMWD 2003). Data from 51 public supply wells show TDS content in the basin ranges from 160 to 1,390 mg/L and averages about 463 mg/L.

Impairments. Historically, high levels of boron and fluoride were found in the central and northwest parts of the basin, and high nitrate-nitrogen concentrations were found in the southeast part of the basin (DWR 1978). In 2002, groundwater exceeding a nitrate-nitrogen concentration of 10 mg/L was found in wells throughout most of the basin (EMWD 2003). Nitrate-nitrogen concentrations as high as 40 mg/L were found in the northern part of the basin in the 1990s and as high as 28 mg/L in the southern part of the basin in 2002 (EMWD 2003). In 2002, TDS content was measured as high as 12,580 mg/L in the basin, and some wells with TDS content exceeding 1,000 mg/L were found throughout most of the basin (EMWD 2003). Pumping is causing groundwater of high TDS content to move from the western part of the basin into groundwater of lower TDS content in the central part of the basin (TechLink 2002; EMWD 2003). Remediation efforts have helped slow the migration of this plume.

Water Quality in Public Supply Wells

Constituent Group[1]	Number of wells sampled[2]	Number of wells with a concentration above an MCL[3]
Inorganics – Primary	56	3
Radiological	56	2
Nitrates	58	12
Pesticides	55	1
VOCs and SVOCs	54	0
Inorganics – Secondary	56	15

[1] A description of each member in the constituent groups and a generalized discussion of the relevance of these groups are included in *California's Groundwater – Bulletin 118* by DWR (2003).
[2] Represents distinct number of wells sampled as required under DHS Title 22 program from 1994 through 2000.
[3] Each well reported with a concentration above an MCL was confirmed with a second detection above an MCL. This information is intended as an indicator of the types of activities that cause contamination in a given basin. It represents the water quality at the sample location. It does not indicate the water quality delivered to the consumer. More detailed drinking water quality information can be obtained from the local water purveyor and its annual Consumer Confidence Report.

Well Characteristics

	Well yields (gal/min)	
Municipal/Irrigation	Range: to 2,600 gpm	Average:
	Total depths (ft)	
Domestic	Range: to 917 feet	Average:
Municipal/Irrigation	Range:	Average:

Active Monitoring Data

Agency	Parameter	Number of wells /measurement frequency
EMWD	Groundwater levels	169/ biannually (EMWD 2003)
EMWD	Miscellaneous water quality	113/ annually (EMWD 2003)
Department of Health Services and cooperators	Title 22 water quality	56/ annually

Basin Management

Groundwater management:	Most of the basin is managed under the jurisdiction of the West San Jacinto Groundwater Basin Management Plan, an AB 3030 plan adopted in June 1995.
Water agencies	
Public	Eastern Municipal Water District, Lake Hemet Municipal Water District
Private	

References Cited

California Department of Water Resources (DWR). 1959. *Santa Ana River Investigation.* Bulletin No. 15. 207 p.

____, Southern District. 1978. *Water Resources Evaluation of the San Jacinto Area*. Southern District Report. 81 p.

Eastern Municipal Water District (EMWD). 2002. *West San Jacinto Groundwater Management Plan 2001 Annual Report onthe Status of the Groundwater Subbasins.* Perris California.

Eastern Municipal Water District (EMWD). 2003. *West San Jacinto Groundwater Management Plan; 2002 Annual Report onthe Status of the Groundwater Subbasins.* Perris California.

TechLink Environmental Inc. (TechLink). 2002. *Regional Groundwater Model for the San Jacinto Watershed.* Consultant's report for Eastern Municipal Water District. Perris California.

Additional References

Lang, David J. 1979. Water Resources Data, 1970-75, For Perris Valley and Vicinity, Riverside County, California. U.S. Geological Survey Open File report 79-1256. 127 p.

Errata

Updated groundwater management information and added hotlinks to applicable websites. (1/20/06)

Appendix L

Division 3, Section 82 of the Municipal Code

DIVISION 3. - WATER CONSERVATION PLAN[4]

Footnotes:

--- (**4**) ---

Cross reference— Building regulations pertaining to water conservation, § 14-381 et seq.

Sec. 82-121. - Declaration of policy.

(a) Water Code § 350 et seq. permits public entities which supply water at retail to adopt and enforce a water conservation program to reduce the quantity of water used by the people therein for the purpose of conserving the water supply. The city council hereby establishes a comprehensive water conservation plan pursuant to the state Water Code to conserve water supplies and to avoid or minimize the effects of any future shortage.

(b) Water Code § 351 provides as follows: "Excepting in event of a breakage or failure of a dam, pump, pipe line or conduit causing an immediate emergency, the declaration shall be made only after a public hearing at which consumers of such water supply shall have an opportunity to be heard to protest against the declaration and to present their respective needs to said governing board."

(c) No customer of the city shall knowingly make, cause, use or permit the use of water supplied by the city for residential, commercial, industrial, agricultural, governmental or any other purpose in a manner contrary to any provisions of this division. Any of the restrictions described in this division shall take effect by adoption of an implementing resolution by the city council as provided in this division.

(Ord. No. 1442, § 1, 2-25-92)

Sec. 82-122. - CEQA exemption.

The city finds actions taken pursuant to this division to be exempt from the California Environmental Quality Act (CEQA) as specific actions necessary to prevent or mitigate an emergency pursuant to Public Resources Code § 15269(c).

(Ord. No. 1442, § 2, 2-25-92)

Sec. 82-123. - Effective date of plan.

This division shall be effective upon its adoption. Specific water conservation phases described in this division shall be effective by subsequent action of the city council in the case of a water supply shortage or by action of the city water superintendent in the case of an emergency water shortage.

(Ord. No. 1442, § 3, 2-25-92)

Sec. 82-124. - Applicability of division.

The provisions of this division shall apply to all persons, customers and property served by the city.

(Ord. No. 1442, § 4, 2-25-92)

Sec. 82-125. - Implementation of division; water conservation commission.

(a) The city manager, the water superintendent or a designated representative is hereby authorized and directed to implement the provisions of this division as approved by the city council.

(b) A water conservation commission shall be appointed by the city council. The commission shall be comprised of five members, including one representative from each of the following water customer groups: single-family, multifamily, mobile home and commercial, and one at-large member.

(Ord. No. 1442, § 5, 2-25-92)

Sec. 82-126. - Findings.

(a) The city council does hereby find, determine and declare as follows:

(1) Water consumption summary for water department service area.

a. The city obtains most of the potable water needed to serve its customers from groundwater wells. The normal operating production of the wells equals the total capacity of all wells times 80 percent. The city also has an agreement with Eastern Municipal Water District (EMWD) for an additional 575 acre-feet per year (AFY). When additional import water is available, the maximum water flow rate from the Eastern Municipal Water District through the Lake Hemet Water District is eight acre-feet per day using three points of connection.

b. The water in the underground aquifer is measured by the height of water above the pumps in the wells. The height of water currently ranges from 31 feet to 207 feet above the pumps, with an average height of 122 feet.

c. With minimum precipitation the city does not foresee any significant reduction in the water supply in the next three years, with the exception of an emergency such as an earthquake or a total power outage causing the water pumps to fail. During the last five years the state has been experiencing drought and there has been only a slight decline in the city water system.

d. The following chart shows the annual water production totals from 1986 through 1990. A breakdown of the actual water consumption amount for each water use category is not available.

PAST WATER PRODUCTION

Year	Acre-Feet per Year
1986	5227
1987	4555
1988	5813
1989	5967
1990	5406

e. The following chart shows the current (September 1990 through August 1991) water consumption amounts and a breakdown of those uses for residential single-family (single-family detached units and individually metered mobile homes), multifamily (apartment complexes) and commercial accounts and mobile home parks on a single water meter.

CURRENT WATER CONSUMPTION

Customer Category	Number of Water Services	Acre-Feet per Year	Average Annual Acre-Feet per Service
Single-family	7,607	2,584.92	0.34
Multifamily	406	811	2.00
Commercial	886	1641	1.85
Mobile homes	39	381.9	9.79
Totals	8,938	5,416.7	0.61

f. Currently, the City of Hemet Water District is 80 percent built out. The water use is projected to increase 1.44 percent per year through the year 2001. The population is projected to increase 1.27 percent per year through the year 2001. The city estimates that by the year 2010 the water district will be 100 percent built out and will require an additional 2,200 acre-feet per year. These figures have been documented in the city general plan and Metcalf and Eddy's water and sewer master plan.

PROJECTED WATER CONSUMPTION

Fiscal Year Projection	Acre-Feet per Year Increase
1991/92	5,496
1992/93	5,576
1993/94	5,657

(2) Possibility of water shortage. A water shortage could exist based upon the occurrence of one or more of the following conditions:

a. A major failure of any or all supply, storage or distribution facilities of the city water and reservoir system.

b. A water supply shortage due to the inability to meet acceptable water quality standards mandated by the state health department.

c. A general water supply shortage due to increased demand or limited supplies.

d. A decline in the underground aquifer as measured by the height of water in the wells.

e. A complete power failure of all four electrical connections from Southern California Edison. The city water department would be able to maintain minimum water supply to all of its customers using only auxiliary connections from the Eastern Municipal Water District and Lake Hemet.

(b) The council also finds and determines that the water resources available to the city service area shall be put to the maximum beneficial use in the interests of the people of the city and for the public welfare, and that waste, unreasonable use or unreasonable method of use of water shall be prohibited. The City of Hemet Water District shall provide a copy of this division to the city office of emergency services, the county office of emergency service, the Eastern Municipal Water District and the Lake Hemet Water District.

(Ord. No. 1442, § 6, 2-25-92)

Sec. 82-127. - Water waste prevention.

(a) Nonessential application of water. No customer shall cause or permit any water furnished to his property by the city to run to waste or be used for nonessential application of water. Hoses used for any purpose shall be equipped with a positive shutoff device. Leaks must be repaired as soon as discovered, and shall not be allowed to continue. The following is a partial list of nonessential applications of water, which include but are not limited to:

(1) Watering to excess, which allows water to run off the landscaped area or allows the landscape to become supersaturated.

(2) Potable water used for earthwork, grading or road construction purposes when nonpotable water is available.

(3) Washing down any paved surface except to alleviate immediate fire, sanitation or health hazards.

Draining and filling of above- or below-grade swimming pools with a capacity of 1,500 gallons or greater, or a depth of four feet or greater, regardless of capacity, shall require a permit for such draining or filling.

(b) Permits. The city water superintendent or a designated representative is authorized to grant permits as he may deem necessary for reasons such as draining swimming pools or repairing leaks, or for health and safety reasons.

(c) Notice of water waste incident. The city shall give notice to the customer at the premises at which the incident occurred. All notices shall contain the facts of the incident, recommendations to remedy the incident, a statement of the possible penalties for each incident, a statement informing the customer of his right to appeal the incident, and a brief summary of the appeal process specified in this section. In addition, some notices shall contain the date and time that installation of a flow restriction device or termination of water service may occur. All penalties shall be paid to the city water department within 15 days after the notice of water waste incident or upon final determination of an appeal.

(1) For a first incident, a city representative shall advise the citizen of the provisions of this division verbally and in writing. Water conservation advice and information shall be given to assist the citizen in eliminating the water waste problem.

(2) For a second incident, the city shall give written notice of the water waste to the customer personally, or tag the door and mail a certified notice to the name on the water service. An inspection date shall be set within ten days to verify that the water waste incident has been remedied. The cost of issuance for the second incident will be billed according to Executive Order No. S-128, Water Waste Second Incident.

(3) For a third incident, the city shall assess a penalty, equal to two times the customer's prior bimonthly water bill amount, to the customer personally, or tag the door and mail a certified notice of the penalty to the name on the water service. A bimonthly billing period includes all water consumed from one meter reading date to the next meter reading date.

(4) For any additional incident, the city may assess an additional penalty or give the date and time that a flow restricting device shall be installed on the service or that the service shall be terminated. The customer shall be notified personally or by tagging the door, and a certified notice shall be sent to the name on water service.

(d) Appeals. Any customer against whom a penalty is to be levied shall have a right to an appeal. A written appeal request and a copy of the notification must be received by the city clerk within ten days of the date of notification of the notice of penalty. If appealed, penalties, including installation of a flow restricting device on water service, shall be stayed until a written decision is made by the water conservation commission.

(e) Restoration of service. Where water service is disconnected or a flow restriction device has been installed as authorized in this section, normal service shall be restored upon correction of the condition or activity and payment of the reconnection charge and penalties. The reconnection charge shall include all costs associated with disconnecting and reconnecting the service or installing and removing the flow restricting device. Restoration of normal service shall be performed during the hours of 8:00 a.m. to 4:00 p.m. on regular working days.

(Ord. No. 1442, § 7, 2-25-92)

Sec. 82-128. - Water rationing.

(a) Phases established. This section establishes four water rationing phases to be implemented in the case of an emergency water shortage or water supply shortage. The four phases are progressively more stringent water conservation measures which include additional mandatory water use restrictions.

Phase	Water Shortage	Target Water Savings
I	Minor shortage	10%
II	Moderate shortage	25%
III	Serious shortage	35%
IV	Critical shortage	50%

(b) Emergency water shortage response. The city water superintendent or a designated representative may invoke emergency water shortage response restrictions when a major failure occurs, whether temporary or permanent, in the supply, the water quality, the distribution lines or the reservoirs of the city's water system.

(c) Water rationing phases. Based on the severity of the water shortage, the city council shall direct the city manager, the water superintendent or a designated representative to implement the provisions of this division. Phases I, II, III and IV shall be implemented and shall continue as voluntary use reduction phases with additional mandatory water use restrictions as long as the target water savings are achieved. The level of water use reduction achieved shall be monitored through monthly or weekly, depending on the severity of the rationing, systemwide production amounts compared to 1988/89 fiscal year production amounts. Any time the conservation goals are not achieved, the appropriate phase shall be implemented as a mandatory use reduction. The level of water use reduction achieved shall be monitored through weekly systemwide production amounts compared to 1988/89 fiscal year production amounts.

(1) Phase I, target water savings ten percent. When normal operating production drops by ten percent during the highest production time of the year (May 15 through October 15) or the water level in the underground aquifer, as measured above the pumps in the wells, drops by an average of 25 feet, the city council may activate by resolution a voluntary or mandatory use reduction program to achieve a ten percent savings in the overall water use as follows:

a. All single-family residential accounts (single-family detached units and individually metered mobile homes) shall be allocated their 1990/91 district average adjusted to achieve a ten percent reduction in the single-family category, but in no case shall consumers be asked to reduce their consumption to less than 2,000 cubic feet per bimonthly billing period per service. Annually, there are currently 205 (or 2.7 percent) single-family accounts that fall into this minimum category.

b. All other accounts (multifamily, apartment complexes, commercial, irrigation and mobile home parks on a single water meter) shall be allotted their historic consumption during the 1990/91 fiscal year less ten percent, but in no case shall consumers be asked to reduce their consumption to less than 2,000 cubic feet per bimonthly billing period. All other accounts without historic consumption shall be allotted 2,000 cubic feet per bimonthly billing period per service. Annually, there are 34 (or 0.7 percent) non-single-family accounts that fall into this minimum category.

c. Additional mandatory water use restrictions are as follows:

1. Restaurants, cafes, cafeterias or other public places where food is sold shall serve water to customers only upon request.

2. Additional water shall not be allowed for new landscaping or expansion of existing facilities unless low water use landscape designs and efficient irrigation systems are used.

(2) Phase II, target water savings 25 percent. When normal operating production drops by 25 percent during the highest production time of the year (May 15 through October 15) or the water level in the underground aquifer, as measured above the pumps in the wells, drops by an average of 50 feet, the city council may activate by resolution a voluntary or mandatory use reduction program to achieve a 25 percent savings in the overall water use as follows:

a. All single-family residential accounts (single-family detached units and individually metered mobile homes) shall be allocated their 1990/91 district average adjusted to achieve a 25 percent reduction in the single-family category, but in no case shall consumers be asked to reduce their consumption to less than 2,000 cubic feet per bimonthly billing period per service. Annually, there are currently 205 (or 2.7 percent) single-family accounts that fall into this minimum category.

b. All other accounts (multifamily, apartment complexes, commercial accounts, irrigation and mobile home parks on a single water meter) shall be allotted their historic consumption during the 1990/91 fiscal year less 25 percent, but in no case shall consumers be asked to reduce their consumption to less than 2,000 cubic feet per bimonthly billing period. All other accounts without historic consumption shall be allotted 2,000 cubic feet per bimonthly billing period per service. Annually, there are 34 (or 0.7 percent) non-single-family accounts that fall into this minimum category.

c. Additional mandatory water use restrictions include the mandatory water use restrictions included in phase I, and the following items:

1. Commercial carwash businesses must recycle their water.

2. Car washing is prohibited except with a bucket or container not exceeding a three-gallon capacity. Hoses for rinsing must be equipped with a positive shutoff nozzle.

3. No water shall be used for fire drills.

4. Irrigation of ornamental landscaping and turf with potable water is limited to no more than two days per week. Landscape irrigation is prohibited between 6:00 a.m. and 6:00 p.m. except for performing regular maintenance checks and repairs, watering golf course greens and tees, using a hand-held hose equipped with a positive shutoff nozzle, using a hand-held bucket of five gallons in capacity or less, or watering with a drip irrigation system. Watering between 6:00 a.m. and 6:00 p.m. may be allowed if freezing temperatures prevent irrigation at night.

(3) Phase III, target water savings 35 percent. When normal operating production drops by 35 percent during the highest production time of the year (May 15 through October 15) or the water level in the underground aquifer, as measured above the pumps in the wells, drops by an average of 60 feet, the city council may activate by resolution a voluntary or mandatory use reduction program to achieve a 35 percent savings in the overall water use as follows:

a. All single-family residential accounts (single-family detached units and individually metered mobile homes) shall be allocated their 1990/91 district average adjusted to achieve a 35 percent reduction in the single-family category, but in no case shall consumers be asked to reduce their consumption to less than 2,000 cubic feet per bimonthly billing period per service. Annually, there are currently 205 (or 2.7 percent) single-family accounts that fail into this minimum category.

b. All other accounts (multifamily, apartment complexes, commercial accounts and mobile home parks on a single water meter) shall be allotted their historic consumption during the 1990/91 fiscal year less 35 percent, but in no case shall consumers be asked to reduce their consumption to less than 2,000 cubic feet per bimonthly billing period. All other accounts without historic consumption shall be allotted 2,000 cubic feet per bimonthly billing period per service. Annually, there are 34 (or 0.7 percent) non-single-family accounts that fall into this minimum category.

c. Additional mandatory water use restrictions include the mandatory water use restrictions included in phase I and phase II, and the following items:

1. No water is to be used for filling of new pools.

2. Operation of decorative fountains is prohibited unless water is recycled.

3. Water shall not be used to clean, fill or maintain levels in decorative fountains, ponds or artificial lakes.

(4) Phase IV, target water savings 50 percent. When normal operating production drops by 50 percent during the highest production time of the year (May 15 through October 15) or the water level in the underground aquifer, as measured above the pumps in the wells, drops by an average of 70 feet, the city council may activate by resolution a voluntary or mandatory use reduction program to achieve a 50 percent savings in the overall water use as follows:

a. All single-family residential accounts (single-family detached units and individually metered mobile homes) shall be allocated their 1990/91 district average adjusted to achieve a 50 percent reduction in the single-family category, but in no case shall consumers be asked to reduce their consumption to less than 2,000 cubic feet per bimonthly billing period per service. Annually, there are currently 205 (or 2.7 percent) single-family accounts that fall into this minimum category.

b. All other accounts (multifamily, apartment complexes, commercial accounts and mobile home parks on a single water meter) shall be allotted their historic consumption during 1990/91 fiscal year less 50 percent, but in no case shall consumers be asked to reduce their consumption to less than 2,000 cubic feet per bimonthly billing period. All other accounts without historic consumption shall be allotted 2,000 cubic feet per bimonthly billing period per service. Annually, there are 34 (or 0.7 percent) non-single-family accounts that fall into this minimum category.

c. Additional mandatory water use restrictions include the mandatory water use restrictions included in phase I, phase II and phase III, and the following item: no installation of new turf.

(Ord. No. 1442, § 8, 2-25-92; Ord. No. 1894, § 2, 1-27-15)

Sec. 82-129. - Appeals and variances.

(a) Appeal process. Any customer who requests an adjustment to his billing allotment shall have a right to the appeal process. A written appeal request form must be completed and filed with the city clerk. All appeal requests shall be reviewed by city staff. Any appeal request that is denied by staff shall automatically be forwarded to the water conservation commission for review. Any allotment adjustment shall start with the appealed billing period.

(b) General variance criteria. No relief shall be granted unless the customer demonstrates maximum practical water reduction, including the installation of low flow showerheads and water conserving aerators on all faucets and the repair of all leaks. The city water superintendent or his designated representative may require a water audit.

(c) Residential variance criteria. A variance may be granted to provide relief to a residential customer that reflects extraordinary water needs, such as:

(1) Irrigation of new plantings, when their installation was required prior to adoption of mandatory water use restrictions.

(2) Previous conservation.

(3) Medical reasons.

(4) Abatement of health or safety hazards.

(d) Nonresidential variance criteria. A variance may be granted to provide relief to a nonresidential customer to reflect changes in circumstances which have occurred subsequent to the base period, such as:

(1) Irrigation of new plantings, when their installation was required prior to adoption of mandatory water use restrictions.

(2) Increased number of employees.

(3) Production of new products which require process water.

(4) Customers without historic water consumption during the base period.

(5) Increase in business.

(6) Abatement of health or safety hazards.

(Ord. No. 1442, § 9, 2-25-92)

Sec. 82-130. - Incentive tiered water rates.

The current tiered water rates shall be increased to create an incentive rate structure to achieve the required reduction in consumption. The incentive rates will depend on the current mandatory rationing phase of the conservation plan. Consistent with various published studies on the relationship between water rates and consumption, the incentive water rate will call for a minimum ten percent rate increase for every five percent of desired decrease in water consumption. Any customer who exceeds his water allotment during the various phases of mandatory water rationing will be billed at a new incentive water rate structure. The entire water consumption for that period will be calculated using the new incentive rates.

(Ord. No. 1442, § 10, 2-25-92)

Sec. 82-131. - Restoration of water service.

Where water service is disconnected or a flow restriction device has been installed, as authorized in this division, normal water service shall be restored upon correction of the condition or activity and payment of the reconnection charge and penalties. The reconnection charge shall include all costs associated with disconnecting and reconnecting the service or installing and removing the flow restricting device. Restoration of normal service shall be performed during the hours of 8:00 a.m. to 4:00 p.m. on regular working days.

(Ord. No. 1442, § 11, 2-25-92)

Sec. 82-132. - Maintenance of public health and safety.

Nothing contained in this division shall be construed to require the city to curtail the supply of water to any customer when, in the discretion of the city water superintendent, such water is required by that customer to maintain an adequate level of public health and safety.

(Ord. No. 1442, § 12, 2-25-92)

Sec. 82-133. - Rights of city; disposition of fees.

The rights of the city under this division shall be cumulative to any other rights of the city to discontinue service. All monies collected by the city pursuant to this division shall be deposited in the city water fund.

(Ord. No. 1442, § 13, 2-25-92)

Sec. 82-134. - Analysis of fiscal impact.

City staff will prepare an analysis of the effect of water conservation plan on the revenues and expenditures of the urban water supplier. The incentive rates structure is adopted to overcome those impacts. The analysis will be submitted to the department of water resources as part of the city's water shortage contingency plan.

(Ord. No. 1442, § 14, 2-25-92)

Secs. 82-135—82-160. - Reserved.

Appendix M

AWWA Water Audit Worksheet

AWWA Free Water Audit Software:
Reporting Worksheet

WAS v5.0
American Water Works Association

? Click to access definition
+ Click to add a comment

Water Audit Report for: City of Hemet
Reporting Year: 2015 (1/2015 - 12/2015)

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the

All volumes to be entered as: ACRE-FEET PER YEAR

To select the correct data grading for each input, determine the highest grade where

Master Meter and Supply Error Adjustments

WATER SUPPLIED

<---------- Enter grading in column 'E' and 'J' ---------->

				Pcnt:	Value:	
Volume from own sources:	8	3,749.000	acre-ft/yr			acre-ft/yr
Water imported:	8	1.000	acre-ft/yr			acre-ft/yr
Water exported:	8	0.000	acre-ft/yr			acre-ft/yr
WATER SUPPLIED:		**3,750.000**	acre-ft/yr			

Enter negative % or value for under-registration
Enter positive % or value for over-registration

AUTHORIZED CONSUMPTION

Click here: ? for help using option buttons below

			Pcnt:	Value:	
Billed metered:	5	3,516.400	acre-ft/yr		
Billed unmetered:		0.000	acre-ft/yr		
Unbilled metered:		0.000	acre-ft/yr		
Unbilled unmetered:		46.875	acre-ft/yr	1.25%		acre-ft/yr

Default option selected for Unbilled unmetered - a grading of 5 is applied but not displayed

Use buttons to select percentage of water supplied **OR** value

AUTHORIZED CONSUMPTION:		**3,563.275**	acre-ft/yr
WATER LOSSES (Water Supplied - Authorized Consumption)		**186.725**	acre-ft/yr

Apparent Losses

			Pcnt:	Value:	
Unauthorized consumption:		9.375	0.25%		acre-ft/yr

Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

Customer metering inaccuracies:		0.000	acre-ft/yr		acre-ft/yr
Systematic data handling errors:		8.791	acre-ft/yr	0.25%	acre-ft/yr

Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed

Apparent Losses:	**18.166**	acre-ft/yr

Real Losses (Current Annual Real Losses or CARL)

Real Losses = Water Losses - Apparent Losses:	**168.559**	acre-ft/yr
WATER LOSSES:	**186.725**	acre-ft/yr

NON-REVENUE WATER

NON-REVENUE WATER:	**233.600**	acre-ft/yr

= Water Losses + Unbilled Metered + Unbilled Unmetered

SYSTEM DATA

Length of mains:		miles	
Number of active AND inactive service connections:	9,304		
Service connection density:		conn./mile main	
Are customer meters typically located at the curbstop or property line?			
Average length of customer service line:		ft	(length of service line, beyond the property boundary, that is the responsibility of the utility)
Average operating pressure:		psi	

COST DATA

Total annual cost of operating water system:		$/Year	
Customer retail unit cost (applied to Apparent Losses):			
Variable production cost (applied to Real Losses):		$/acre-ft	☐ Use Customer Retail Unit Cost to value real losses

WATER AUDIT DATA VALIDITY SCORE:

Add a grading value for 8 parameter(s) to enable an audit score to be calculated

PRIORITY AREAS FOR ATTENTION:

Based on the information provided, audit accuracy can be improved by addressing the following components:

1: Customer metering inaccuracies
2: Total annual cost of operating water system
3: Customer retail unit cost (applied to Apparent Losses)

AWWA Free Water Audit Software: Water Balance

WAS v5.0

American Water Works Association.

Water Audit Report for:	City of Hemet	
Reporting Year:	2015	1/2015 - 12/2015
Data Validity Score:	N/A*	* Confirm Units and Data Grading are Complete

		Water Exported 0.000	Billed Water Exported			Revenue Water 0.000
Own Sources (Adjusted for known errors) 3,749.000	System Input 3,750.000	Water Supplied 3,750.000	Authorized Consumption 3,563.275	Billed Authorized Consumption 3,516.400	Billed Metered Consumption (water exported is removed) 3,516.400	Revenue Water 3,516.400
					Billed Unmetered Consumption 0.000	
				Unbilled Authorized Consumption 46.875	Unbilled Metered Consumption 0.000	Non-Revenue Water (NRW) 233.600
					Unbilled Unmetered Consumption 46.875	
			Water Losses 186.725	Apparent Losses 18.166	Unauthorized Consumption 9.375	
					Customer Metering Inaccuracies 0.000	
					Systematic Data Handling Errors 8.791	
Water Imported 1.000				Real Losses 168.559	Leakage on Transmission and/or Distribution Mains Not broken down	
					Leakage and Overflows at Utility's Storage Tanks Not broken down	
					Leakage on Service Connections Not broken down	

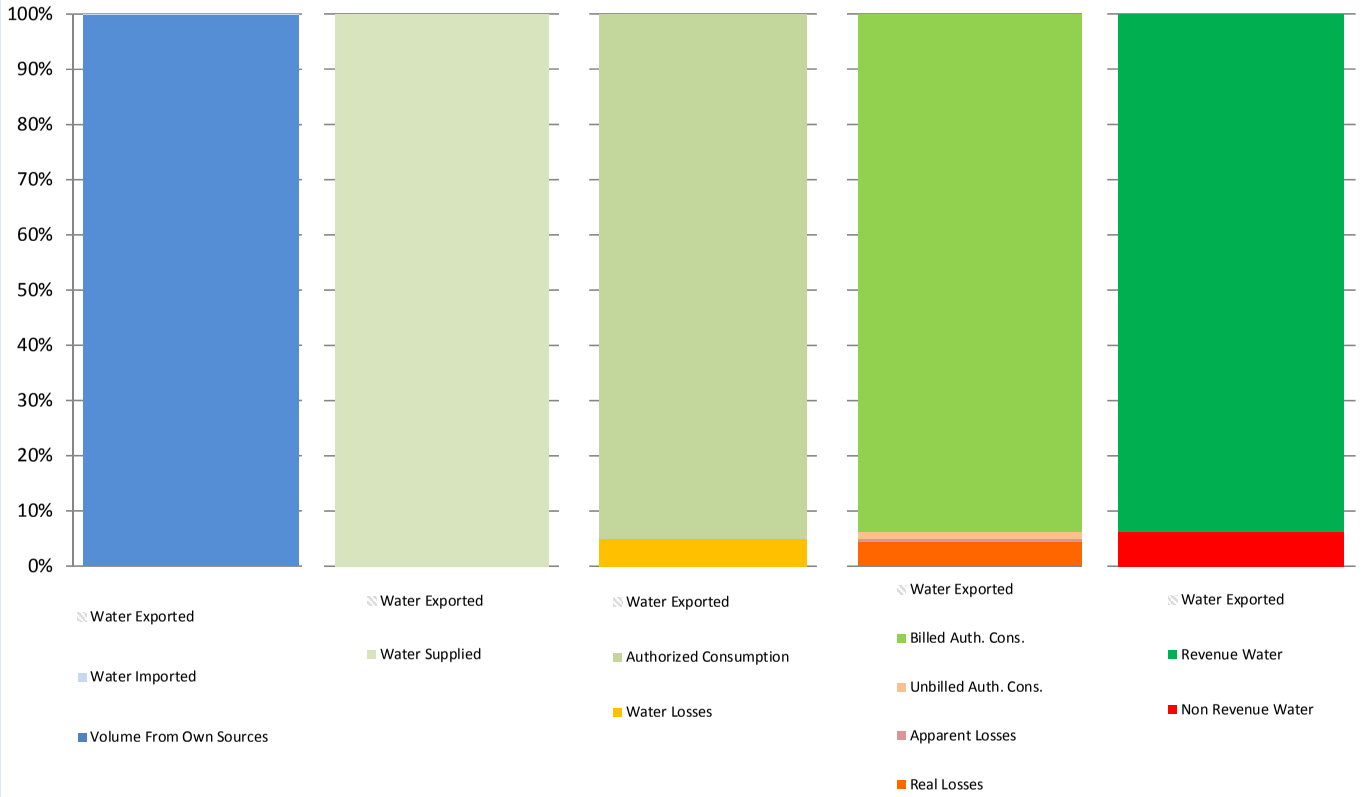
AWWA Free Water Audit Software:
Dashboard

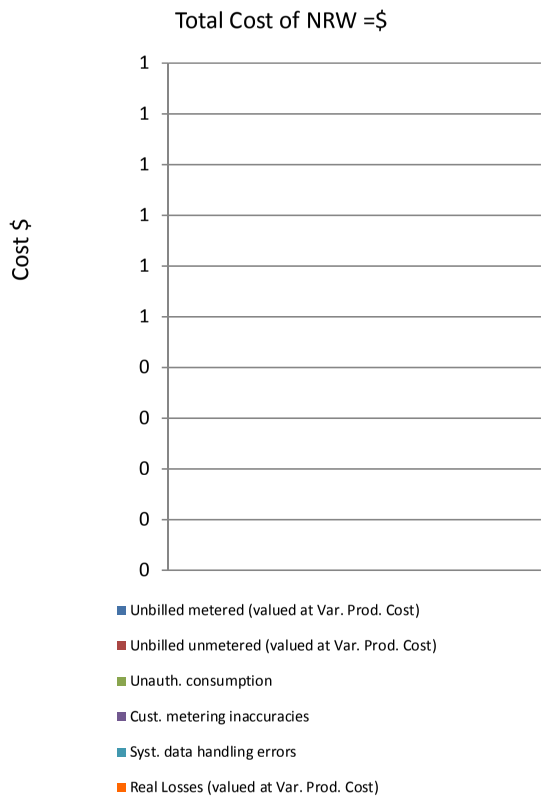
WAS v5.0
American Water Works Association.

The graphic below is a visual representation of the Water Balance with bar heights propotional to the volume of the audit components

Water Audit Report for: **City of Hemet**
Reporting Year: **2015** **1/2015 - 12/2015**
Data Validity Score: **N/A*** *** Confirm Units and Data Grading are Complete**

○ Show me the VOLUME of Non-Revenue Water
◉ Show me the COST of Non-Revenue Water





Appendix N

Documentation on Compliance with SWRCB Resolution 2015-0032

August 31, 2015

VIA ELECTRONIC AND CERTIFIED MAIL NO. 7015 0920 0001 4893 7561

Ms. Kristen Jensen
Public Works Director
City of Hemet
3777 Industrial Avenue
Hemet, CA 92543
KJensen@cityofhemet.org

SUBJECT: ENFORCEMENT ACTION: ISSUANCE OF CONSERVATION ORDER FOR FAILURE TO MEET WATER CONSERVATION STANDARD

Ms. Jensen,

On May 5, 2015, the State Water Resources Control Board (State Water Board) adopted Resolution 2015-0032, an Emergency Regulation for Statewide Urban Water Conservation (Emergency Regulation) pursuant to Water Code section 1058.5. The Emergency Regulation became effective on May 18, 2015. Among other things, the Emergency Regulation is designed to achieve the 25 percent statewide potable water usage reduction through February 2016 ordered by Governor Brown in his April 1, 2015 executive order.

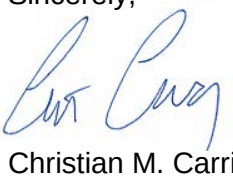
The Emergency Regulation requires each urban water supplier to "reduce its total potable water production by the percentage identified as its conservation standard." California Code Regulations, title 23, section 865(c)(1).

After reviewing your response to the State Water Board's Information Order, and meeting with representatives from the City of Hemet (the City) on August 6, 2015, it has become clear that the City is not likely to meets its conservation target of 32% by February, 2016. Subsequently, further enforcement action is warranted.

I am issuing you a Conservation Order under section 866(a)(1). Please see the enclosed order. The State Water Board finds that a tiered rate structure that implements a drought penalty is an effective way to encourage water conservation. Information on conservation water pricing can be found at: http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/pricing/.

If you have questions, please contact Dr. Matthew Buffleben at (916) 341-5891, or by email at Matthew.Buffleben@waterboards.ca.gov.

Sincerely,



Christian M. Carrigan, Director
Office of Enforcement

Enclosure

cc: *(via email only)*

Dr. Matthew Buffleben, Chief
Special Investigations Unit
Matthew.Buffleben@waterboards.ca.gov

City of Hemet

3777 INDUSTRIAL AVE • HEMET, CALIFORNIA 92544 • (951)765-3710

From the Office
of the
Public Works Director
Kristen Jensen

Delivered Via Electronic Mail

October 13, 2015

State Water Resources Control Board
Attn: Dr. Matthew S. Buffleben, PE
Chief, Special Investigations Unit
Office of Enforcement

Re: SEPTEMBER 2015 RESPONSE TO CITY OF HEMET CONSERVATION ORDER

Dear Dr. Buffleben,

Below please find our responses for the month of September to the Conservation Order issued to the City of Hemet on August 31, 2015.

Per the Conservation Order the City of Hemet shall:

(A) **Immediately and diligently pursue a rate study in compliance with California Proposition 218, with the goal of implementing a water rate structure that encourages conservation as well as discouraging waste or overuse. The district shall initiate the public notice period of the proposed change in rate structure by November 1, 2015.**

On August 7, 2015, the City of Hemet mailed a Notice to Property Owners of Public Hearing on Proposed Water and Sewer Rate Adjustments to a total of 14,711 owners and rate payers. The Public Hearing/Protest Meeting was held on September 22, 2015 and the rates were adopted by Council. New water rates are in effect as of October 1, 2015, thereby meeting compliance with this item.

(B) **Determine, within the next thirty (30) days, the feasibility of implementing a "drought surcharge" on the existing rate structure, and if such surcharge is infeasible, include a "drought surcharge" as part of the rate study described in (A).**

The proposed water rates from item (A) include "Drought" rates and "Non-drought" rates. With adoption of the rates, drought rates are in effect as of October 1, 2015, thereby meeting compliance with this item.

(C) Continue current outreach programs and expand programs that focus on increasing conservation awareness for commercial, industrial, and institutional customers.

The City ordered and received table top "tents" for distribution to restaurants in our service area. We also ordered and received the same style tents for distribution to the hotels in our service area. The materials did not arrive until very late in the month. Distribution information for both will be reported with the month of October status updates. Customers will also receive a copy of their current usage by day, and will be provided with a flyer encouraging them to participate in support of the program, as well as take advantage of rebates and conservation programs offered by the City and other agencies.

The City is also expanding its current programs as it looks to fund the cost of conservation program plays in two area elementary schools. We feel education at this level will help instill good habits in school age children that they will then take home and share with their families.

(D) Identify within thirty (30) days the highest water users in its service area including, but not limited to, the local schools, and golf courses within the City and conduct specialized outreach to that group of water users, inviting them to a meeting held by the City where additional conservation measures that those users may implement will be discussed.

During the month of September, City staff identified the top 20 commercial accounts and the top 20 residential accounts that makeup the highest potable water users in our system. The commercial accounts consist of the following:

- 1 golf course
- 2 commercial restaurants
- 3 local parks
- 6 School sites

Staff met with each of the commercial customers, audited their usage, performed a site walk, reviewed current irrigation restrictions, and recommended changes that would need to be made to meet the restrictions. The commercial customers were given two weeks to comply, and will be revisited the first the week of October for compliance. One fine was issued as the customer has been noticed for violations previously. They continue to work towards compliance.

(E) Increase outreach efforts towards the City's commercial, industrial, and institutional customers by offering at least seven (7) water use audits per month. The City shall maintain communications with audited customers to monitor implementation of audit recommendations.

City staff will performed 12 commercial audits during the month of September and has established regular follow up meetings with all customers who are audited. During the month of October, the City intends to add visits to the remaining 8 highest commercial water users as identified in item "D". In addition, delivery of industry specific (restaurant, hotel) conservation materials will be distributed to at least 20 additional commercial customers.

(F) The City shall continue to administer its annual exchange program for high-efficiency toilets and other indoor water efficient devices. Because the City does not administer its own rebate programs, the City shall incorporate other agency rebate offerings into its outreach and advertising materials.

The City will continue its toilet exchange program which is annually scheduled for the public in late April or early May. In addition, the City advertises year round about the available free conservation kits for indoor and outdoor use provided by the City. The City also continues to promote rebate offerings from the following agencies on the City's website and on City-distributed educational materials:

Eastern Municipal Water District
Metropolitan Water District
State of California

In October, the City Water Department invested in a conservation banner that will be displayed over HWY74 in the months of December and January and at City facilities and events during the rest of the year. For the month of October, the banner will be displayed at the Hemet Public Library, which receives up to 1,500 visitors per day.

(G) Implement a leak-detection and monitoring program immediately. The City shall determine what volume of non-revenue water is lost to leaks every year within sixty (60) days, and reduce this volume to an amount consistent with industry best practices.

The City currently uses radio read Master Meters which have the capability to perform data logs that can show water usage on an hourly, daily, and weekly basis. Our City Customer Service Representatives perform high and low water usage logs to monitor and inform the City's water customers of excessive or abnormal usage. For calendar year 2014, less than 4% of water produced was unaccounted for. This was far below the acceptable industry "leak or loss" rate of rate of 10%. Alerts from the radio read meters allow the City to address leak issues before they becoming long term problem.

For the month of September, 415 leak alerts were identified. Each was individually researched, and a total of 64 door tags were left notifying customers of possible leaks on the private side of the meter.

(H) Seek volunteer or part-time employee dedicated to enforcing the City's outdoor water restrictions within thirty (30) days.

During the month of September 248 existing employee hours were dedicated to enforcement of conservation restrictions and water waste education. Staff has identified a potential volunteer to assist the Water Department with conservation efforts, who is anticipated to start in the month of October. In addition, on October 13, 2015, City Council will consider the addition of a full time Customer Service Representative position to dedicate to water waste enforcement.

(I) Hire or allocate at least one (1) new or existing full-time employee that will be dedicated to supporting the City's water conservation program within ninety (90) days.

On October 13, 2015, City Council will consider the addition of one Accounting Technician III position which will be dedicated to the administrative tasks related to implementing our conservation programs. This position will allow current staff additional time performing field education and enforcement.

The City is happy to provide documentation or examples for any items referred to in our responses above. We look forward to continuing the betterment of our conservation efforts throughout the City, and ultimately hope to meet the 32% conservation target assigned to our district.

Feel free to contact me at kjensen@cityofhemet.org or by phone at 951-765-3823.

Respectfully,

Kristen Jensen
Public Works Director
City of Hemet.

STATE OF CALIFORNIA
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
STATE WATER RESOURCES CONTROL BOARD

OFFICE OF ENFORCEMENT

CONSERVATION ORDER

In the Matter of Urban Water Conservation by
The City of Hemet

1. On January 17, 2014, Governor Edmund G. Brown Jr. (Governor Brown) issued Proclamation No. 1-17-2014 (Proclamation), declaring a State of Emergency to exist in California under the Emergency Services Act due to severe drought conditions. The Proclamation, among other things, called on all Californians to reduce their water usage by 20 percent.

2. On April 25, 2014, Governor Brown issued a Proclamation of a Continued State of Emergency due to drought conditions, based on the need to strengthen the state's ability to manage water and habitat effectively in drought conditions.

3. On April 1, 2015, Governor Brown issued Executive Order B-29-15 (Executive Order) to strengthen the state's ability to manage water and habitat effectively in drought conditions. The Executive Order calls on all Californians to redouble their efforts to conserve water, and directs the State Water Resources Control Board (State Water Board) to impose restrictions on urban water suppliers to achieve a statewide 25 percent reduction in potable urban water usage through February 2016. The Executive Order further requires commercial industrial and institutional users to implement water efficiency measures, prohibits irrigation with potable water of ornamental turf in public street medians and prohibits irrigation with potable water outside newly constructed homes and buildings that is not delivered by drip or microspray systems.

4. On May 5, 2015, the State Water Board adopted Resolution 2015-0032, an Emergency Regulation for Statewide Urban Water Conservation (Emergency Regulation) pursuant to Water Code section 1058.5. The Emergency Regulation adds a new section to title 23 of the California Code of Regulations intended to safeguard urban water supplies in the event of continued drought, minimize the potential for waste and unreasonable use of water, and achieve the 25 percent statewide potable water usage reduction ordered by Governor Brown in the Executive Order. The Emergency Regulation was approved by the Office of Administrative Law and became effective on May 18, 2015.

5. The Emergency Regulation requires each urban water supplier to "reduce its total potable water production by the percentage identified as its conservation standard." California Code Regulations, title 23, section 865(c)(1).

6. Section 865(b)(2) requires urban water suppliers to prepare and submit a monitoring report to the State Water Board by the 15th of each month detailing the total amount of potable water produced compared to the amount produced in the same calendar month in 2013.

7. Section 866(a) allows the Executive Director of the State Water board, or the Executive Director's designee, to issue Conservation Orders requiring additional actions by the supplier to come into compliance with its conservation standard. Section 866(b) allows the Executive Director of the State Water Board, or the Executive Director's designee, to issue orders requesting information from the supplier concerning water production, water use and/or water conservation. State Water Board Executive Director Thomas Howard has delegated authority under Sections 866(a) and (b)

to State Water Board Chief Deputy Director Caren Trgovcich, who in turn has delegated these authorities to Director of the State Water Board's Office of Enforcement Cris Carrigan.

8. The drought conditions that formed the bases for the Executive Order and Emergency Regulations continue to exist and will likely continue to exist for the foreseeable future.

9. The City of Hemet (the City) has a conservation target, pursuant to Section 865(c), of 32% savings over its water usage in 2013. The City is cumulatively 9.2% behind its conservation standard.

10. On Jul 29, 2015 the State Water Board Office of Enforcement issued an Information Order pursuant to its authority outlined in Section 866(b) of the Emergency Regulations, to determine what actions the City had taken to comply with its conservation standard.

11. On August 6, 2015 the City met with State Water Board Staff from the Office of Enforcement to review its response to the Information Order, discuss its water conservation program, and identify areas of potential water use savings.

12. The circumstances described above indicate that the City has not met its monthly conservation standard, and is not on track to meet the standard through February 2016.

13. To help ensure that the City meets its conservation target of 32% by February 2016, the State Water Board mandates that the City take the actions described below.

14. Recipients of conservation orders issued pursuant to Section 866(a) may petition the State Water Board for reconsideration. (Water Code § 1122; 23 CCR §§ 768 et seq., 866(a)(2).)

IT IS HEREBY ORDERED:

1. This Order is effective on the date shown below. All submittal requirements are based on the effective date of this Order.

2. The City shall:

   (A) Immediately and diligently pursue a rate study in compliance with California Proposition 218, with the goal of implementing a water rate structure that encourages conservation as well as discouraging waste or overuse. The district shall initiate the public notice period of the proposed change in rate structure by November 1, 2015.

   (B) Determine, within the next thirty (30) days, the feasibility of implementing a "drought surcharge" on the existing rate structure, and if such surcharge is infeasible, include a "drought surcharge" as part of the rate study described in (A).

   (C) Continue current outreach programs and expand programs that focus on increasing conservation awareness for commercial, industrial, and institutional customers.

   (D) Identify within thirty (30) days the highest water users in its service area including, but not limited to, the local schools, and golf courses within the City and conduct specialized outreach to that group of water users, inviting them to a meeting held by the City where additional conservation measures that those users may implement will be discussed.

   (E) Increase outreach efforts towards the City's commercial, industrial, and institutional customers by offering at least seven (7) water use audits per month. The City shall maintain communications with audited customers to monitor implementation of audit recommendations.

(F) The City shall continue to administer its annual exchange program for high-efficiency toilets and other indoor water efficient devices. Because the City does not administer its own rebate programs, the City shall incorporate other agency rebate offerings into its outreach and advertising materials.

(G) Implement a leak-detection and monitoring program immediately. The City shall determine what volume of non-revenue water is lost to leaks every year within sixty (60) days, and reduce this volume to an amount consistent with industry best practices.

(H) Seek volunteer or part-time employee dedicated to enforcing the City's outdoor water restrictions within thirty (30) days.

(I) Hire or allocate at least one (1) new or existing full-time employee that will be dedicated to supporting the City's water conservation program within ninety (90) days.

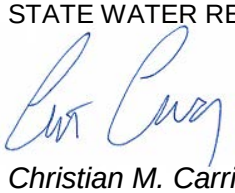
3. The City shall continue to report the monthly conservation data required for all water suppliers pursuant to Section 865(b)(2) of the Emergency Regulation.

4. The City shall develop and submit a report by September 15, 2015, and every month afterward until February 15, 2016, detailing the previous month's efforts to comply with each of the mandates listed above in Section 2, pursuant to Section 866(b) of the Emergency Regulation. The report shall be submitted via e-mail to Matthew Buffleben, at Matthew.Buffleben@waterboards.ca.gov no later than the 15th of the month, for every month within the reporting period.

5. The City is required to take the actions mandated above. Failure to comply with this Order subjects the party to enforcement action including, but not limited to, civil liability of up to $500 per day for each day the violation continues pursuant to Water Code section 1058.5.

6. Reservation of Enforcement Authority and Discretion: Nothing in this Order is intended to or shall be construed to limit or preclude the State Water Board from exercising its authority under any statute, regulation, ordinance, or other law, including, but not limited to, the authority to bring enforcement against water suppliers who in violation of Water Code section 1052, the Emergency Regulations or any applicable law.

STATE WATER RESOURCES CONTROL BOARD



Christian M. Carrigan, Director
Office of Enforcement

Dated: August 31, 2015

City of Hemet

Delivered Via Electronic Mail

November 16, 2015

State Water Resources Control Board
Attn: Dr. Matthew S. Buffleben, PE
Chief, Special Investigations Unit
Office of Enforcement

Re: OCTOBER 2015 RESPONSE TO CITY OF HEMET CONSERVATION ORDER

Dear Dr. Buffleben,

The City is happy to report that we have made additional progress in the month of October, moving toward compliance with the Conservation Order tasks. We had encouraging numbers with the residential gallons per person per day under 60 gallons! We struggle to hit the 32% conservation tier goal, but were successful in achieving 25% reduction in what proved to be a very hot October. We appreciate your help, guidance, and genuine consideration of our circumstances as we work to maintain compliance with the State Order.

Per the Conservation Order the City of Hemet shall:

(A) **Immediately and diligently pursue a rate study in compliance with California Proposition 218, with the goal of implementing a water rate structure that encourages conservation as well as discouraging waste or overuse. The district shall initiate the public notice period of the proposed change in rate structure by November 1, 2015.**

New water rates were implemented as of October 1, 2015. The new rate structure includes both "Drought" and "Non-drought" rates that may enacted by the City Council as circumstances deem necessary. With the implementation of rates of October 1st, the City Council chose to immediately place "drought" rates into effect. At this point, we believe the City has met full compliance with this task.

Beyond simply meeting compliance with the task above, and in an effort to further long term conservation behavior, the City is now working to transition to allocation budget based, or efficiency, rates for water and sewer. The City has obtained a grant from the Santa Ana Watershed Protection Authority in the amount of $215,000 to assist in the transition, which is expected to be completed by the end of 2016. This type of rate structure will allow customers to clearly understand, and monitor, their individualized usage behavior for indoor, outdoor, and excess use levels. The rate structure has been studied in detail, and has been proven to result in increased

conservation by customers. The allocation method will be applied to all customer classes upon its implementation.

(B) Determine, within the next thirty (30) days, the feasibility of implementing a "drought surcharge"on the existing rate structure, and if such surcharge is infeasible, include a "drought surcharge" as part of the rate study described in (A).

The proposed water rates from item (A) include "Drought" rates and "Non-drought" rates. With adoption of the rates, drought rates are in effect as of October 1, 2015, thereby meeting compliance with this item.

(C) Continue current outreach programs and expand programs that focus on increasing conservation awareness for commercial, industrial, and institutional customers.

The City was not able to distribute the table top "tents" for restaurants and hotels as we had hoped to do in October. Due to strained staffing levels, and our focus on completing audits of top water user commercial accounts, the deliveries did not happen. We will put additional effort into distribution of these materials during the months of November and December. Additional staff, addressed in tasks H and I below, will greatly increase our ability to perform these types of tasks.

In an effort to expand conservation programs, the City offered to fund the cost of conservation program plays in two area elementary schools. Unfortunately, another water district had already supported the plays at one school, and the other declined to participate. Instead, we are now looking to hold an educational event at the public library during the weeks of Christmas break when elementary schools are out of class and able to attend.

(D) Identify within thirty (30) days the highest water users in its service area including, but not limited to, the local schools, and golf courses within the City and conduct specialized outreach to that group of water users, inviting them to a meeting held by the City where additional conservation measures that those users may implement will be discussed.

During the month of September, City staff identified the top 20 commercial accounts, and the top 20 residential account,s that makeup the highest potable water users in our system. These include a golf course, a number of restaurants, parks, schools and apartments. Staff met with 12 of the commercial customers in September and met with the remaining 8 in the top 20 list in October. Staff continues to follow up with all of the identified account to offer additional assistance, support additional education efforts, and work to ultimately increase awareness of ways to improve conservation at their locations.

One commercial customer fine was issued in October as the customer had been previously noticed for violations, and was found in violation again. The customer continues to work towards compliance and City staff have been following up with them regularly.

(E) Increase outreach efforts towards the City's commercial, industrial, and institutional customers by offering at least seven (7) water use audits per

month. The City shall maintain communications with audited customers to monitor implementation of audit recommendations.

Staff performed 8 commercial audits in the month of October. This, added to the 12 conducted in September, completes onsite review of our top 20 commercial highest water user accounts. Each of these accounts were provided with hourly/daily usage logs from each of their meters, informed of apparent leaks, notified about areas of potential run off/water waste, and given recommendations on irrigation timing to come into compliance with current City Water Conservation Plan requirements. All but two of the 20 audits conducted have had full follow up by staff to monitor their implementation of recommendations. So far, the customers are maintaining changes implemented as a result of their location reviews. A copy of the current template used when reviewing a site is included as "Attachment" A.

Staff is working with the Finance Department to include billing language inserts to all commercial customers offering water conservation audits for their locations. We will continue to track the users previously audited to insure that recommendations remain in place at the 20 commercial sites.

The City also recently identified its top 20 residential water users. Staff is currently working to bolster residential conservation program materials in an effort to provide informational material that is targeted to these customers. Offering "residential audits" is simply not something that our staffing has the capacity to address. There are also legal considerations that would need to be taken into account with public employees entering private property. We are looking to refine our documentation to provide a positive, educational, approach to conservation for our highest single family residential users.

(F) The City shall continue to administer its annual exchange program for high-efficiency toilets and other indoor water efficient devices. Because the City does not administer its own rebate programs, the City shall incorporate other agency rebate offerings into its outreach and advertising materials.

As previously reported, the City will continue its current, annual, toilet exchange program in late April or early May. Advertising continues year round about the available free conservation kits for indoor and outdoor use provided by the City. The City also continues to promote rebate offerings from the following agencies on the City's website and on City-distributed educational materials:

Eastern Municipal Water District
Metropolitan Water District
State of California

The City of Hemet Water Department conservation banner will be displayed over HWY74 in the months of December, 2015, and January, June, July, and September 2016. The banner, which encourages the public to save water, will also be displayed at City facilities and events during the rest of the year. For the month of October, the banner was displayed at the Hemet Public Library. The City has also incorporated conservation tips on social media sites, such as facebook, to provide information on simple ways to reduce water use. Both the banner and the social media outreach

efforts point customers to visit our website. Upon visiting the site, customers are provided with rebate information from all available sources.

(G) Implement a leak-detection and monitoring program immediately. The City shall determine what volume of non-revenue water is lost to leaks every year within sixty (60) days, and reduce this volume to an amount consistent with industry best practices.

Background:
The City currently uses radio read Master Meters which have the capability to perform data logs that can show water usage on an hourly, daily, and weekly basis. Our City Customer Service Representatives perform high and low water usage logs to monitor and inform the City's water customers of excessive or abnormal usage. For calendar year 2014, less than 4% of water produced was unaccounted for. This was far below the acceptable industry "leak or loss" rate of rate of 10%. Alerts from the radio read meters allow the City to address leak issues before they becoming long term problem.

For the month of October, a report identifying 288 possible leak alerts was created via the radio read meter system, resulting in a total of 44 door tags/customer contacts being made regarding possible private side leaks. Leak alert notifications occur when water flow is tracked at a high/steady use on a property for more than a one hour period.

When leak alert notifications are received, they are researched by staff, who determine which notifications truly indicate a potential leak. They do this by revisiting customer locations to confirm a possible leak, or verify with the customer that the notification was triggered for another reason. If a leak is found to be on the City's side of the meter, staff makes immediate repair to the problem. For any large repair needs, the Water Superintendent is immediately notified and a construction crew is scheduled to perform the repair. For those notifications that indicate leaks on the private side of the meter, field staff attempt to make immediate contact to review the notification with the customer. Door hangers are left for customers that are not home at the time of staff revisit. When those customers contact us, we return to review the notice and determine if further action is needed. Any true leaks that are not fixed will trigger additional alerts in the next scheduled meter reading, and the same process will be followed.

(H) Seek volunteer or part-time employee dedicated to enforcing the City's outdoor water restrictions within thirty (30) days.

We were initially optimistic about being able to obtain volunteer help for conservation enforcement efforts in the field, however we are finding it difficult to find volunteers able to dedicate the time required for this effort. Also, given the recent rate increase, and fact that enforcement is not always met with open arms by water wasters,staff felt it made more sense for trained employees to be performing the enforcement of outdoor water restrictions. Staff will continue to seek volunteers that may take on small administrative support tasks in the program. During the month of October, existing staff members were, once again, instructed to dedicate additional hours to

enforcement of conservation restrictions and water waste education. A total of 194 employee hours were dedicated to the effort.

Progress was made on October 13, 2015, as the City Council authorized staff to hire one additional full time Customer Service Representative to assist with conservation enforcement and education. Because the City was in the middle of a recruitment to fill an existing vacancy, we look to expedite filling of the additional position from the eligibility list resulting from that recruitment. Currently we are track to fill both positions in December. We will continue to dedicate as much time as possible to enforcement with existing staff.

(l) Hire or allocate at least one (1) new or existing full-time employee that will be dedicated to supporting the City's water conservation program within ninety (90) days.

On October 13, 2015, City Council approved the addition of one Accounting Technician III position which will be dedicated to the administrative tasks related to implementing our conservation programs. This position will allow current field staff to dedicate more time to performing field education and enforcement, rather than splitting time between field and administrative tasks.

This position was previously cut from FY14/15 Operating Budgets. With the position now reinstated, staff hopes to have the vacancy refilled by the middle of December. We are working to recall the employee previously laid off from the position, prior to commencing a new recruitment. Should the need for a full recruitment occur, and given the lead time for processing, background checks, and transition time, there is possibility the position may not be filled until January.

The City is happy to provide documentation or examples for any items referred to in our responses above. Again, we appreciate the open lines of communication with the State Board and look forward to progressing to full compliance with this order.

If you have any questions or comments, feel free to contact me at kjensen@cityofhemet.org or by phone at 951-765-3823.

Respectfully,

Kristen Jensen
Public Works Director
City of Hemet.

CITY OF HEMET WATER DEPARTMENT

The City of Hemet is being required by the State to cut 32% of water used compared to the same time in 2013. Therefore The City of Hemet is conducting water audits of its top users. Your business was flagged in the process. This is a reminder that we are in a severe drought and would like to help you conserve water in any way possible. We are requiring every business cut their usage by 32% ASAP. The City of Hemet has a water conservation ordinance in place. To view water use restrictions online please visit cityofhemet.org or type in the following link http://www.cityofhemet.org/index.aspx?nid=656. For your convenience a copy will be included in this letter. Below are a few websites with great advice on how to conserve water and how to receive possible rebates to convert to different drought tolerant landscapes and water saving appliances.

http://www.bewaterwise.com/rebates01.html

http://www.energystar.gov/rebate-finder

http://socalwatersmart.com/

If there is anything you feel The City of Hemet can help you with please feel free to let us know. Below you can find the contact information of The City of Hemet's Water Quality and Conservation Specialist. Thank You.

Mathew Osborn

mosborn@cityofhemet.org (951)765-3876

Attachment "A"

MANDATORY WATER USE RESTRICTIONS NOW IN EFFECT

Due to the ongoing drought conditions in the state of California, the State Water Resources Control Board (SWRCB) has issued Emergency Order 2014-0718-01E, which mandates water suppliers enact certain water restrictions. On January 27, 2015, as directed by the SWRCB, the Hemet City Council approved Resolution No. 15-004 activating Phase 2 of the City's Water Conservation Plan, which implements a water use reduction program to achieve a 25% reduction in overall water use. The ordinance became **effective immediately**.

Here is a summary of the restrictions that are now in place:

- **No customer shall cause or permit any water to run to waste.**
- Irrigation of ornamental landscaping and turf with potable water is **limited to no more than two days per week**.
- Landscape watering is **prohibited between 6:00am and 6:00pm** except for performing regular maintenance checks and repairs.
- **No water shall be allowed to run off landscaped areas** or supersaturate these areas.
- **Additional water shall not be allowed for new landscaping** or expansion of existing facilities unless low water use landscape designs and efficient irrigation systems are used.
- **No water shall be used** to hose or wash sidewalks, walkways, driveways, parking areas or other paved surfaces.
- Hoses used for any purpose shall be equipped with a **positive shutoff device.**
- **Water leaks must be repaired** as soon as discovered, and shall not be allowed to continue.
- **Car washing** is prohibited except with a bucket or container not exceeding a three-gallon capacity. Hoses for rinsing must be equipped with a positive shutoff nozzle.
- **No water shall be used to fill or maintain levels in decorative fountains**, ponds, lakes, and similar structures unless such structure is equipped with a water recycling system.
- Restaurants, cafes, cafeterias or other public places were food is sold shall **serve water to customers only upon request.**

CITY OF HEMET OUTDOOR AUDIT

DATE:_____ CONTACT NAME / POSITION:_____

	OVERWATERING (WATER RUNNING OFF LANDSCAPED AREAS)
	DAYS WATERING (CITY ORDINANCE ALLOWS 2 DAYS PER WEEK)
	WATERING TIMES (CITY ORDINANCE ALLOWS WATERING BETWEEN 6PM & 6AM ONLY)
	WATER EFFICIENT IRRIGATION SYSTEM (THE RIGHT SPRINKLERS FOR THE AREA, USE OF DRIP SYSTEMS)
	POSITIVE SHUT OFF VALVE (IF USING A HOSE THERE MUST BE A POSITIVE SHUTOFF SPRAY NOZZLE ATTACHED)
	OTHER:_____

NOTES

CORRECTIVE ACTIONS:

	ADJUST SPRINKLER TIMER
	ADJUST SPRINKLER HEADS AND OR DRIP SYSTEM
	REPLACE OR REPAIR SPRINKLER HEADS
	ATTACH POSITIVE SHUTOFF SPRAY NOZZLE
	OTHER:_____

NOTES

On _____ The City of Hemet will re-evaluate water use efficiency measures to be assure you are in compliance.

City of Hemet

3777 INDUSTRIAL AVE • HEMET, CALIFORNIA 92544 • (951)765-3710

From the Office
of the
Public Works Director
Kristen Jensen

Delivered Via Electronic Mail

December 15, 2015

State Water Resources Control Board
Attn: Dr. Matthew S. Buffleben, PE
Chief, Special Investigations Unit
Office of Enforcement

Re: NOVEMBER 2015 RESPONSE TO CITY OF HEMET CONSERVATION ORDER

Dear Dr. Buffleben,

Below please find responses to the City's task order for the month of November, 2015. As always, we are happy to discuss any items you have questions about.

Per the Conservation Order the City of Hemet shall:

(A) **Immediately and diligently pursue a rate study in compliance with California Proposition 218, with the goal of implementing a water rate structure that encourages conservation as well as discouraging waste or overuse. The district shall initiate the public notice period of the proposed change in rate structure by November 1, 2015.**

New water rates were implemented as of October 1, 2015. The new rate structure includes both "Drought" and "Non-drought" rates that may enacted by the City Council as circumstances deem necessary. With the implementation of rates of October 1st, the City Council chose to immediately place "drought" rates into effect. At this point, we believe the City has met full compliance with this task.

The City continues to work toward ultimately transitioning to an allocation budget based, or efficiency, rates for water and sewer. There are a number of major tasks that need to be completed, beginning with an overhaul of our current financial software. The current financial system used city-wide will have to be updated to a newer platform that can support the formula, functions and fields required for allocation based rates, while also continuing to meet the functional needs of all City departments outside of the water utility. We have been discussing this with Tyler Systems, our current software provider, and believe that we have a viable option for upgrade. Because the upgrade will require an integrated approach that incorporates all governmental functions, transition is expected to add an additional six months to our initial efficiency rate implementation time frame. We will continue to update the SWRCB on our progress.

(B) Determine, within the next thirty (30) days, the feasibility of implementing a "drought surcharge"on the existing rate structure, and if such surcharge is infeasible, include a "drought surcharge" as part of the rate study described in (A).

The proposed water rates from item (A) include "Drought" rates and "Non-drought" rates. With adoption of the rates, drought rates are in effect as of October 1, 2015, thereby meeting compliance with this item.

(C) Continue current outreach programs and expand programs that focus on increasing conservation awareness for commercial, industrial, and institutional customers.

Staff availability remained limited and distribution of marketing materials was again pushed to be completed between December and January in order to meet other operational priorities.

(D) Identify within thirty (30) days the highest water users in its service area including, but not limited to, the local schools, and golf courses within the City and conduct specialized outreach to that group of water users, inviting them to a meeting held by the City where additional conservation measures that those users may implement will be discussed.

City staff identified the highest water users in its service area in the month of September. We have continued to monitor those identified on a monthly basis. Additional information on audit quantities, customer follow up and conservation results of identifying the highest water users are included in the task answers below.

(E) Increase outreach efforts towards the City's commercial, industrial, and institutional customers by offering at least seven (7) water use audits per month. The City shall maintain communications with audited customers to monitor implementation of audit recommendations.

Beginning in November, each commercial customer bill contains language offering water conservation audits, and provides City contact information to request an audit. Because there are multiple billing cycles, the message will cycle through all commercial customers by the end of December. Staff completed the final two audits for the original top 20 commercial customers identified for audit in previous months. Follow up on all previous audits has shown that recommendations given by the City have been maintained by customers to a large degree. A recent comparison of overall water usage among those 20 customers shows an average reduction of 15-16% in water usage for a two month saving of approximately 4,992,788 gallons of waters!

(F) The City shall continue to administer its annual exchange program for high-efficiency toilets and other indoor water efficient devices. Because the City does not administer its own rebate programs, the City shall incorporate other agency rebate offerings into its outreach and advertising materials.

As previously reported, the City will continue its current, annual, toilet exchange program in late April or early May. Advertising continues year round about the available free conservation kits for indoor and outdoor use provided by the City. In the month of December, all residential customers will receive an FAQ sheet regarding monthly billing that will also encourage them to contact the City to request

free conservation kits. We also continue to promote rebate offerings from other agencies on the City's website.

The City of Hemet Water Department conservation banner was displayed at the Hemet Public Library during the entire month of November. It is still scheduled for display on HWY74 in the months of December, 2015, and January, June, July, and September, 2016.

(G) Implement a leak-detection and monitoring program immediately. The City shall determine what volume of non-revenue water is lost to leaks every year within sixty (60) days, and reduce this volume to an amount consistent with industry best practices.

Background:
The City currently uses radio read Master Meters which have the capability to perform data logs that can show water usage on an hourly, daily, and weekly basis. Our City Customer Service Representatives perform high and low water usage logs to monitor and inform the City's water customers of excessive or abnormal usage. For calendar year 2014, less than 4% of water produced was unaccounted for. This was far below the acceptable industry "leak or loss" rate of rate of 10%. Alerts from the radio read meters allow the City to address leak issues before they becoming long term problem.

For the month of November, a report identifying 93 possible leak alerts was created via the radio read meter system, resulting in a total of 18 door tags/customer contacts being made regarding possible private side leaks.

To ensure that we are collecting the most accurate information possible about customer usage, we are working to aggressively replace meter equipment that we know is either out of warranty or has flagged as a "no-read". Additionally, we are moving to a monthly billing cycle for all residential customers beginning March 2016. Monthly reading of meters will not only provide a more accurate water usage picture for the City, it will also allow customers to evaluate and adjust usage on a more frequent basis, and alert both customers and the City to potential leaks sooner than with bi-monthly billing.

(H) Seek volunteer or part-time employee dedicated to enforcing the City's outdoor water restrictions within thirty (30) days.

The City remains unable to establish volunteer help related to enforcement. However, during the month of November, at total of 130 existing staff member hours were dedicated to conservation enforcement. This number is lower than previous months due to vacation and holiday schedules.

On November 18, the City interviewed candidates to fill one vacant, as well as one additional, full time Customer Service Representative position. The additional position was added by City Council to be dedicated to conservation enforcement and education. The new staff conservation support member will start effective Monday, December 7, 2015.

(l) Hire or allocate at least one (1) new or existing full-time employee that will be dedicated to supporting the City's water conservation program within ninety (90) days.

On October 2015, City Council approved the addition of one Accounting Technician III position which will be dedicated to the administrative tasks related to implementing our conservation programs. Initially the City anticipated that a former employee would return to fill the position, but the offer was declined. The City will ultimately have to recruit for this position, but is working to fast that recruitment to get someone assisting with the program by the end of January.

Those are the City of Hemet Water Department conservation task order updates for the month of November, 2015. We also wanted to make you aware of our conservation numbers for November. Unfortunately, but not surprisingly, November production volumes were very similar to the production seen in November of 2013. Our conservation for the month is anticipated at around 3%. We attribute this to a number of factors:

- The benchmark year of 2013 production numbers already reflected reduced usage as a result of the City's long running conservation efforts.
- Weather during November was very similar to the same month in 2013, and very little precipitation occurred both years.
- With bi-monthly billing still in effect, many residential customers have not yet received a bill representing a full billing cycle of drought rates.
- There is very little outdoor usage in our service as lush landscapes have not existed to a large degree for years. This makes winter conservation all the more difficult, as the summer month really reflect a majority of indoor use as well.

As we have discussed multiple times in the past, our conservation tier of 32% is well above what we believe it should be due to outdated/inaccurate information provided during the tier assignment period. Had the correct values of 58-60% residential customer use and population of 29,982 been provided, our RGPD would have placed our conservation tier assignment around 20% or less. We are requesting that the SWRCB staff keep this in consideration as you evaluate our overall compliance. We are anticipating December production numbers to be equally, if not more, difficult to reduce.

We really value the opportunity for open discussion about our compliance efforts, and the understanding of what realistic expectations of conservation progress are for our small service area.

If you have any questions or comments, feel free to contact me at kjensen@cityofhemet.org or by phone at 951-765-3823.

Respectfully,

Kristen Jensen
Public Works Director
City of Hemet.

City of Hemet

3777 INDUSTRIAL AVE • HEMET, CALIFORNIA 92544 • (951)765-3710

From the Office
of the
Public Works Director
Kristen Jensen

Delivered Via Electronic Mail

January 14, 2016

State Water Resources Control Board
Attn: Dr. Matthew S. Buffleben, PE
Chief, Special Investigations Unit
Office of Enforcement

Re: DECEMBER 2015 RESPONSE TO CITY OF HEMET CONSERVATION ORDER

Dear Dr. Buffleben,

Below please find responses to the City's task order for the month of December, 2015. We are happy to report that overall conservation for the month was above 10% with residential gallons per day (RGPD) at 48 gallons per person per day, which is well below the State standard of 55 gallons per person per day.

Per the Conservation Order the City of Hemet shall:

(A) **Immediately and diligently pursue a rate study in compliance with California Proposition 218, with the goal of implementing a water rate structure that encourages conservation as well as discouraging waste or overuse. The district shall initiate the public notice period of the proposed change in rate structure by November 1, 2015.**

Task Compliance Achieved
New water rates were implemented as of October 1, 2015. The new rate structure includes both "Drought" and "Non-drought" rates that may enacted by the City Council as circumstances deem necessary. With the implementation of rates of October 1st, the City Council chose to immediately place "drought" rates into effect. At this point, we believe the City has met full compliance with this task.

The City continues to work toward transitioning to an allocation budget based, or efficiency, rates for water and sewer. On December 14, 2015, a number of City staff met with East Valley Municipal Water District (EVMWD) to review their successful transition to the rates and again insight on lessons learned. We have also obtained a proposal for the required rate study, and are currently negotiating the time line and costs with the proposing firm. We expect to have a rate study contract in place by the end of January. The City has been awarded over $215,000 from the Santa Ana Watershed Project Authority (SAWPA) to assist in offsetting costs of the transition.

Additionally, in December the City of Hemet Water Department notified its customers that water billing, which is currently bi-monthly for residential customers, will be

transitioned to monthly billing beginning in March 2016. This will not only help ease the impacts of the next rate increase (March 1, 2016) to the customers, but will provide more accurate measurement of residential usage for conservation purposes.

(B) Determine, within the next thirty (30) days, the feasibility of implementing a "drought surcharge"on the existing rate structure, and if such surcharge is infeasible, include a "drought surcharge" as part of the rate study described in (A).

Task Compliance Achieved

The proposed water rates from item (A) include "Drought" rates and "Non-drought" rates. With adoption of the rates, drought rates are in effect as of October 1, 2015, thereby meeting compliance with this item.

(C) Continue current outreach programs and expand programs that focus on increasing conservation awareness for commercial, industrial, and institutional customers.

Task Compliance Achieved/Ongoing

With the appointment of additional staff in the month of December, the City was able to distribute marketing materials in the form of conservation tents to 10 restaurants and 7 hotels in our service area. Details of the locations and number of tents provided are included in Attachment A. Due to corporate and business policies at the individual locations, some business required authorization prior to display. We will be following up in the upcoming months to encourage those that are not use the materials to do so.

(D) Identify within thirty (30) days the highest water users in its service area including, but not limited to, the local schools, and golf courses within the City and conduct specialized outreach to that group of water users, inviting them to a meeting held by the City where additional conservation measures that those users may implement will be discussed.

Task Compliance Achieved

City staff previously identified the highest water users in its service area during the month of September. Face to face meetings were conducted during September and October, and completed in November. During those meetings, the highest users were educated on the current restrictions in place, notified of water wasting issues at their sites, and provided recommendations for correction. In December, staff continued to perform monthly consumption monitoring of those identified. The accounts being monitored include all schools, one golf course, all parks and a number businesses.

(E) Increase outreach efforts towards the City's commercial, industrial, and institutional customers by offering at least seven (7) water use audits per month. The City shall maintain communications with audited customers to monitor implementation of audit recommendations.

Task Compliance Achieved/Ongoing

Beginning in November, and continued into December, every commercial customer bill contained language offering water conservation audits, and provided City contact information to request an audit. The message has now cycled through all commercial customer billings. The message will remain on billings until further notice.

Staff continues to monitor usage by all previously audited customers. As of the end of December, all audited commercial customers have maintained consumption

reductions as compared to previous year usage. No new audits were requested in the month of December. Staff continues to conduct field audits during late night and early morning hours to identify water wasting and active irrigating during rain storms.

(F) The City shall continue to administer its annual exchange program for high-efficiency toilets and other indoor water efficient devices. Because the City does not administer its own rebate programs, the City shall incorporate other agency rebate offerings into its outreach and advertising materials.

Task Compliance Achieved/Ongoing
Staff reviewed the timing of the annual toilet exchange, which normally occurs in late April or early May. In 2016, we have decided to administer the program in the month of March. This is the same month that we will be moving to monthly billing, as well as the first month of any potential extension in the State Executive Order. We also feel this will provide additional conservation opportunity well ahead of the summer months.

In the month of December, all residential customers received an FAQ sheet regarding monthly billing that included information about available conservation kits and website links to additional information. Staff received a number of calls regarding the kits and ultimately delivered kits to six residential customers. Because the billing cycles are staggered, we anticipate receiving additional calls throughout the month of January.

The City of Hemet Water Department conservation banner was displayed at the Hemet Public Library for two weeks, and displayed on HWY74 two weeks, in the months of December, 2015. Periodic display of the banner across HWY74 will continue to occur throughout 2016. The City will also continue to provide links to other agencies offering rebates via our website and marketing materials.

(G) Implement a leak-detection and monitoring program immediately. The City shall determine what volume of non-revenue water is lost to leaks every year within sixty (60) days, and reduce this volume to an amount consistent with industry best practices.

Task Compliance Achieved
Background: The City currently uses radio read Master Meters which have the capability to perform data logs that can show water usage on an hourly, daily, and weekly basis. Our City Customer Service Representatives perform high and low water usage logs to monitor and inform the City's water customers of excessive or abnormal usage. For calendar year 2014, less than 4% of water produced was unaccounted for. This was far below the acceptable industry "leak or loss" rate of rate of 10%. Alerts from the radio read meters allow the City to address leak issues before they becoming long term problem.

For the month of December, a report identifying 302 possible leak alerts was created via the radio read meter system, resulting in a total of 48 door tags/customer contacts being made to notify customers of possible private side leaks.

(H) Seek volunteer or part-time employee dedicated to enforcing the City's outdoor water restrictions within thirty (30) days.

Task Compliance Achieved

On December 7, 2015, City filled the additional, full time Customer Service Representative position that was added to the organizational structure. The additional position, which exceeds the part-time employee requirement in this task, was added by City Council to be dedicated to conservation enforcement and education. With the start of the conservation support member, the City was able to catch up on the distribution of marketing materials. This position will also serve to run the additional meter read routes that will be put in place as the City moves to monthly billing in March. We continue to cross train our new recruit so there is a full understanding of all functions of the Water Department. This knowledge will help to insure that the CSR is an informed, effective communicator to the public about the importance of conservation, and able to perform outdoor water restrictions with an educational approach.

(I) Hire or allocate at least one (1) new or existing full-time employee that will be dedicated to supporting the City's water conservation program within ninety (90) days.

Task Compliance Achieved

Recruitment for the additional Accounting Technician was delayed by the holidays, and is now expected to occur in January/February. However, the City has brought on a *full time* temporary employee to begin to assist with administrative report generation and customer account audit/review. s On October 2015, City Council approved the addition of one Accounting Technician III position which will be dedicated to the administrative tasks related to implementing our conservation programs. Initially the City anticipated that a former employee would return to fill the position, but the offer was declined. The City will ultimately have to recruit for this position, but is working to fast that recruitment to get someone assisting with the program by the end of January.

At this point, the City believes we have met compliance with all tasks required in the Conservation Order issued on August 31, 2015. We realize that Tasks C, E, and F each include elements that imply continuance of programs/offerings, and are therefore ongoing. Upon completing your review of our responses for December, 2015, we would like to discuss the need to continue future monthly reporting.

As always, we value the opportunity for open discussion about our compliance efforts, and appreciate the relationship we have built with the State Water Board team. If you have any questions or comments, feel free to contact me at kjensen@cityofhemet.org or by phone at 951-765-3823.

Respectfully,

Kristen Jensen
Public Works Director
City of Hemet.

Attachments: City of Hemet – Conservation Tents Delivery List (Attachment A)

ATTACHMENT "A"

City of Hemet - Conservation Tents - Dec 2015

BUSINESS NAME	ADDRESS	TABLE TENTS DELIVERED	HOTEL TENTS DELIVERED	DATE
Ramona Motel	1120 E. Florida Ave		10	12/16/2015
Oryz Restaurant	306 E. Florida Ave	22		12/16/2015
Los Altos Restaurant	129 N. Carmalita	38		12/16/2015
Valentinas Restaurant	828 W. Florida Ave	25		12/16/2015
America's Best Value	800 W. Florida Ave		100	12/16/2015
Jimenez Mexican Food	1032 W. Florida Ave	50		12/16/2015
Royal Inn Suites	1220 W. Florida Ave		75	12/16/2015
Coachlight Motel	1640 W. Florida Ave		50	12/16/2015
Angies Diner	1770 W. Florida Ave	25		12/16/2015
Chilis Restaurant	2100 W. Florida Ave	25		12/16/2015
Polly's Pie Restaurant	2204 W. Florida Ave	25		12/16/2015
Diamond Inn	2700 W. Florida Ave		25	12/16/2015
Budget Motel	2780 W. Florida Ave		25	12/16/2015
La Fogata Restaurant	2940 W. Florida Ave	25		12/16/2015
Steer N Stein	3104 W. Florida Ave	50		12/16/2015
Sweet Baby Janes	124 S. Harvard	25		12/16/2015
Travel Lodge	2625 W. Florida Ave		100	12/16/2015
TOTALS		***310***	***385***	

City of Hemet

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From the Office
of the
Public Works Director
Kristen Jensen

Delivered Via Electronic Mail

February 15, 2016

State Water Resources Control Board
Attn: Dr. Matthew S. Buffleben, PE
Chief, Special Investigations Unit
Office of Enforcement

Re: JANUARY 2016 RESPONSE TO CITY OF HEMET CONSERVATION ORDER

Dear Dr. Buffleben,

The City is pleased to provide responses to the City's task order for the month of January, 2016. We are happy to report that overall conservation for the month was above 18% with residential gallons per day (RGPD) remaining consistent at just under 48 gallons per person per day. This continues to be well below the State's standard of 55 gallons per person per day.

Per the Conservation Order the City of Hemet shall:

(A) **Immediately and diligently pursue a rate study in compliance with California Proposition 218, with the goal of implementing a water rate structure that encourages conservation as well as discouraging waste or overuse. The district shall initiate the public notice period of the proposed change in rate structure by November 1, 2015.**

Task Compliance Achieved
New water rates were implemented as of October 1, 2015. The new rate structure includes both "Drought" and "Non-drought" rates that may enacted by the City Council as circumstances deem necessary. With the implementation of rates of October 1st, the City Council chose to immediately place "drought" rates into effect. At this point, we believe the City has met full compliance with this task.

Efficiency Rate Project Update:
During the month of January the City continued to negotiate and refine the rate proposal received for transitioning to allocated budget based water rates. We initially expected to have the contract completed in January. At this point the contract will be in place by the end of February, with an implementation goal of January 1, 2017 for the new rate structure.

(B) Determine, within the next thirty (30) days, the feasibility of implementing a "drought surcharge" on the existing rate structure, and if such surcharge is infeasible, include a "drought surcharge" as part of the rate study described in (A).

Task Compliance Achieved
The proposed water rates from item (A) include "Drought" rates and "Non-drought" rates. With adoption of the rates, drought rates are in effect as of October 1, 2015, thereby meeting compliance with this item.

(C) Continue current outreach programs and expand programs that focus on increasing conservation awareness for commercial, industrial, and institutional customers.

Task Compliance Achieved/Ongoing
Staff continues to reach out to the commercial, industrial and institutional customer base through daily contact with customes. This includes site visits to educate customers on potential water wasting issues observed during the daily course of work.

On January 25, 2016, the City of Hemet participated in "The Taste of Valley" community event where local businesses and restaurants come together with the public to provide "a taste" of what the community offers. At the three hour long event, staff distributed over 200 indoor and outdoor conservation kits, distributed hundreds of conservation information flyers, and educated the general public about ways to be a responsible water user at work and at home. We also had the opportunity to speak with many other venue participants about ways to conserve at their local businesses, and provided contact information for future questions or assistance.

(D) Identify within thirty (30) days the highest water users in its service area including, but not limited to, the local schools, and golf courses within the City and conduct specialized outreach to that group of water users, inviting them to a meeting held by the City where additional conservation measures that those users may implement will be discussed.

Task Compliance Achieved
City staff previously identified the highest water users in its service area during the month of September. Face to face meetings were conducted during September and October, and completed in November. During those meetings, the highest users were educated on the current restrictions in place, notified of water wasting issues at their sites, and provided recommendations for correction. Through December and January, staff has continued to perform monthly consumption monitoring of previously identified high consumption customers. We are pleased to report that all of the customers have been diligent in maintaining their potable usage reductions.

(E) Increase outreach efforts towards the City's commercial, industrial, and institutional customers by offering at least seven (7) water use audits per month. The City shall maintain communications with audited customers to monitor implementation of audit recommendations.

Task Compliance Achieved/Ongoing
Beginning in November, every commercial customer bill contained language offering water conservation audits, and provided City contact information to request an audit. The message has cycled through all commercial customer billings. The message will remain on billings until further notice.

Staff continues to monitor usage by all previously audited customers with positive results. No new audits were requested in the month of January, despite the continued billing notification of their availability. As previously reported, and as part of our normal conservation enforcement efforts, staff continues to conduct field audits during

late night and early morning hours to identify water wasting and active irrigating during rain storms.

(F) The City shall continue to administer its annual exchange program for high-efficiency toilets and other indoor water efficient devices. Because the City does not administer its own rebate programs, the City shall incorporate other agency rebate offerings into its outreach and advertising materials.

Task Compliance Achieved/Ongoing
The City has scheduled its annual low flow toilet exchange for Saturday, April 9, 2016. 200 toilets will be offered at no cost to City of Hemet Water customers to replace less efficient models.

The City of Hemet Water Department conservation banner was displayed for two weeks during the month of January, 2016. As previously reported, it is the City's intention to display the banner across HWY74 multiple times throughout 2016. The City continues to provide links to other agencies offering rebates via our website and marketing materials.

(G) Implement a leak-detection and monitoring program immediately. The City shall determine what volume of non-revenue water is lost to leaks every year within sixty (60) days, and reduce this volume to an amount consistent with industry best practices.

Task Compliance Achieved
Background: The City currently uses radio read Master Meters which have the capability to perform data logs that can show water usage on an hourly, daily, and weekly basis. Our City Customer Service Representatives perform high and low water usage logs to monitor and inform the City's water customers of excessive or abnormal usage. For calendar year 2014, less than 4% of water produced was unaccounted for. This was far below the acceptable industry "leak or loss" rate of rate of 10%. Alerts from the radio read meters allow the City to address leak issues before they becoming long term problem.

For the month of January, a report identifying 232 possible leak alerts was created via the radio read meter system, resulting in a total of 31 door tags/customer contacts being made to notify customers of possible private side leaks.

(H) Seek volunteer or part-time employee dedicated to enforcing the City's outdoor water restrictions within thirty (30) days.

Task Compliance Achieved
On December 7, 2015, City filled the additional, full time Customer Service Representative position that was added to the organizational structure. The additional position, which exceeds the part-time employee requirement in this task, was added by City Council to be dedicated to conservation enforcement and education.

(l) Hire or allocate at least one (1) new or existing full-time employee that will be dedicated to supporting the City's water conservation program within ninety (90) days.

Task Compliance Achieved

On October 2015, City Council approved the addition of one Accounting Technician I/II position which will be dedicated to the administrative tasks related to implementing our conservation programs. Recruitment for the additional Accounting Technician was posted February 1, 2016, and the recruitment closes February 22, 2016. The position is anticipated to be filled in April due to lead time for interviews, background check processing and employer notices. The City secured a *full time* temporary employee in December to assist with administrative report generation and customer account audit/review through the hiring process timeframe.

With the SWRCB's February 2, 2016, adoption of the revised emergency regulation, the City of Hemet Water District conservation tier standard was adjusted and reduced from 32% to 16%. We appreciate the Board taking into account the corrected 2014 population and residential usage data submitted to make this adjustment. We believe that this is a much more reasonable tier and is more reflective of a feasible conservation goal for our service area and customers. The City is further reviewing the CIMIS climate zone assignment and growth adjustment for our district, and will submit for further adjustments according to the Board's deadlines.

Given the adjusted 16% compliance standard, we anticipate our cumulative reduction in potable water use beginning June 1, 2015, through January 31, 2016, to be above 17%. A review of our previous conservation efforts, as measured against the adjusted 16% conservation tier, puts the City of Hemet *in compliance with the cumulative conservation goal since June 1, 2015.* We realize that the Board understands the circumstances that resulted in the initial tier assignment of 32%, and how the challenges to meet that number ultimately led to our district being viewed as non-compliant. With the reporting information provided over the last eight months, and the current status of our compliance with the 16% conservation standard, we would like discus the need to continue future monthly reporting with the SWCRB.

We look forward to talking with you soon. If you have any questions or comments, feel free to contact me at kjensen@cityofhemet.org or by phone at 951-765-3823.

Respectfully,

Kristen Jensen
Public Works Director
City of Hemet

City of Hemet

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From the Office
of the
Public Works Director
Kristen Jensen

Delivered Via Electronic Mail

March 14, 2016

State Water Resources Control Board
Attn: Dr. Matthew S. Buffleben, PE
Chief, Special Investigations Unit
Office of Enforcement

Re: FEBRUARY 2016 RESPONSE TO CITY OF HEMET CONSERVATION ORDER

Dear Dr. Buffleben,

The City is pleased to provide the following responses to the City's task order for the month of February, 2016.

Per the Conservation Order the City of Hemet shall:

(A) **Immediately and diligently pursue a rate study in compliance with California Proposition 218, with the goal of implementing a water rate structure that encourages conservation as well as discouraging waste or overuse. The district shall initiate the public notice period of the proposed change in rate structure by November 1, 2015.**

Task Compliance Achieved
New water rates were implemented as of October 1, 2015. The new rate structure includes both "Drought" and "Non-drought" rates that may enacted by the City Council as circumstances deem necessary. With the implementation of rates of October 1st, the City Council chose to immediately place "drought" rates into effect. On March 1, 2016, a second phase of rate increases will take effect. At this point, we believe the City has met full compliance with this task.

(B) Determine, within the next thirty (30) days, the feasibility of implementing a "drought surcharge" on the existing rate structure, and if such surcharge is infeasible, include a "drought surcharge" as part of the rate study described in (A).

Task Compliance Achieved
The proposed water rates from item (A) include "Drought" rates and "Non-drought" rates. With adoption of the rates, drought rates are in effect as of October 1, 2015, and were increased as of March 1, 2016, thereby meeting compliance with this item.

(C) Continue current outreach programs and expand programs that focus on increasing conservation awareness for commercial, industrial, and institutional customers.

Task Compliance Achieved/Ongoing
Staff continues to reach out to the commercial, industrial and institutional customer base through daily contact with customers. This includes site visits to educate customers on potential water wasting issues observed during the daily course of work.

In the month of February, staff delivered conservation marketing material in the form of 100 table top tents to one additional hotel and four additional restaurants in our service area.

(D) Identify within thirty (30) days the highest water users in its service area including, but not limited to, the local schools, and golf courses within the City and conduct specialized outreach to that group of water users, inviting them to a meeting held by the City where additional conservation measures that those users may implement will be discussed.

Task Compliance Achieved
City staff previously identified the highest water users in its service area during the month of September. Face to face meetings were conducted during September and October, and completed in November. During those meetings, the highest users were educated on the current restrictions in place, notified of water wasting issues at their sites, and provided recommendations for correction. Monthly consumption monitoring continues for any customer previously identified as high consumption water users. Through continued customer contact and ongoing education, we are finding that these customers are maintaining conservation efforts previously implemented.

(E) Increase outreach efforts towards the City's commercial, industrial, and institutional customers by offering at least seven (7) water use audits per month. The City shall maintain communications with audited customers to monitor implementation of audit recommendations.

Task Compliance Achieved/Ongoing
Beginning in November, every commercial customer bill contained language offering water conservation audits, and provided City contact information to request an audit. The message has cycled through all commercial customer billings. The message will remain on billings until further notice.

Staff did not receive any requests for water conservation audits in the month of February. Audit availability continues to be promoted on our monthly billings.

(F) The City shall continue to administer its annual exchange program for high-efficiency toilets and other indoor water efficient devices. Because the City does not administer its own rebate programs, the City shall incorporate other agency rebate offerings into its outreach and advertising materials.

Task Compliance Achieved/Ongoing
The City has scheduled its annual low flow toilet exchange for Saturday, April 2, 2016. 250 toilets will be offered at no cost to City of Hemet Water customers to replace less efficient models. A press release will appear in two local newspapers prior to the event and an informational flyer continues to rotate to the front page of our website, as well as, actively post on City of Hemet social media sites.

The City of Hemet Water Department conservation banner was displayed for one week during the month of February, and will be displayed at the library during any unreserved openings in the upcoming months.

(G) Implement a leak-detection and monitoring program immediately. The City shall determine what volume of non-revenue water is lost to leaks every year within sixty (60) days, and reduce this volume to an amount consistent with industry best practices.

Task Compliance Achieved

Background: The City currently uses radio read Master Meters which have the capability to perform data logs that can show water usage on an hourly, daily, and weekly basis. Our City Customer Service Representatives perform high and low water usage logs to monitor and inform the City's water customers of excessive or abnormal usage. For calendar year 2014, less than 4% of water produced was unaccounted for. In calendar year 2015, that number was just under 5%. This was far below the acceptable industry "leak or loss" rate of 10%. Alerts from the radio read meters allow the City to address leak issues before they becoming long term problem.

For the month of February, a report identifying 110 possible leak alerts was created via the radio read meter system, resulting in a total of 37 door tags/customer contacts being made to notify customers of possible private side leaks.

(H) Seek volunteer or part-time employee dedicated to enforcing the City's outdoor water restrictions within thirty (30) days.

Task Compliance Achieved

On December 7, 2015, City filled the additional, full time Customer Service Representative position that was added to the organizational structure. The additional position, which exceeds the part-time employee requirement in this task, was added by City Council to be dedicated to conservation enforcement and education.

(I) Hire or allocate at least one (1) new or existing full-time employee that will be dedicated to supporting the City's water conservation program within ninety (90) days.

Task Compliance Achieved

On October 2015, City Council approved the addition of one Accounting Technician I/II position which will be dedicated to the administrative tasks related to implementing our conservation programs. Recruitment for the additional Accounting Technician was posted February 1, 2016, and the recruitment closes February 22, 2016. The position is anticipated to be filled in April due to lead time for interviews, background check processing and employer notices. The City secured a *full time* temporary employee in December to assist with administrative report generation and customer account audit/review through the hiring process timeframe.

With the SWRCB's February 2, 2016, adoption of the revised emergency regulation, the City of Hemet Water District conservation tier standard was adjusted and reduced from 32% to 16%. An additional 2% reduction adjustment was made after a calculation error was corrected for all

Climate Zone 9 districts. The City of Hemet Water Department conservation tier goal after the correction is 14%. Staff has submitted for further climate adjustment based on local CIMIS information for our area.

The City only experienced a 1% reduction in water production as compared to February 2013. This was due to unseasonably high temperatures throughout most of the month (average of 75 degrees when normal is 66 degrees), and less rainfall than experienced in previous years. However, the residential gallons per day (RGPD) number of 52 remains below the State of California standard of 55 gallons per person per day.

Those are our updates for now. If you have any questions or comments, feel free to contact me at kjensen@cityofhemet.org or by phone at 951-765-3823.

Respectfully,

Kristen Jensen
Public Works Director
City of Hemet

City of Hemet

3777 INDUSTRIAL AVE • HEMET, CALIFORNIA 92544 • (951)765-3710

From the Office
of the
Public Works Director
Kristen Jensen

Delivered Via Electronic Mail

April 14, 2016

State Water Resources Control Board
Attn: Dr. Matthew S. Buffleben, PE
Chief, Special Investigations Unit
Office of Enforcement

Re: MARCH 2016 RESPONSE TO CITY OF HEMET CONSERVATION ORDER

Dear Dr. Buffleben,

The City is pleased to provide the following responses to the City's task order for the month of March, 2016. Per the Conservation Order the City of Hemet shall:

(A) **Immediately and diligently pursue a rate study in compliance with California Proposition 218, with the goal of implementing a water rate structure that encourages conservation as well as discouraging waste or overuse. The district shall initiate the public notice period of the proposed change in rate structure by November 1, 2015.**

Task Compliance Achieved
New water rates were implemented as of October 1, 2015. The new rate structure includes both "Drought" and "Non-drought" rates that may enacted by the City Council as circumstances deem necessary. With the implementation of rates of October 1st, the City Council chose to immediately place "drought" rates into effect. On March 1, 2016, the second phase of five planned rate increases took effect. As previously reported, we believe the City has met full compliance with this task.

In March, 2013, the City contracted with Bartle Wells Associates to begin to review the feasibility of moving to allocation-based budgeted water rates. Staff anticipates kick-off meetings in April with both the rate consultant firm and representatives from other agencies that are experienced in implementation of this type of rate structure.

(B) Determine, within the next thirty (30) days, the feasibility of implementing a "drought surcharge" on the existing rate structure, and if such surcharge is infeasible, include a "drought surcharge" as part of the rate study described in (A).

Task Compliance Achieved
The proposed water rates from item (A) include "Drought" rates and "Non-drought" rates. With adoption of the rates, drought rates are in effect as of October 1, 2015, and were increased as of March 1, 2016, thereby meeting compliance with this item.

(C) Continue current outreach programs and expand programs that focus on increasing conservation awareness for commercial, industrial, and institutional customers.

Task Compliance Achieved/Ongoing
Staff continues to reach out to the commercial, industrial and institutional customer base through daily contact with customers. This includes site visits to educate customers on potential water wasting issues observed during the daily course of work. At this point, staff has saturated our service area with water conservation marketing materials, distributing them to all hotels and restaurants. In March, staff began revisiting businesses that previously received marketing materials to encourage those that are still not displaying them to do so.

Staff has also continued to revisit institutional customers, maintaining a partnered approach in keeping conservation at school sites a top priority and working to identify any increases in use quickly for adjustment. Additional turf management, conservation training and certification opportunities are being researched for possible staff attendance. This will allow staff to stay current in irrigation application techniques and provide more thorough and customized recommendations for maintaining implemented conservation efforts.

(D) Identify within thirty (30) days the highest water users in its service area including, but not limited to, the local schools, and golf courses within the City and conduct specialized outreach to that group of water users, inviting them to a meeting held by the City where additional conservation measures that those users may implement will be discussed.

Task Compliance Achieved
City staff previously identified the highest water users in its service area during the month of September. Face to face meetings were conducted during September and October, and completed in November. During those meetings, the highest users were educated on the current restrictions in place, notified of water wasting issues at their sites, and provided recommendations for correction. Monthly consumption monitoring has continued for any customer previously identified as a high consumption water user. Through continued customer contact and ongoing education, we are finding that these customers are effectively maintaining conservation efforts previously implemented.

(E) Increase outreach efforts towards the City's commercial, industrial, and institutional customers by offering at least seven (7) water use audits per month. The City shall maintain communications with audited customers to monitor implementation of audit recommendations.

Task Compliance Achieved/Ongoing
Beginning in November, every commercial customer bill contained language offering water conservation audits, and provided City contact information to request an audit. The message has cycled through all commercial customer billings. The message will remain on billings until further notice. Staff did not receive any requests for water conservation audits in the month of March.

(F) The City shall continue to administer its annual exchange program for high-efficiency toilets and other indoor water efficient devices. Because the City does not administer its own rebate programs, the City shall incorporate other agency rebate offerings into its outreach and advertising materials.

Task Compliance Achieved/Ongoing
The City administered its annual low flow toilet exchange on Saturday, April 2, 2016. A total of 250 toilets were distributed to City of Hemet Water customers. In exchange, the customers receiving the low toilets are required to return their older, higher water use toilets to the City of Hemet Corporate Yard. This year, the toilets distributed were high efficiency dual flush toilets that use a maximum of 1.1 or 1.6 gallons per flush. During the event, the department exhausted the inventory of low flow toilets purchased for distribution. This has not occurred at previous events. Due to demand and continued interest, the City is currently evaluating the possibility of administering a second low flow toilet exchange event in 2016.

The City of Hemet Water Department conservation banner was displayed for displayed at the library the entire month of March.

(G) Implement a leak-detection and monitoring program immediately. The City shall determine what volume of non-revenue water is lost to leaks every year within sixty (60) days, and reduce this volume to an amount consistent with industry best practices.

Task Compliance Achieved
Background: The City currently uses radio read Master Meters which have the capability to perform data logs that can show water usage on an hourly, daily, and weekly basis. Our City Customer Service Representatives perform high and low water usage logs to monitor and inform the City's water customers of excessive or abnormal usage. For calendar year 2014, less than 4% of water produced was unaccounted for. In calendar year 2015, that number was just under 5%. This was far below the acceptable industry "leak or loss" rate of 10%. Alerts from the radio read meters allow the City to address leak issues before they becoming long term problem.

For the month of March, 2016, a report identifying 454 possible leak alerts was created via the radio read meter system, resulting in a total of 52 door tags/customer contacts being made to notify customers of possible private side leaks.

(H) Seek volunteer or part-time employee dedicated to enforcing the City's outdoor water restrictions within thirty (30) days.

Task Compliance Achieved
On December 7, 2015, City filled the additional, full time Customer Service Representative position that was added to the organizational structure. The additional position, which exceeds the part-time employee requirement in this task, was added by City Council to be dedicated to conservation enforcement and education.

(I) Hire or allocate at least one (1) new or existing full-time employee that will be dedicated to supporting the City's water conservation program within ninety (90) days.

Task Compliance Achieved

On October 2015, City Council approved the addition of one Accounting Technician I/II position which will be dedicated to the administrative tasks related to implementing our conservation programs. A recruitment for the additional Accounting Technician was administered in February, and interviews were conducted in March. As of the date of this report, a job offer has been presented to a candidate and the position is anticipated to be filled in April. The City had previously secured a *full time* temporary employee in December to assist with administrative report generation and customer account audit/review through the hiring process timeframe.

The City of Hemet Water Department conservation tier standard has been reduced from 32% to 14%. Once again, average temperatures in our area exceeded the temperatures experienced in the same month in 2013. This resulted in production of 5.08 acre feet of potable water above the baseline 2013 production volumes (287.33 AF in 2016 vs. 282.25 AF in 2013). This is the first month since the implementation of the State Executive order that the City did not experience a reduction in water production as compared to 2013. Despite this, the City remains compliant in meeting its cumulative Conservation Standard with a cumulative reduction of over 17%. The residential production for the month of March resulted in a residential gallons per day (RGPD) number of 56, which continues to remain near the State of California standard of 55 gallons per person per day.

Unfortunately, the rainfall anticipated to result from El Nino conditions failed to deliver even the average precipitation in our region. As we begin to anticipate warmer temperatures with the approach of summer, the City will be working diligently to keep conservation at the forefront with our customer base. We anticipate that monthly residential billing beginning with March billing cycles will assist in providing more frequent usage statics for our customers that may positively influence additional conservation of resources.

As always, the City of Hemet Water Department appreciates the willingness of SWRCB staff to take into consideration challenges specific to our district. If you have any questions or comments, feel free to contact me at kjensen@cityofhemet.org or by phone at 951-765-3823.

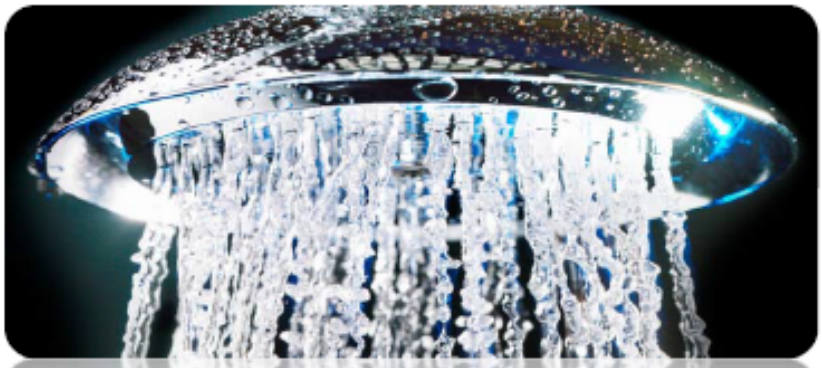
Respectfully,

Kristen Jensen
Public Works Director
City of Hemet

Appendix O

Printed Material Focusing on Public Outreach for Water Conservation

DUE TO THE SEVERE DROUGHT IN CALIFORNIA, AND RESOLUTION NO. 2014-0038 PASSED BY THE STATE WATER RESOURCES CONTROL BOARD, THE CITY OF HEMET NEEDS YOUR HELP IN CONSERVING WATER! THE CITY IS REQUESTING A VOLUNTARY 20% REDUCTION IN INDOOR AND OUTDOOR WATER USAGE. FURTHER REDUCTIONS IN WATER USE MAY BE MANDATED IF VOLUNTARY CONSERVATION EFFORTS ARE NOT SUCCESSFUL. FOLLOW THESE WATER SAVING TIPS TO HELP DO YOUR PART:



INDOORS

LAUNDRY ROOM

- Use the washing machine for full loads only – **Save 16 gallons/load**

BATHROOM

- Take five minute showers instead of ten minute showers – **Reducing five minutes will save 2.5 gallons with a low flow showerhead, 25 gallons with a standard five gallon a minute showerhead**
- Turn off water when shaving and brushing teeth – **Save 2 gallons/minute**
- Fix leaky toilets – **Save 30 to 5 gallons/day/toilet**

KITCHEN

- Fill your dishwasher instead of washing by hand and only run when full – **Save 3-8 gallons/load**
- If washing dishes by hand, don't let the water run while rinsing them – **Save 2.5 gallons/minute**
- Fix leaky faucets – **Save 15 to 20 gallons/day/faucet**

OUTDOORS

LANDSCAPE

- Reduce your watering days to twice or three times per week. Water only when lawn needs it and water in early morning or late evening when temperatures are cooler – **Save 25 gallons/each time you water**
- Check sprinklers frequently and adjust to prevent overspray and runoff. Also adjust timer according to the season and amount of rainfall – **Save 12 to 15 gallons/each time you water**
- Install drip irrigation for your trees, shrubs and flowers – **Save 15 gallons/each time you water**
- Plant drought resistant trees and plants – **Save 30 to 60 gallons/each time you water per 1,000 sq. ft.**

CLEAN UP & POOL

- Use a broom or leaf blower, not a hose, to clean sidewalks, driveways and patios– **Save 8 to 18 gallons/minute**
- Wash cars with a bucket, sponge and a hose with a self-closing nozzle or take your car to a car wash where they recycle water– **Save 8 to 18 gallons/minute**
- Cover pools and spas with a cover to reduce evaporation – **Saves up to 90% evaporation when covered regularly**

For even more information on how you can conserve water you can visit the following websites: www.saveourH20.org, www.bewaterwise.com, and www.iegardenfriendly.com

City of Hemet

ARE YOU STILL
Flushing Money Down the Toilet?

ANNUAL TOILET EXCHANGE
APRIL 2ND, 2016
FREE LOW-FLOW TOILET EXCHANGE

FREE HIGH EFFICIENCY TOILET EXCHANGE

Toilets will be provided at no charge to City of Hemet water customers from 8am-4pm. If you are unable to attend this FREE event, you may contact the City of Hemet the Monday following the event to inquire if there is any remaining inventory. For additional questions regarding the Toilet Exchange Program, please contact the City of Hemet Corporation Yard at (951) 765-3712 or visit our website at cityofhemet.org.

WATER USE IT WISELY
wateruseitwisely.com

EVERY DROP COUNTS
REDUCE YOUR USE

How does the program work?

1. You must be a City of Hemet Water District customer. Bring proof of your current water bill.
2. Bring proper identification that you are the customer.
3. Have a way to pick up your FREE toilet.
4. Install your new high-efficeincy toilet.
5. Return your old toilet by the specified date.

CITY OF HEMET
3777 Industrial Ave
Hemet, Ca 92545
(951) 765-3712

cityofhemet.org

Hours of Operation
Mon-Thurs 6 am - 4:30 pm

Appendix P

EMWD 2015 UWMP Draft

EASTERN MUNICIPAL WATER DISTRICT

Public Draft

Urban Water Management Plan

2015 Update

May 2016

Eastern Municipal Water District
2015 Urban Water Management Plan

PUBLIC DRAFT

Prepared by

May 2016

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List of Acronyms and Abbreviations

AB	Assembly Bill
Act	Urban Water Management Planning Act of 1983
AF	acre-feet
AFY	acre-feet per year
AMI	Advanced Metering Infrastructure
AWWA	American Water Works Association
Bay-Delta	San Francisco Bay/Sacramento-San Joaquin Delta
BDCP	Bay Delta Conservancy Plan
BMPs	Best Management Practices
CDFW	California Department of Fish and Wildlife
CFS	Cubic feet per second
CII	Commercial, Industrial, and Institutional
CIMIS	California Irrigation Management Information System
CRA	Colorado River Aqueduct
CUWCC	California Urban Water Conservation Council
CWC	California Water Code
DBPs	Disinfection byproducts
DMM	Demand Measurements Measure
DOE	US Department of Energy
DoF	California Department of Finance
DWR	California Department of Water Resources
ECs	Emerging constituents
EDU	Equivalent Dwelling Unit
EMWD	Eastern Municipal Water District
ERRP	Enhanced Recharge and Recovery Program
ESA	Endangered Species Act
ETAF	Evapotranspiration Adjustment Factor
ETo	Reference Evapotranspiration
EVMWD	Elsinore Valley Municipal Water District
Forum	Colorado River Basin Salinity Control Forum
FY	Fiscal Year
GIS	Geographic Information System
GPCD	gallons per capita per day
gpm	gallons per minute
HECW	High Efficiency Clothes Washers
Hemet/San Jacinto Basin	Hemet/San Jacinto Water Management Plan area
HET	High-Efficiency Toilets
HSJ Management Plan	Hemet/San Jacinto Groundwater Management Area Water Management Plan
IPR	Indirect Potable Recharge
IRP	Integrated Resource Plan

IRRP	Integrated Recharge and Recovery Program
IRWM	Integrated Regional Water Management
LHMWD	Lake Hemet Municipal Water District
MAF	million acre-feet
MCL	Maximum Contaminant Level
mg/L	milligrams per liter
Mills	Henry J. Mills
MOU	Memorandum of Understanding
MFR	Multi-Family Residential
MWD	Metropolitan Water District of Southern California
MWD IRP	Metropolitan Water District of Southern California's Integrated Water Resources Plan
MWELO	Model Water Efficient Landscape Ordinance
NDMA	N-Nitrosodimethylamine
OEHHA	Office of Environmental Health Hazard Assessment
PG&E	Pacific Gas and Electric
PHG	Public Health Goal
PPCPs	Pharmaceuticals and Personal Care Products
QWEL	Qualified Water Efficient Landscaper
RCWD	Rancho California Water District
R&R	Replacement and Refurbishment
RWRF	Regional Water Reclamation Facility
SARCCUP	Santa Ana River Conservation & Conjunctive Use Program
SAWPA	Santa Ana Watershed Planning Authority
SB	Senate Bill
SDCWA	San Diego County Water Authority
SFR	Single Family Residential
Skinner	Robert F. Skinner
SNMP	Salt and Nutrient Management Plan
Soboba Settlement Act	Soboba Band of Luiseño Indians Settlement Act of 2007
Soboba Settlement Agreement	Soboba Band of Luiseño Indians Water Settlement
Soboba Tribe	Soboba Band of Luiseño Indians
SWP	State Water Project
SWRCB	State Water Resources Control Board
TAF	thousand acre-feet
TDS	total dissolved solids
TOC	Total Organic Carbon
µg/L	micrograms per liter
ULFT	Ultra Low-Flush Toilets
USBR	U.S. Department of the Interior, Bureau of Reclamation
USEPA	U.S. Environmental Protection Agency
UWMP	Urban Water Management Plan
VOCs	Volatile organic compounds
Watermaster	Hemet-San Jacinto Watermaster

WBIC	Weather-based irrigation controller
West San Jacinto Basin	West San Jacinto Groundwater Basin Management Plan area
WSAP	Water Supply Allocation Plan
WSCP	Water Shortage Contingency Plan
WSDMP	Water Surplus and Drought Management Plan
WSEOP	Water Shortage Emergency Operations Plan
WSJ Management Plan	West San Jacinto Groundwater Basin Management Plan
WSO	Water System Optimization
WSS	WaterSense Specified

Executive Summary

ES-1 Plan Purpose and Overview

The Urban Water Management Planning Act (UWMP Act), adopted in 1983, requires every urban water supplier that provides water for municipal purposes to more than 3,000 connections or supplies more than 3,000 acre-feet of water annually to adopt and submit an Urban Water Management Plan (UWMP) to the California Department of Water Resources (DWR) every five years. The main purpose of developing and updating an UWMP is to forecast water demands and supplies under normal, single-dry, and multiple-dry year conditions; assess supply reliability; and describe methods of reducing demands under potential water shortages.

This 2015 UWMP satisfies the requirements of the UWMP Act and its amendments, and provides an overview of Eastern Municipal Water District's (EMWD)'s long-term supplies and demands. The 2015 UWMP also reports EMWD's progress towards meeting the water use efficiency targets set by the Water Conservation Act of 2009 (SBx7-7).

In addition to significant conservation efforts made since the enactment of SBx7-7, the 2015 UWMP also documents EMWD's significant per capita water use reduction as a result of emergency requirements set by the State Water Resources Control Board (SWRCB). In response to California Governor Brown's April 2014 Proclamation declaring severe drought conditions in the state of California, the SWRCB has required water suppliers to reduce water usage statewide. EMWD was assigned a required demand reduction of 28 percent relative to 2013 water usage. This 2015 UWMP documents EMWD's significant per capita water use reduction in response to the SWRCB's water conservation requirements.

Table ES-1 summarizes the information contained within EMWD's 2015 UWMP.

Table ES-1: Organizational Overview of the 2015 UWMP

Chapter Name	Information Contained within Chapter
Chapter 1 – Introduction and Overview	• General legal requirements for 2015 UWMPs • Local planning efforts
Chapter 2 – Plan Preparation	• Plan preparation • Agency coordination and outreach
Chapter 3 – System Description	• General description of EMWD's retail and wholesale service areas • Description of EMWD's distribution systems • Climate characteristics of EMWD's service area • Current and projected population and demographic figures
Chapter 4 – System Water Use	• Overview of past, current, and projected water use • System water losses • Climate change impacts on water use
Chapter 5 – Baselines and Targets	• Information on the Water Conservation Act of 2009 • Baseline gross per capita water use • Updated water use targets for 2015 and 2020 • 2015 target compliance confirmation

Chapter Name	Information Contained within Chapter
Chapter 6 – System Supplies	• Information about current and projected supplies • Background on imported water supply, including the Metropolitan Water District of Southern California • Description of groundwater basin management and supplies • Description of EMWD's recycled water system and the beneficial uses of recycled water • Description of planned water projects • Climate change impacts to supplies
Chapter 7 – Water Supply Reliability Assessment	• Overview of the reliability of each of EMWD's supplies • Water quality of supplies • Projections for water supply and water demands under normal, single dry, and multiple dry year hydrologic conditions • Regional supply reliability
Chapter 8 – Water Shortage Contingency Planning	• Overview of EMWD's water shortage stages and associated prohibitions for each stage • Methods for reducing water use • Minimum supply available for the next three years
Chapter 9 – Demand Management Measures	• Overview of the California Urban Water Conservation Council • Summary of EMWD's retail and wholesale demand management measures
Chapter 10 – Plan Adoption, Submittal, and Implementation	• Overview of the UWMP adoption process • Implementation of the 2015 Plan

ES-2 Service Area and Water Supplies

EMWD provides potable water, recycled water, and wastewater services to an area of approximately 555 square miles in western Riverside County. EMWD is both a retail and wholesale agency, serving a retail population of 546,146 people and a wholesale population of 215,075 people. The agency was initially formed in 1950 to bring imported water to the area and in 1951 was annexed into the Metropolitan Water District of Southern California (MWD). EMWD is now one of MWD's 26 member agencies.

The majority of EMWD's supplies are imported water purchased through MWD from the State Water Project (SWP) and the Colorado River Aqueduct (CRA). Imported water is delivered to EMWD either as potable water treated by MWD, or as raw water that EMWD can either treat at one of its two local filtration plants or deliver as raw water for non-potable uses.

EMWD's local supplies include groundwater, desalinated groundwater, and recycled water. Groundwater is pumped from the Hemet/San Jacinto and West San Jacinto areas of the San Jacinto Groundwater Basin. Groundwater in portions of the West San Jacinto Basin is high in salinity and requires desalination for potable use. EMWD owns and operates two desalination plants that convert brackish groundwater from the West San Jacinto Basin into potable water. EMWD also owns, operates, and maintains its own recycled water system that consists of four Regional Water Reclamation Facilities and several storage ponds spread throughout EMWD's service area that are all connected through the recycled water system. As of 2014, EMWD has used 100 percent of the recycled water it produces.

ES-3 Water Demands

Since its formation as a water agency, EMWD has shifted from primarily serving agricultural uses to primarily serving urban uses. Today, EMWD's retail customers are mostly residential, with other uses consisting of commercial, industrial, institutional, landscape and agricultural. In addition to retail potable water demand, EMWD delivers water to seven wholesale customer agencies and meets a significant portion of demand with recycled water.

In 2015, the SWRCB in its Emergency Regulation required water suppliers to reduce water usage by 25 percent statewide as a means of reducing stress on California's water supplies during the ongoing drought. The mandatory water restrictions required EMWD to implement Stage 4 of its Water Shortage Contingency Plan (WSCP) to meet conservation targets which helped EMWD reduce demands in 2015 by over 20 percent.

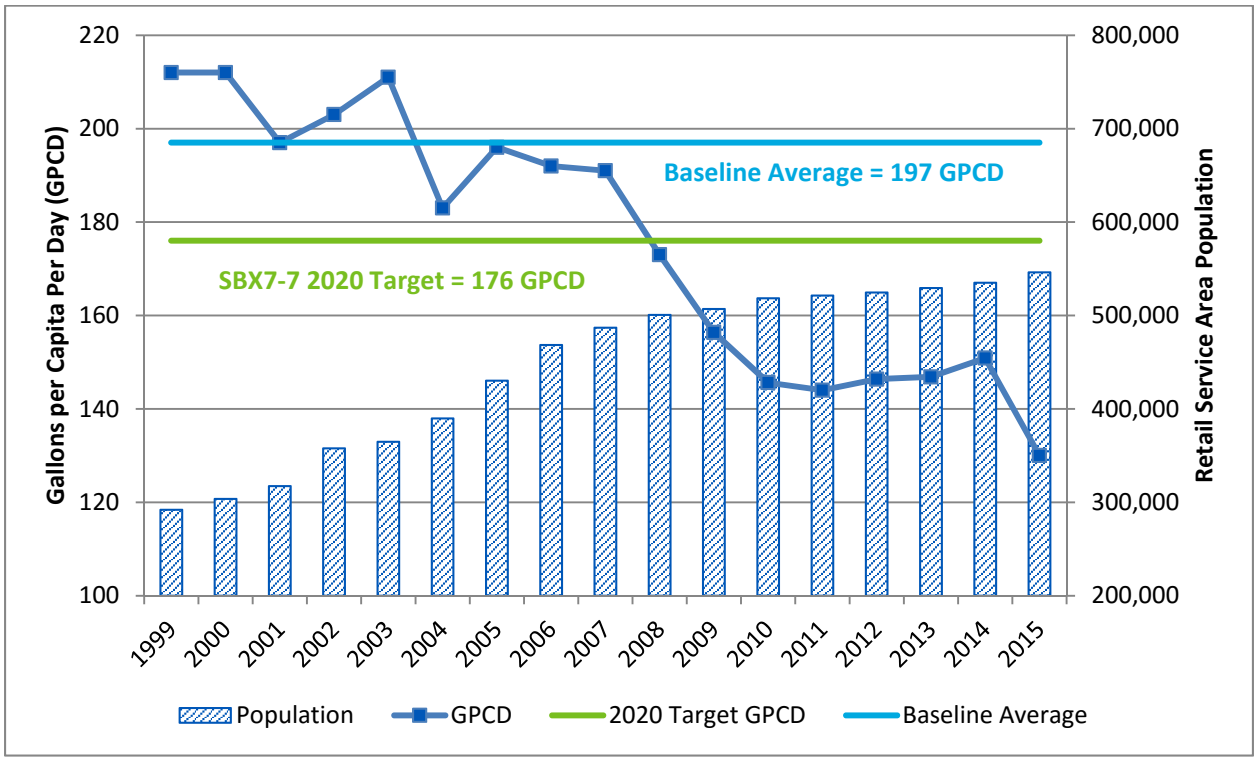
Demands projections for EMWD were developed using information about planned development and land use. These future demand projections assume the return of typical hydrologic conditions during the planning horizon that will allow a relaxation of the SWRCB's Emergency Regulation requirements. Although development has slowed in recent years, growth is expected to increase as the overall economy grows. EMWD's retail and wholesale demand projections for its potable and non-potable systems are presented in Table ES-2.

Table ES-2: Total Demand Projections

	2015	2020	2025	2030	2035	2040
Retail Potable and Raw Water Demand	78,815	100,500	111,500	122,900	134,000	144,500
Wholesale Potable and Raw Water Demand	21,768	65,500	69,700	73,800	77,800	82,200
Total Potable and Raw Water Demand	**100,583**	**166,000**	**181,200**	**196,700**	**211,800**	**226,700**
Retail Recycled Water Demand	44,150	45,245	48,334	50,017	51,800	53,300
Wholesale Recycled Water Demand	1,235	1,656	4,766	5,183	5,600	5,600
Total Recycled Water Demand	**45,385**	**46,901**	**53,100**	**55,200**	**57,400**	**58,900**
Total Water Demand	**145,968**	**212,901**	**234,300**	**251,900**	**269,200**	**285,600**

As part of this UWMP, EMWD was required to update its baseline and target per capita water use numbers in compliance with SBx7-7. The overall goal of SBx7-7 is to reach a 20 percent statewide reduction of per capita urban water use by 2020. EMWD established a 10-year baseline period from 1999 to 2008 with a baseline water usage of 197 gallons per capita per day (GPCD). The 2020 target was calculated using DWR's Method 2, which uses an efficiency standard with targets for indoor use, landscape use, and commercial, industrial and institutional use and an optional target for agricultural use. EMWD's 2020 target was set at 176 GPCD, with a 2015 interim target of 187 GPCD. EMWD's actual 2015 per capita water use was calculated as 129 GPCD, well below the 2015 interim target. EMWD anticipates that even if demands increase when regulations are lifted, it will still meet its 2020 compliance target. Figure ES-1 illustrates EMWD's progress toward meeting its conservation target.

Figure ES-1: Progress Toward Meeting SBx7-7 Targets



ES-4 Water Supply Forecast

EMWD plans to meet increases in projected demands through a combination of local supply development and ongoing water conservation. EMWD is in the process of completing master planning documents that investigate optimal supply portfolios to meet the agency's needs. Future supply projects described in this 2015 UMWP include: continuing full utilization of recycled water, expansion of the desalter program, increasing local groundwater banking, and developing additional regional water transfers and exchanges. Reasonably available volumes from local supply development were incorporated into EMWD's supply projections, and are presented in Table ES-3.

Table ES-3: Total Retail and Wholesale Water Supply (AFY)

Supply	2015	2020	2025	2030	2035	2040
Retail						
Imported Water	56,275	81,197	89,097	100,497	111,597	122,097
Groundwater	15,252	12,303	12,303	12,303	12,303	12,303
Desalinated Groundwater	7,288	7,000	10,100	10,100	10,100	10,100
Recycled Water	44,150	45,245	48,334	50,017	51,800	53,300
Total Retail Supply	**122,965**	**145,745**	**159,834**	**172,917**	**185,800**	**197,800**
Wholesale						
Imported Water	21,768	65,500	69,700	73,800	77,800	82,200
Recycled Water	1,235	1,656	4,766	5,183	5,600	5,600
Total Wholesale Supply	**23,003**	**67,156**	**74,466**	**78,983**	**83,400**	**87,800**
Total Water Supply	**145,968**	**212,901**	**234,300**	**251,900**	**269,200**	**285,600**

ES-5 Supply Reliability and Contingency Planning

EMWD will continue to rely on imported water from MWD as the main source of supply for its retail and wholesale customers, yet recognizes the need to increase local supplies and water conservation to manage supply and demand. MWD evaluated challenges to supply reliability in its 2015 UWMP, including drought conditions, environmental regulations, water quality concerns, and infrastructure vulnerability. MWD has undertaken several planning initiatives to assess and prepare for vulnerabilities including its Integrated Water Resources Plan, its Water Surplus and Drought Management Plan, and its Water Supply Allocation Plan (WSAP). Additionally, MWD has developed dry-year storage through groundwater and surface water reservoirs that help meet dry-year demands. Based on the information provided in MWD's 2015 UWMP, MWD has sufficient supply capabilities to meet the expected demands of its member agencies from 2020 through 2040 under normal, historic single-dry and historic multiple-dry year conditions.

EMWD recognizes that recent and ongoing dry conditions have impacted the reliability of the SWP and CRA imported supplies, causing significant withdrawals from MWD's storage reservoirs during the last few years. If another multiple-dry year period were to occur over the next three years, MWD could face supply shortages. EMWD is able to respond to supply shortages through implementation of its WSCP and MWD's WSAP. EMWD has the ability to meet current and projected water demands through 2040 under normal, historic single-dry and historic multiple-dry year conditions using a combination of imported water from MWD and existing local supply resources. Table ES-4 and Table ES-5 demonstrate the supply-demand balance for EMWD's service area under single-dry and multiple-dry hydrologic scenarios.

Table ES-4: Single Dry Year Supply and Demand Comparison

	2020	2025	2030	2035	2040
Retail					
Supply totals	166,300	182,400	197,400	212,000	225,700
Demand totals	166,300	182,400	197,400	212,000	225,700
Difference	0	0	0	0	0
Wholesale					
Supply totals	75,600	84,000	89,100	94,100	99,200
Demand totals	75,600	84,000	89,100	94,100	99,200
Difference	0	0	0	0	0

Table ES-5: Multiple Dry Year Supply and Demand Comparison

		2020	2025	2030	2035	2040
Retail						
First year	Supply totals	166,300	182,400	197,400	212,000	225,700
	Demand totals	166,300	182,400	197,400	212,000	225,700
	Difference	0	0	0	0	0
Second year	Supply totals	142,500	155,400	167,400	179,000	190,100
	Demand totals	142,500	155,400	167,400	179,000	190,100
	Difference	0	0	0	0	0
Third year	Supply totals	149,500	162,700	175,100	186,900	198,600
	Demand totals	149,500	162,700	175,100	186,900	198,600
	Difference	0	0	0	0	0
Wholesale						
First year	Supply totals	75,600	84,000	89,100	94,100	99,200
	Demand totals	75,600	84,000	89,100	94,100	99,200
	Difference	0	0	0	0	0
Second year	Supply totals	61,800	68,500	72,400	76,400	80,300
	Demand totals	61,800	68,500	72,400	76,400	80,300
	Difference	0	0	0	0	0
Third year	Supply totals	66,000	71,900	76,100	80,200	84,300
	Demand totals	66,000	71,900	76,100	80,200	84,300
	Difference	0	0	0	0	0

Chapter 1 Introduction and Overview

1.1 Background and Purpose

The Urban Water Management Planning Act (Act), adopted in 1983, requires water suppliers to conduct long-term water resources planning. Prior to adoption of the Act, water agencies were more vulnerable to supply disruptions during periods of drought or supply shortages. The Act sought to minimize susceptibility to supply shortages by requiring a minimum level of long-term resource assessment and planning by water suppliers. The planning requirements established by the Act and subsequent legislation encourage regional coordination and focus on water use efficiency as described in the sections below. This 2015 Urban Water Management Plan (UWMP) addresses the water supply sources, projected demands, and supply reliability for Eastern Municipal Water District's (EMWD) service area.

1.2 Urban Water Management Planning Act and the California Water Code

California Water Code (CWC) Section 10620 (a) of the Urban Water Management Act, states "Every urban water supplier shall prepare and adopt an urban water management plan in the manner set forth in Article 3 (commencing with Section 10640)". These plans are to be updated every five years and submitted to the California Department of Water Resources (DWR). Requirements for the UWMP include:

- Assessment of current and projected water supplies
- Evaluation of demand and customer types
- Evaluation of the reliability of water supplies
- Description of conservation measures implemented by the urban water supplier
- Response plan, in the event of a water shortage
- Comparison of demand and supply projections

In November of 2009, the State legislation passed Senate Bill (SB) 7 as part of the Seventh Extraordinary Session, referred to as SBx7-7 or the Water Conservation Act of 2009. SBx7-7 sets the goal of achieving a 20 percent reduction in urban per capita water use statewide by 2020. Retail water agencies are required to set targets and track progress toward decreasing daily per capita urban water use in their service areas, which will assist the State in meeting its 20 percent reduction goal by 2020. This law requires that every UWMP include:

- Baseline per capita water use
- Urban water use target for 2020
- Interim urban water use target for 2015
- Compliance daily per capita water use

This 2015 UWMP has been prepared to comply with the Urban Water Management Planning Act and SBx7-7. In addition to meeting the requirements of the Act, this report will be used to support water supply assessments and written verifications of water supply required by SB 610 and SB 221 of 2001. These bills require that water supply information be provided to counties and cities for projects of a certain size, prior to discretionary project approval. Both bills allow an UWMP to be used as a source document to fulfill these legislative requirements.

Since 2010, several amendments have been added to the Act. These include requirements for: describing the water supplier's Demand Management Measures and establishing a submittal date to DWR of July 1, 2016 (Assembly Bill (AB) 2067, 2014); analyzing and defining water features that are artificially supplied with water (AB 2409, 2010); submitting the plan electronically, using standardized tables and

forms, quantifying and reporting distribution system water losses, and guidance for voluntary reporting of passive water savings (SB 1420, 2014); and guidance for voluntary reporting of energy intensity (SB 1036, 2014). This 2015 UWMP was developed to incorporate these new requirements, under the guidance of DWR's 2015 UWMPs Guidebook for Urban Water Suppliers. A checklist to document compliance of this 2015 UWMP with the Act and the CWC is provided in Appendix A.

This UWMP includes all required DWR standardized tables within relevant chapters and they are compiled in Appendix B. Within the UWMP chapters, DWR's standardized tables include the DWR-assigned table number in the first row of the table. This 2015 UWMP also includes all required SBx7-7 tables in Appendix C to verify compliance with the SBx7-7 targets.

1.3 Urban Water Management Plans in Relation to Other Planning Efforts

UWMPs allow for integration of information from other planning documents, as well as regional planning efforts. EMWD has recently completed, or is about to complete, a number of planning documents that were used to inform estimates of water supplies and water use projections for the 2015 UWMP update. Additionally, regional planning efforts conducted by Metropolitan Water District of Southern California (MWD) were used to assess the EMWD imported water supply reliability. Relevant planning documents are summarized in Table 1-1 below.

Table 1-1: Planning Documents in Relation to the 2015 UWMP

Planning Document	Summary
Water Master Plan, EMWD 2016	This document analyzes EMWD's facilities needs to meet current and future customer demands.
Recycled Water Strategic and Master Plan, EMWD 2016	The document analyzes EMWD's recycled water opportunities and contains recycled water projections through the year 2045, including descriptions of planned recycled water projects and facilities.
Wastewater Collection Master Plan, EMWD 2016	This document analyzes EMWD's facilities needs to collect existing and future wastewater.
Regional Water Reclamation Facilities Master Plan	This document analyzes EMWD's reclamation facility needs for treating existing and future wastewater.
Integrated Resources Plan, MWD 2015	The document describes MWD's plan for providing adequate and reliable supplies to member agencies and is used as the basis for MWD's 2015 UWMP.
2015 Urban Water Management Plan, MWD	The document describes MWD's demand and supply reliability and is used as the basis EMWD's imported water supply reliability.

Chapter 2 Plan Preparation

2.1 Basis for Preparing the Plan

EMWD operates a Public Water System that qualifies as an "Urban Water Supplier" under the CWC Section 10617, serving more than 3,000 customers and more than 3,000 acre-feet per year (AFY). Table 2-1 provides qualifying information about EMWD, as required in the 2015 UWMP Guidebook.

Table 2-1: Retail Public Water System

DWR Table 2-1 Retail Only: Public Water Systems			
Public Water System Number	**Public Water System Name**	**Number of Municipal Connections 2015[1]**	**Volume of Water Supplied 2015 (AFY)**
CA3310009	Eastern Municipal Water District	147,300	78,815
	Total	**147,300**	**78,815**

1) The number of connections and volume of water supplied in this table reflect EMWD's potable water system only. Recycled water connections (500) and volume supplied (44,150 AF) in 2015 is not included.

For the 2015 update of the UWMP, an individual plan was prepared in coordination with the appropriate regional agencies and constituents. The plan will report solely on the EMWD service area and will address all the requirements of the CWC. Table 2-2 documents the Plan Identification for EMWD's 2015 update of the UWMP.

Table 2-2: Plan Identification

DWR Table 2-2: Plan Identification	
	Type of Plan
☑	Individual UWMP
☐	Regional UWMP

EMWD is both a retail and wholesale Urban Water Supplier and has selected to report UWMP data in calendar years and in units of acre-feet (AF). Table 2-3 documents the Agency Identification for the update of the 2015 UWMP.

Table 2-3: Agency Identification

DWR Table 2-3: Agency Identification	
	Type of Agency
☑	Agency is a wholesaler
☑	Agency is a retailer
	Fiscal or Calendar Year
☑	UWMP Tables Are in Calendar Years
☐	UWMP Tables Are in Fiscal Years
	Units of Measure Used in UWMP
Unit	AF

2.2 Coordination and Outreach

As noted in Section 2.1, EMWD is both a retail and wholesale agency. As a retail agency, EMWD is required to provide its wholesaler, MWD, with projected water demand in five-year increments for 20 years. As a wholesale agency, EMWD is required to provide information to its customer urban water suppliers identifying and quantifying water supplies available to those agencies in five-year increments. Table 2-4 and Table 2-5 list the wholesale and retail agencies, respectively, that EMWD exchanged water supplier information with for the development of the 2015 UWMPs.

Table 2-4: Retail Water Supplier Information Exchange

DWR Table 2-4 Retail: Water Supplier Information Exchange
The retail supplier has informed the following wholesale supplier(s) of projected water use in accordance with CWC 10631.
Wholesale Water Supplier Name
Metropolitan Water District of Southern California

1) EMWD participated in the development of the 2015 MWD IRP Update and the MWD 2015 UWMP

Table 2-5: Wholesale Water Supplier Information Exchange

DWR Table 2-4 Wholesale: Water Supplier Information Exchange	
☑	Supplier has informed 10 or fewer other water suppliers of water supplies available in accordance with CWC 10631.
Water Supplier Name	
City of Hemet	
City of Perris	
City of San Jacinto	
Lake Hemet Municipal Water District	
Nuevo Water Company	
Rancho California Water District	
Western Municipal Water District	

Article 3, Section 10642 of the UWMP Act requires each urban water supplier to encourage the active involvement of diverse social, cultural and economic elements of the population within the service area. EMWD has encouraged the participation of sub agencies, cities and the County of Riverside and other public groups. Public participation and coordination efforts are detailed in Table 2-6.

Table 2-6: Coordination for UWMP Preparation

Organization/ Agency Name	Participated in Developing the UWMP	Was Contacted for Assistance	Was Sent a Notification of 2015 UWMP Preparation	Attended Public Meetings	Commented on the Draft	Was Sent a Copy of the 2015 UWMP
Metropolitan Water District of Southern California	✓	✓	✓			
Lake Hemet Municipal Water District	✓	✓	✓			
City of Hemet	✓	✓	✓			
City of Temecula			✓			
City of Murrieta			✓			
City of San Jacinto	✓	✓	✓			
City of Perris	✓	✓	✓			
Rancho California Water District	✓	✓	✓			
Nuevo Water Company	✓	✓	✓			
City of Menifee			✓			
County of Riverside			✓			
General Public						

Chapter 3 System Description

3.1 Eastern Municipal Water District

EMWD is a public water agency formed in 1950 by popular vote. In 1951, it was annexed into the MWD and gained access to a supply of imported water from the Colorado River Aqueduct (CRA). Today, EMWD remains one of MWD's 26 member agencies and receives water from Northern California through the State Water Project (SWP) in addition to deliveries through the CRA.

EMWD's initial mission was to deliver imported water to supplement local groundwater for a small, mostly agricultural, community. Over time, EMWD's list of services has evolved to include groundwater production, desalination, water filtration, wastewater collection and treatment, and regional water recycling. EMWD provides both retail and wholesale water service covering a total population of over 750,000. EMWD's mission is "to provide safe and reliable water and wastewater management services to our community in an economical, efficient, and responsible manner, now and in the future."

A five-member Board of Directors governs EMWD. Each Director serves an area of equivalent population size within EMWD's boundaries and is elected to office every four years. As a member agency of MWD, EMWD also has a member appointed to the MWD Board.

3.2 Service Area Physical Description

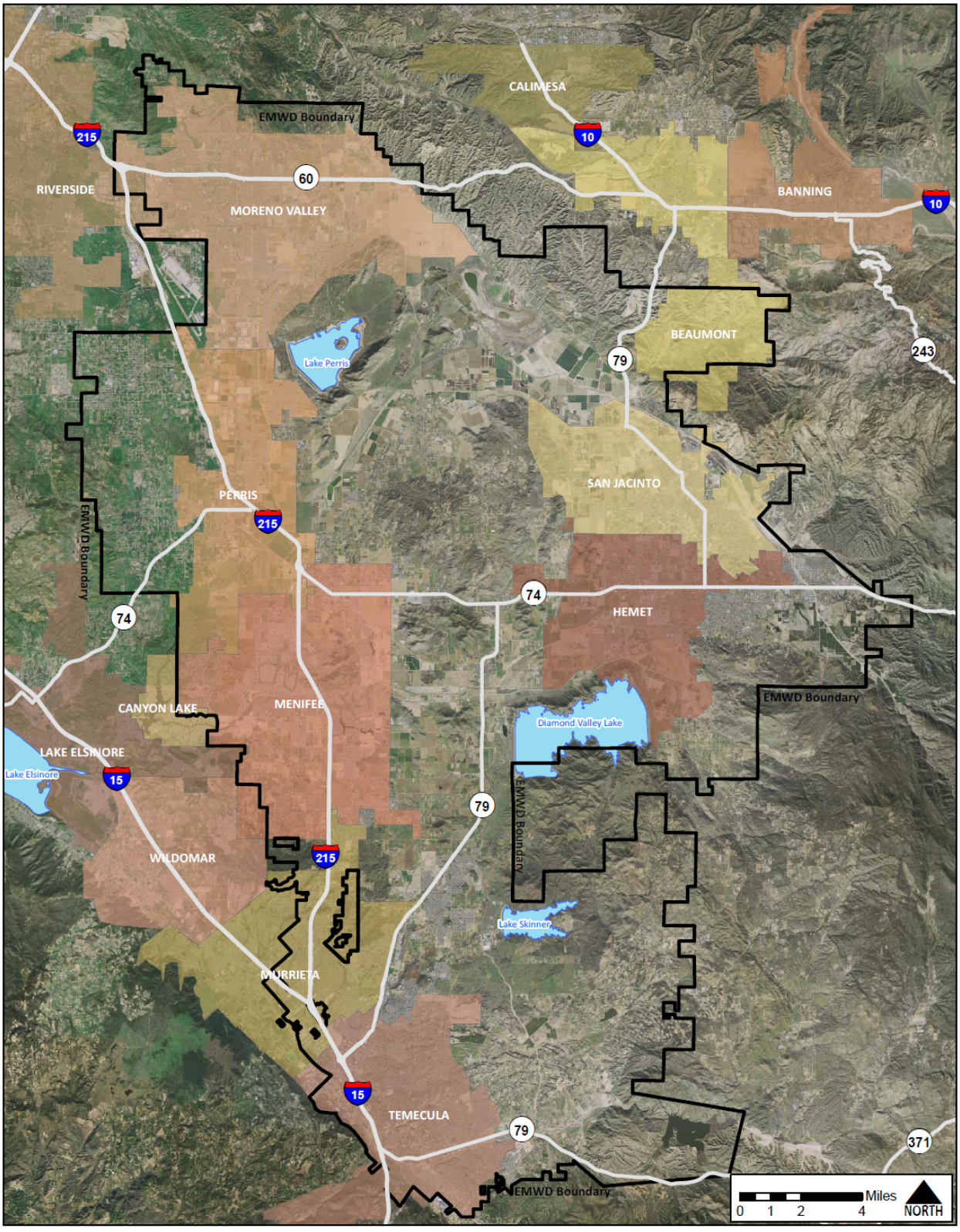
EMWD is located in western Riverside County, approximately 75 miles east of Los Angeles. The 555 square mile service area includes seven incorporated cities in addition to unincorporated areas in the County of Riverside.

The cities and unincorporated areas within EMWD's boundary include:

- City of Hemet
- City of Menifee
- City of Moreno Valley
- City of Murrieta
- City of Perris
- City of San Jacinto
- City of Temecula
- Homeland
- Lakeview
- Nuevo
- Quail Valley
- Romoland
- Valle Vista
- Winchester

In most of the listed areas, EMWD provides both water and sewer service. However, in some places EMWD provides only sewer or water service, or provides wholesale water to a purveyor agency. EMWD's service area boundary and the cities within that boundary are shown in Figure 3-1.

Figure 3-1: Areas Within EMWD Boundaries



emwd

Eastern Municipal Water District
Cities

EMWD is a wholesale potable provider to the following agencies:

- City of Hemet Water Department
- City of Perris Water System
- City of San Jacinto Water Department
- Lake Hemet Municipal Water District (LHMWD)
- Nuevo Water Company
- Rancho California Water District (RCWD)

Additionally, EMWD sells recycled water to RCWD and Elsinore Valley Municipal Water District (EVMWD) and has an emergency connection with the City of Perris' North Perris Water System.

Several of these agencies have prepared or will prepare their own UWMP. EMWD has discussed and reviewed the supplemental water demands required by each agency with representatives of those agencies. The demand and water supply requirements are discussed in this UWMP.

3.3 Treatment and Distribution Systems

EMWD has four sources of water supply: imported water from MWD, local groundwater, desalinated groundwater, and recycled water. Delivery points for each source of water are located throughout the EMWD service area.

Potable imported water is treated and delivered to EMWD directly from MWD's two large filtration plants. The Henry J. Mills (Mills) Water Treatment Plant treats water from Northern California and provides it to EMWD through two connection points located in the northeast portion of EMWD's service area. The Robert F. Skinner (Skinner) Water Treatment Plant treats a blend of Colorado River water and water from Northern California and provides it to EMWD through a connection point in the southwest portion of EMWD's service area.

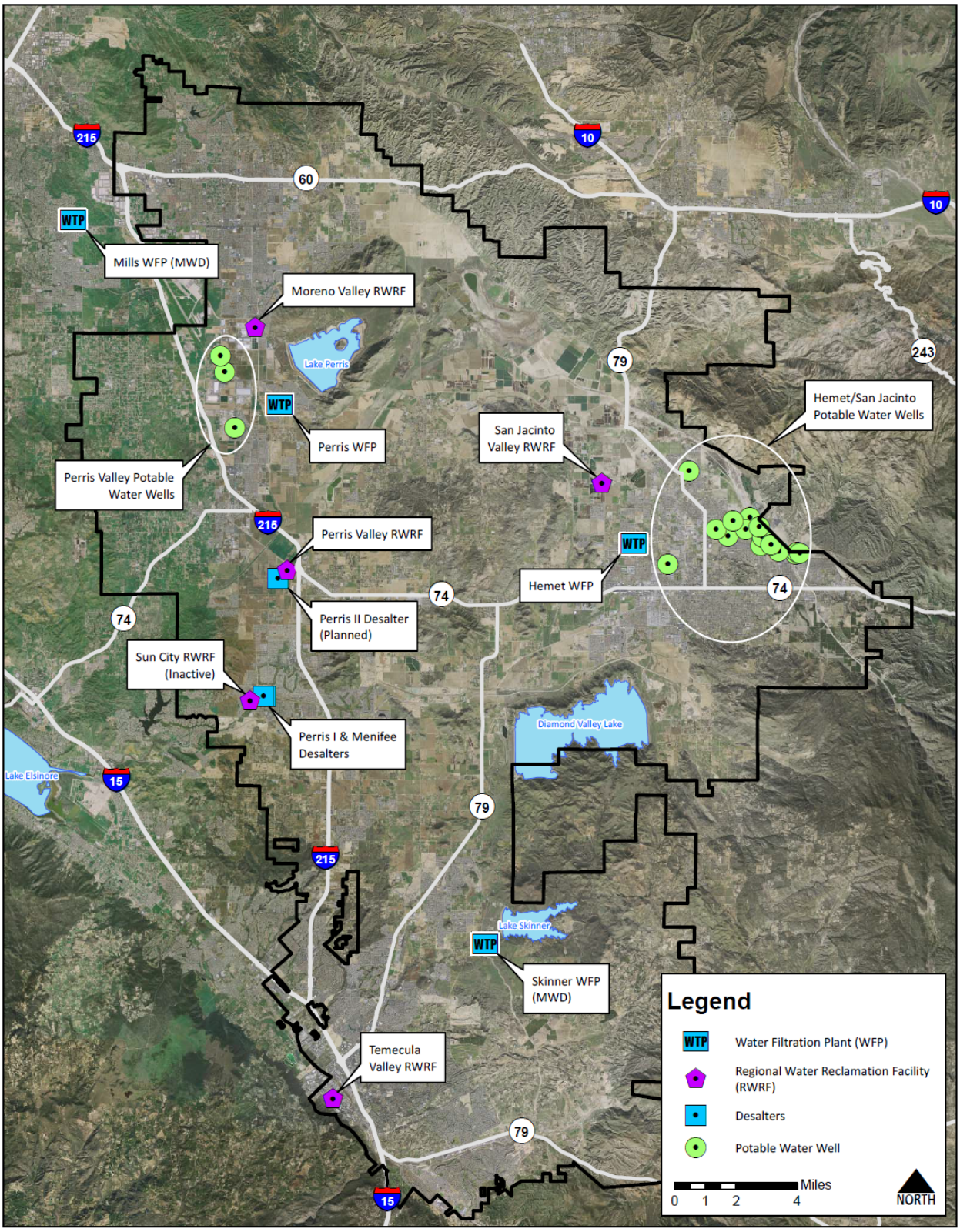
EMWD owns and operates two microfiltration plants that filter raw imported water delivered through MWD, removing particulate contaminants to achieve potable water standards. The two treatment plants, the Perris Water Filtration Plant and the Hemet Water Filtration Plant, are located in Perris and Hemet, respectively. Raw water from MWD is also used for groundwater replenishment in the eastern part of EMWD. EMWD and others can extract this water at a later date for beneficial uses. Untreated water from MWD used for agricultural purposes is delivered in the northeast for use by EMWD retail and wholesale accounts and in the south for RCWD agricultural accounts.

EMWD produces potable and brackish groundwater from the San Jacinto Groundwater Basin that underlies the EMWD service area. Groundwater wells are mostly located within the San Jacinto Watershed and serve the northern portion of EMWD, with the largest amount of production taking place around the cities of Hemet and San Jacinto. EMWD owns and operates two desalination plants in Sun City, the Menifee Desalter and the Perris I Desalter, which treat brackish groundwater through reverse osmosis to achieve potable water standards.

In addition to the potable system, EMWD maintains a regional recycled water system that provides tertiary-treated recycled water to customers for agricultural, landscape irrigation, environmental, and industrial use. EMWD's recycled water system consists of four regional water reclamation facilities (RWRFs) that treat municipal sewage and produce water for recycling. The four RWRFs, the San Jacinto Valley RWRF, the Moreno Valley RWRF, the Temecula Valley RWRF, and the Perris Valley RWRF, are spread throughout EMWD's service area. An intricate web of pipelines connects the four RWRFs, as well as several distribution storage ponds, to manage the delivery of recycled water.

EMWD's water supplies and facilities are described in more detail in *Chapter 6 – System Supplies*. The location of EMWD's treatment and distribution facilities are shown in Figure 3-2.

Figure 3-2: Location of Treatment and Distribution Facilities in EMWD's Service Area



emwd

Eastern Municipal Water District
Key Facilities

3.4 Climate

EMWD has a semi-arid climate characterized by hot, dry summers and cooler winters. The region experiences a wide variation in rainfall and periodic drought. The average total rainfall in the service area is approximately 7.6 inches, occurring mostly December through March. Table 3-1 provides a summary of average reference evapotranspiration (ETo), temperature and precipitation for EMWD's service area taken from the California Irrigation Management Information System (CIMIS) Winchester-179 local climate station between the years 2002 and 2015.

Table 3-1: EMWD Climate

	Standard Monthly Average Eto (inches)	Average Rainfall (inches)	Average Max Temperature (Fahrenheit)	Average Min Temperature (Fahrenheit)
January	2.29	1.16	67.12	33.96
February	2.69	1.78	66.67	35.42
March	4.29	0.83	70.22	38.89
April	5.18	0.51	72.79	42.18
May	6.55	0.24	77.48	47.75
June	7.17	0.01	84.93	52.84
July	7.85	0.30	92.26	59.48
August	7.64	0.10	93.33	58.70
September	6.21	0.20	91.33	56.23
October	4.21	0.41	80.40	47.89
November	2.70	0.57	72.70	39.51
December	2.04	1.51	64.16	33.71
Total / Average	**58.82**	**7.60**	**77.78**	**45.55**

California is currently experiencing a historic drought with record high temperatures and limited rainfall. Through 2014, EMWD saw an increase in demand corresponding to these two factors. On April 1, 2015, California Governor Brown directed the State Water Resources Control Board (SWRCB) to require water suppliers to reduce water usage by 25 percent statewide as a means of reducing stress on California water supplies during the drought. Mandatory water use reduction targets for each water provider were determined by the SWRCB, and EMWD was assigned a water use reduction target of 28 percent. The mandatory water restrictions required EMWD to implement Stage 4 of its Water Shortage Contingency Plan (WSCP) to meet conservation targets. EMWD customers responded with a 20 percent reduction in demand. EMWD's WSCP and water use prohibitions are described in *Chapter 8 – Water Shortage Contingency Planning*.

3.5 Population

Through the past decade, EMWD's service area was one of the fastest growing regions in California. Since 1990, more than 350,000 people have been added to the service area, doubling the population. Table 3-2 summarizes EMWD's historical retail and wholesale service populations.

The population within EMWD's retail service area represents the area directly served by EMWD's distribution system. Population for EMWD's retail and wholesale service areas has been calculated based on data available from the 1990, 2000, and 2010 Censuses. Previous estimates included in the 2010 UWMP from the Riverside County Center for Demographics research underestimated EMWD's service area population for 2010. For this 2015 UWMP, the final 2010 Census data were used to recalculate

EMWD's retail and wholesale populations. DWR's Population Tool was used to estimate EMWD's historical retail population as described in Section 5.4. California Department of Finance (DoF) growth projections were used in combination with Census data and Geographic Information System (GIS) software to estimate historical population for EMWD's wholesale service area.

Table 3-2: Historical Population within EMWD's Boundary – 1990 – 2010

Water Service Area	1990	1995	2000	2005	2010
EMWD Retail Service Area[1]	240,293	277,013	297,111	430,314	519,880
EMWD Wholesale Service Area[2,3]	102,362	134,932	167,104	185,420	200,789
Total	**342,655**	**411,945**	**464,215**	**615,734**	**720,669**

1) Retail population was estimated using Census data and DWR's Population Tool.
2) Wholesale population for 2005 was interpolated based on California Department of Finance growth estimates.
3) Wholesale population for 2010 was estimated using 2010 Census tracts and GIS.

3.5.1 Current and Projected Population

To ensure that planning efforts for future growth are comprehensive, EMWD incorporates regional projections in its UWMP. The 2015 populations for EMWD and its sub agencies were primarily estimated using data from the 2014 American Community Survey at the Census tract level. An overlay of the Census tracts and the respective agency service areas in GIS was used to attribute populations to each agency. Projections for the remainder of the planning period (2020 – 2040) were prepared based on EMWD's proposed development projects and land uses within EMWD's borders as well as current demographic information such as household size. Table 3-3 and Table 3-4 show EMWD's current and projected retail and wholesale populations, respectively.

Table 3-3: Retail Population – Current and Projected

DWR Table 3-1 Retail: Population - Current and Projected						
Population Served[1,2]	**2015**	**2020**	**2025**	**2030**	**2035**	**2040**
	546,146	617,100	699,800	784,100	864,200	939,100

1) Retail population for 2015 was estimated using a SWRCB reporting method using 2010 Census data and the American Community Survey for 2014. DWR pre-approved EMWD's methodology for estimating population.
2) Retail population projections for 2020-2040 were estimated using EMWD's Database of Proposed Projects and the 2015 SWRCB estimated population. DWR pre-approved EMWD's methodology for estimating population.

Table 3-4: Wholesale Population –Current and Projected

DWR Table 3-1 Wholesale: Population - Current and Projected						
Population Served[1,2]	**2015**	**2020**	**2025**	**2030**	**2035**	**2040**
	215,075	239,400	267,300	291,100	314,400	335,500

1) Wholesale population for 2015 was estimated using GIS and 2010 Census tract data.
2) Wholesale population projections for 2020-2040 were estimated using EMWD's Database of Proposed Projects and the 2015 population. DWR pre-approved EMWD's methodology for estimating population.

3.6 Other Demographic Factors

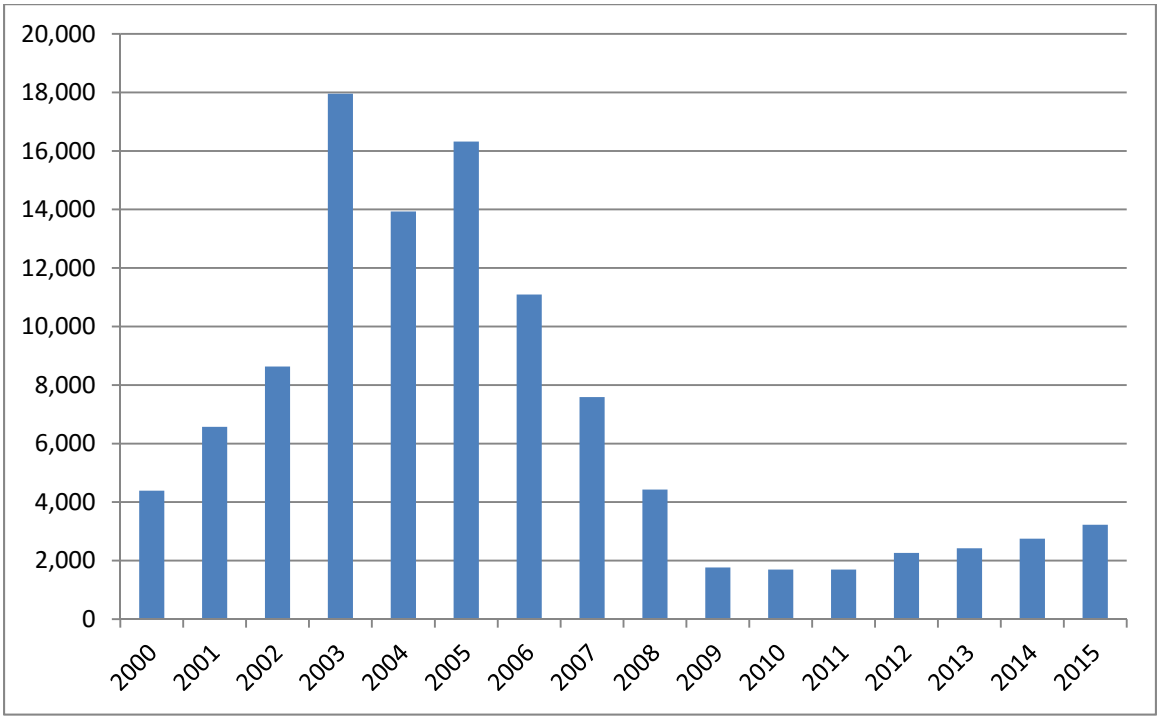
As the population within EMWD's service area continues to grow, the characteristics of the service area are continually changing. Tract homes, commercial centers and new industrial warehouses are replacing areas of agriculture and vacant land. Over the next 25 years, EMWD's total population is projected to grow by over 500,000 people, a 67 percent increase over the current population.

EMWD has a history of boom and bust development cycles. From the mid- 1980's to 1990's, population growth in EMWD routinely exceeded 10 percent per year. In the early 1990's, growth slowed during an economic recession. During the late 1990's, growth began to steadily increase, and the first five years of the 2000's again brought accelerated population growth to the area. Growth within EMWD's service area reached its peak rate in 2005, but then there was a major decline in housing development and growth slowed again. Starting in 2006 EMWD saw a sharp decline in the number of new connections added, reaching a low point in 2010. Since 2010, new connections have slowly been increasing; but they remain well below the peak levels of new development seen in the early 2000's.

The cycle of booming growth followed by depressed development makes new development in EMWD's service area difficult to predict. On average, 6,700 new equivalent dwelling units (EDUs) per year were added to EMWD's service area from 2000 through 2015; but over that 15-year time period there have been two years with more than 15,000 EDUs added and three years with less than 2,000 EDU's added. Because of the variability in demand cycles, EMWD has developed a comprehensive database of planned projects that tracks proposed new development and land use changes. This database is used in facility and supply planning to project future demands.

Ultimate demand estimates indicate that before EMWD reaches build out, the population will more than double compared to the current size. Land will continue to be developed in western Riverside County as more and more people move into the area. Just as it has in the past, EMWD will continue to meet the challenges of new development with innovation, efficiency and responsibility. Figure 3-2 shows EMWD new EDUs for the years 2000 through 2015.

Figure 3-3: EMWD New EDUs– 2000 – 2015



Chapter 4 System Water Use

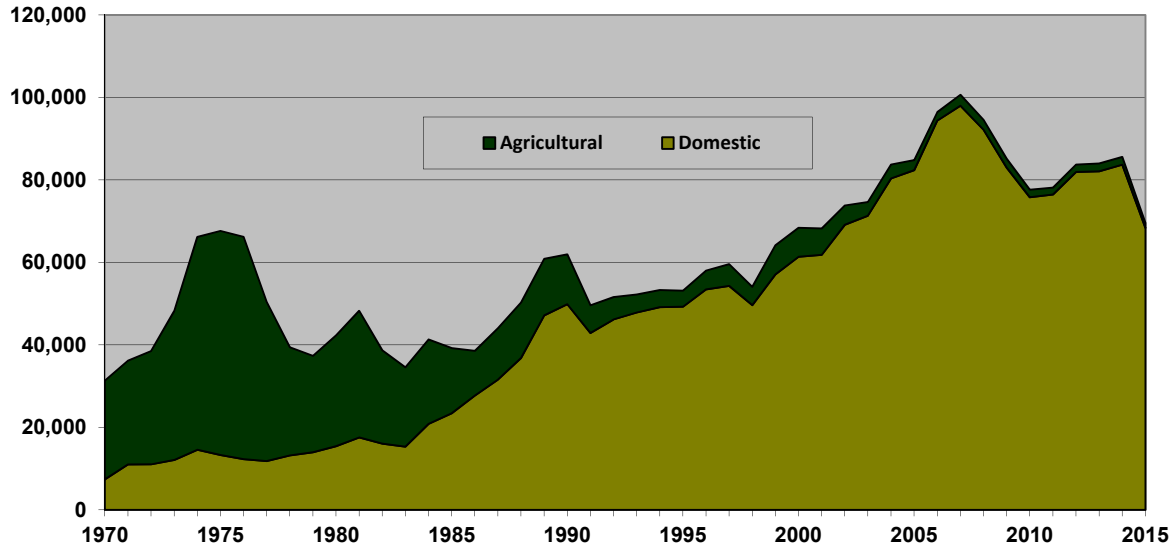
4.1 Overview

When EMWD was formed in 1950 it was a small agency, primarily serving agricultural customers. Since then, potable water use in EMWD's service area has shifted from primarily agricultural to urban use. The reduction in agricultural demand has two major causes: rural farm land has been transformed to urban housing, and most remaining agricultural demands have been shifted to the recycled water system.

The development of new homes and the accompanying increase in population led to the increasing demand for domestic water. Influenced by the last construction boom and drier than average weather conditions, total water demands grew through 2007 before declining significantly reaching a low point in 2010. The reduced demand can be attributed to several different factors including the implementation of an allocation-based tiered rate billing structure and an overall decline in the economy.

Since 2010, EMWD has experienced some increases in demand as the region has experienced dry weather patterns and a growing economy. Even with the warmer, drier weather, and improvements in the economy, demand has remained well below the peak seen in 2007. EMWD's proactive conservation program, including an allocation-based tiered rate billing structure, has reduced demand even as the agency has added almost 7,000 new dwelling units since 2010. In 2015, EMWD implemented Stage 4 of its WSCP in response to the 28 percent reduction requirement mandated by the SWRCB. In response, EMWD's customers reduced demand by more than 30 percent when compared to its peak demand in 2007.

Figure 4-1: Retail Potable Water Sales – 1970 – 2015



In addition to retail potable water demand, EMWD delivers water to seven wholesale customer agencies and meets a significant portion of demand with recycled water. The sections below summarize the past and projected retail and wholesale water use within EMWD's service area.

4.2 Water Use by Sector

Demands for EMWD were developed using information about planned development and land use. To track new developments, EMWD updates a GIS database that tracks proposed development quarterly. Currently, EMWD is tracking the status of over 700 proposed projects and over 150,000 residential units.

Growth rates were based on a forecast of new development prepared by Empire Economic in 2015. Although development has slowed significantly in recent years, new connections are still being added to EMWD's water and wastewater systems annually; and growth is expected to increase as the overall economy continues to grow. EMWD's growth forecasts include both the retail and wholesale service areas.

EMWD's retail demand projections include the water savings needed to meet the Water Conservation Act of 2009, SBx7-7 requirements. Demand forecasts for wholesale customers are developed from growth projections and through collaboration with sub agencies.

4.2.1 Retail Market Segments

EMWD's primary retail customers can be divided into residential, commercial, industrial, institutional, landscape and agricultural irrigation sectors. Although the residential sector is by far EMWD's largest customer segment, each market segment plays a role in the growth and development of EMWD's service area. Table 4-1 shows the past and current number of accounts by customer type. Table 4-2, Table 4-3, and Table 4-4 show EMWD's retail historical, current, and projected water use by customer type, respectively.

Table 4-1: Potable Retail Accounts by Customer Type – Actual and Projected

	Actual			Projected				
Use Type	**2005**	**2010**	**2015**	**2020**	**2025**	**2030**	**2035**	**2040**
Single Family	114,100	129,400	136,200	154,300	173,600	193,200	212,000	230,500
Multi-Family	1,000	4,300	4,300	4,900	5,500	6,100	6,800	7,300
Commercial	1,500	2,100	2,600	3,000	3,300	3,700	4,100	4,400
Industrial	100	100	200	200	200	200	200	300
Institutional/ Governmental	40	500	500	600	700	800	900	900
Landscape[1]	1,500	2,200	2,800	2,200	2,200	2,200	2,200	2,100
Agricultural irrigation	200	100	700	700	700	700	700	700
Total	**118,440**	**138,700**	**147,300**	**165,900**	**186,200**	**206,900**	**226,900**	**246,200**

1) Landscape accounts are projected to remain constant/decrease over time due to anticipated conversion to recycled water

Table 4-2: Retail Demands for Potable and Raw Water – Historical (AFY)

Use Type	**Additional Description**	**2005**	**2010**
Single Family		62,300	54,000
Multi-Family		5,500	6,100
Commercial		3,900	4,200
Industrial		400	400
Institutional / Governmental		2,900	2,300
Landscape		7,500	8,900
Agricultural irrigation	Potable Water	2,400	1,800
Agricultural irrigation	Raw Water	100	500
Losses	System losses & unbilled, authorized consumption	7,600	8,200
	Total	**92,600**	**86,400**

Table 4-3: Retail Demands for Potable and Raw Water – Current (AFY)

DWR Table 4-1 Retail: Demands for Potable and Raw Water – Actual			
Use Type	**2015 Actual**		
	Additional Description	**Level of Treatment When Delivered**	**Volume**
Single Family		Drinking Water	45,735
Multi-Family		Drinking Water	5,830
Commercial		Drinking Water	4,603
Industrial		Drinking Water	270
Institutional /Governmental		Drinking Water	2,083
Landscape		Drinking Water	7,735
Agricultural irrigation	Potable Water	Drinking Water	1,924
Agricultural irrigation	Raw Water	Raw Water	941
Agricultural irrigation[1]	Brackish groundwater used to supplement the recycled water system	Raw Water	682
Other	Temporary construction meters, etc.	Drinking Water	1,507
Other	Unbilled, authorized consumption	Drinking Water	3,322
Losses[2]	Real and apparent losses	Drinking Water	4,183
		Total	**78,815**

1) In 2015, brackish groundwater was used to supplement the recycled water system due to higher than average agricultural demands.
2) Losses reflect real and apparent losses for fiscal year 2014/2015.

Table 4-4: Retail Demands for Potable and Raw Water – Projected (AFY)

DWR Table 4-2 Retail: Demands for Potable and Raw Water – Projected						
Use Type	**Additional Description**	**Projected Water Use[1]**				
		2020	**2025**	**2030**	**2035**	**2040**
Single Family		64,800	72,900	81,100	89,000	96,800
Multi-Family		8,300	9,300	10,300	11,400	12,300
Commercial		6,500	7,300	8,100	8,900	9,700
Industrial		400	400	500	500	600
Institutional / Governmental		3,000	3,300	3,700	4,100	4,400
Landscape[2]		7,500	7,500	7,500	7,500	7,300
Agricultural irrigation	Potable Water	1,900	1,900	1,900	1,900	1,900
Agricultural irrigation	Raw Water	1,000	1,000	1,000	1,000	1,000
Losses[3]	System losses & unbilled, authorized consumption	7,100	7,900	8,800	9,700	10,500
	Total	**100,500**	**111,500**	**122,900**	**134,000**	**144,500**

1) Passive water savings due to the restrictions outlined in the Administrative Code are included in the demand projections for EMWD's retail service area.
2) Landscape demands remain constant/decrease over time as landscape accounts are offset by conversion to the recycled water system.
3) Projections for losses in the table include system losses (real and apparent) and unbilled, authorized consumption.

Residential consumption is the dominant demand for EMWD and this will continue in the future according to current general plans for the County of Riverside and local cities. Residential accounts are required to keep their demands below a budgeted allocation or pay a high rate for water use. Accounts dedicated to irrigating landscaped areas have the second highest consumption rate. Just as with residential accounts, landscape accounts are subject to a budgeted allocation or pay a higher rate for over budget use. New development in both of these account classes are provided with lower budget allocations to account for water use efficiency requirements for new development. Additional efficiency may occur in the future due to the recent 2015 update to the Model Water Efficient Landscape Ordinance (MWELO). The impact of the revised MWELO is still being estimated. Section 5, Article 6 of EMWD's Administrative Code details EMWD's rate structure. Passive water savings due to the restrictions outlined in the Administrative Code are included in the demand projections for EMWD's retail service area in Table 4-4.

Commercial developments will also continue to increase and will be focused along the major transportation corridors through EMWD's boundary (Interstate Highway 15, Interstate Highway 215, Highway 79, and Highway 74). Currently, commercial demands account for about six percent of EMWD's retail demand. Land use based projections indicate that the ratio of commercial demand to retail demand will increase slightly over time.

EMWD has a very small industrial use sector, accounting for less than 0.5 percent of retail demand. Industrial developments are proposed around Interstate Highway 215 and other main transportation corridors. Much of the proposed growth consists of large warehouse projects with minimal water demand. As much as feasible, EMWD will meet the needs of high water demand industrial customers with recycled water.

Currently, the demand from institutional accounts account for about three percent of retail demand for potable water. EMWD works closely with institutional and government accounts to help reduce their demand and promote the efficient use of water. Whenever possible, recycled water is used for landscape irrigation for schools and other government facilities. EMWD has also developed conservation programs designed to assist public sector accounts like schools to reduce demand through the retrofit of inefficient devices. These programs are discussed further in *Chapter 9 – Demand Management Measures*.

EMWD's service area has gone through a major transformation from a farming community to a residential community. Currently, agricultural demand accounts for less than four percent of EMWD's potable and raw water market, with a substantial portion of the agricultural community being served by the recycled water system. Agricultural demand for potable and raw water is expected to remain relatively stable for the next twenty years with some fluctuations from year to year due to changes in weather or crop rotations. It is also possible that a general decline over time may be observed both as a result of continued urbanization and increased recycled water usage.

4.2.2 Wholesale to Other Agencies

EMWD wholesales water to seven different agencies. The demand from each agency differs based on its need each year. These demands can be unstable at times as these agencies use water from EMWD to supplement their system when their local facilities are inadequate or fail. EMWD will also provide backup for the North Perris Water System if an emergency should occur.

Under the Hemet/San Jacinto Groundwater Management Area Water Management Plan (HSJ Management Plan), EMWD will be responsible for providing water to recharge the groundwater basin. A portion of the water supplied will be SWP water imported through MWD to meet the requirements of the Soboba Band of Luiseño Indians Water Settlement Agreement (detailed in Section 6.3.2) and to improve the reliability of groundwater in the area. Individual agencies, including EMWD, will extract their allotted amount of the recharged water from the basin using wells already in place and new wells yet to be constructed. As described in *Chapter 6 – System Supplies*, MWD will deliver a long-term average of

7,500 AFY to EMWD for groundwater recharge as part of the agreement; but due to drought conditions, no recharge occurred in 2015.

A portion of the water EMWD wholesales to LHMWD is raw water for agricultural uses. This water is needed especially when surface water is not available to LHMWD in dry years.

Table 4-5 shows the historical wholesale water sales to other agencies. The total current and projected wholesale demands are summarized in Table 4-6 and Table 4-7, respectively. Wholesale demand projections are based on communications with sub agencies and respective growth projections for those agencies.

Table 4-5: Wholesale to Other Agencies – Historical (AFY)

	Actual Sales	
Water Agency	**2005**	**2010**
City of Hemet	100	0
City of Perris Water System	1,900	1,700
City of San Jacinto	0	0
Nuevo Water Company	800	600
Murrieta Water Company	100	1,600
Rancho California Water District	26,300	21,900
Lake Hemet Municipal Water District[1]	100	1,300
Hemet-San Jacinto Watermaster[2]	0	0
Total	**29,300**	**27,100**

1) Sales of water to Lake Hemet are for non-potable supplies used to meet agricultural demand
2) Water to the Hemet-San Jacinto Watermaster is for groundwater recharge that will occur under the Hemet/San Jacinto Water Management Plan

Table 4-6: Wholesale Demands for Potable and Raw Water – Actual (AFY)

DWR Table 4-1 Wholesale: Demands for Potable and Raw Water – Actual			
Use Type	**2015 Actual**		
	Additional Description	**Level of Treatment When Delivered**	**Volume**
Sales to other agencies	City of Hemet	Drinking Water	0
Sales to other agencies	City of Perris Water System	Drinking Water	1,542
Sales to other agencies	City of San Jacinto	Drinking Water	0
Sales to other agencies	Nuevo Water Company	Drinking Water	247
Sales to other agencies	Western Municipal Water District Murrieta Division	Drinking Water	728
Sales to other agencies	Rancho California Water District	Drinking Water	4,015
Sales to other agencies	Rancho California Water District	Raw Water	10,925
Sales to other agencies	Lake Hemet Municipal Water District	Raw Water	4,311
Groundwater recharge[1]	Imported water recharge to the Hemet/San Jacinto Basin	Raw Water	0
		Total	**21,768**

1) Groundwater recharge will occur under the Hemet/San Jacinto Water Management Plan

Table 4-7: Wholesale Demands for Potable and Raw Water – Projected (AFY)

DWR Table 4-2 Wholesale: Demands for Potable and Raw Water – Projected						
Use Type	Additional Description	Projected Water Use				
		2020	2025	2030	2035	2040
Sales to other agencies	City of Hemet	0	0	0	0	0
Sales to other agencies	City of Perris Water System	1,800	1,900	2,000	2,100	2,200
Sales to other agencies	City of San Jacinto	0	0	0	0	0
Sales to other agencies	Nuevo Water Company	400	500	600	600	700
Sales to other agencies	Western Municipal Water District Murrieta Division	2,500	3,900	5,200	6,500	7,900
Sales to other agencies	Rancho California Water District	48,600	50,800	53,000	55,200	57,600
Sales to other agencies[1]	Raw Water to Lake Hemet Municipal Water District	4,700	5,100	5,500	5,900	6,300
Groundwater recharge[2]	Imported water recharge to the Hemet/San Jacinto Basin	7,500	7,500	7,500	7,500	7,500
Total		**65,500**	**69,700**	**73,800**	**77,800**	**82,200**

1) Deliveries to Lake Hemet Municipal Water District may be in the form of recharge managed through the Hemet/San Jacinto Water Management Plan.
2) Groundwater recharge will occur under the Hemet/San Jacinto Water Management Plan.

4.2.3 Other Water Uses

In addition to potable and raw water demands, EMWD also uses recycled water for beneficial uses such as municipal, industrial, landscape, agricultural and environmental use. These uses are described in more detail in *Chapter 6 – System Supplies*. Total current and projected retail and wholesale recycled water demands are summarized in Table 4-8 and Table 4-9, respectively, along with retail and wholesale total potable and raw water use.

Table 4-8: Retail Total Water Demands (AFY)

DWR Table 4-3 Retail: Total Water Demands						
	2015	2020	2025	2030	2035	2040
Potable and Raw Water	78,815	100,500	111,500	122,900	134,000	144,500
Recycled Water Demand	44,150	45,245	48,334	50,017	51,800	53,300
Total Water Demand	**122,965**	**145,745**	**159,834**	**172,917**	**185,800**	**197,800**

Table 4-9: Wholesale Total Water Demands (AFY)

DWR Table 4-3 Wholesale: Total Water Demands						
	2015	2020	2025	2030	2035	2040
Potable and Raw Water	21,768	65,500	69,700	73,800	77,800	82,200
Recycled Water Demand	1,235	1,656	4,766	5,183	5,600	5,600
Total Water Demand	**23,003**	**67,156**	**74,466**	**78,983**	**83,400**	**87,800**

4.3 Distribution System Water Losses

Water loss is a combination of apparent losses and real losses. Apparent losses are attributed to unauthorized consumption, customer metering inaccuracies and systematic data handling errors. Real losses are attributed to such physical water losses as leakage along the pipe system, at the storage tanks, or at the service connections. Real losses in EMWD's potable system are highest where pipelines are older and smaller in size, especially in the Hemet and San Jacinto areas that were once owned by the Fruitvale Mutual Water Company. EMWD tracks pipe leaks and identifies pipes for replacement as part of its capital improvement program. These efforts are described in more detail in *Chapter 9 – Demand Management Measures*.

EMWD used the American Water Works Association (AWWA) water system balance methodology to quantify water loss for fiscal year (FY) 2014/2015. This water loss represents the most recent 12-month period calculated using the AWWA methodology. While EMWD provides both retail and wholesale services and generally reports these services separately throughout this UWMP, its physical facilities are shared. Therefore, losses cannot be easily attributed to one system or the other. For this reason, all of EMWD's water losses for this 12-month period are reported in a single table. Table 4-10 summarizes the water loss results of the AWWA water audit for EMWD's combined retail and wholesale system. A copy of EMWD's AWWA water audit for FY 2014/2015 is included as Appendix D.

Table 4-10: EMWD's 12 Month Water Loss Audit Reporting

DWR Table 4-4 Retail: 12 Month Water Loss Audit Reporting	
Reporting Period Start Date	**Volume of Water Loss[1, 2]* (AFY)**
07/2014	4,183
** Taken from the field "Water Losses" (a combination of apparent losses and real losses) from the AWWA worksheet.*	

1) EMWD's retail and wholesale physical facilities are shared. Therefore, losses cannot be easily attributed to one system or the other. For this reason, all of EMWD's water losses are reported in the DWR Table 4-4 for retail.
2) Water Loss includes Real losses (3,497 AF) and Apparent losses (686 AF)

4.4 Estimating Future Water Savings

EMWD demand projections include water savings that result from a progressive conservation rate structure. EMWD uses an allocation-based tiered rate structure to encourage conservation by sending a strong price signal for water use over a budget allocation. Indoor budgets are based on an allocation of 60 gallons per capita per day. Outdoor budgets are based on the irrigated area and a percent of evapotranspiration. The percent of evapotranspiration is tied to the date the landscaping is installed. The rate structure is used to enforce codes and standards in place to promote efficiency. As codes and standards increase efficiency over time, EMWD has the ability to adjust the allocations. The most recent update to EMWD's allocations occurred in May of 2015, when a fifty percent evapotranspiration standard was adopted for all new non-functional landscape installed after June 1, 2015. The impact of the revised restrictions on new landscape is still being evaluated and not included in current water saving estimates. The details on EMWD's rate structure can be found in Section 5, Article 6 of EMWD's Administrative Code. Table 4-11 confirms that future water savings and low income demands are included in projections.

Table 4-11: Inclusion in Water Use Projections

DWR Table 4-5 Retail Only: Inclusion in Water Use Projections	
Are Future Water Savings Included in Projections? (Refer to Appendix K of UWMP Guidebook)	Yes
If "Yes" to above, state the section or page number, in the cell to the right, where citations of the codes, ordinances, etc… utilized in demand projections are found.	Section 4.2.1 and Section 4.4
Are Lower Income Residential Demands Included In Projections?	Yes

4.5 Lower Income Housing Demand

Senate Bill 1087 requires that water use projections in an UWMP include the projected water use for single family and multi-family residential housing for lower income households as identified in the housing element of any city and county in the service area of the supplier. EMWD used the percent of low income and very low income housing identified in the Housing Needs Assessment Allocation Plan for January 1, 2014 through October 1, 2021, approved by the Southern California Association of Governments, to estimate the number of new low income housing units that may require service within EMWD's retail service area. The number of low income housing units and their associated demands are shown in Table 4-12. The demands for these units are included in the total projected residential retail demands in Table 4-4.

Table 4-12: Projected New Retail Low Income Housing Units and Demands – 2020 – 2040

		Retail Service Area								
		City of Hemet	City of Menifee	City of Moreno Valley	City of Murrieta	City of Perris	City of San Jacinto	City of Temecula	Riverside County	**Total**
2020	Housing Units	1,400	2,200	1,900	600	1,500	1,900	100	2,900	**12,500**
	Demand (AFY)	600	900	800	300	600	800	40	1,100	**5,140**
2025	Housing Units	1,300	1,500	1,900	600	1,400	1,300	300	3,400	**11,700**
	Demand (AFY)	500	600	700	200	600	500	120	1,400	**4,620**
2030	Housing Units	1,600	1,500	2,300	600	1,400	900	100	3,100	**11,500**
	Demand (AFY)	600	600	900	200	600	400	40	1,200	**4,540**
2035	Housing Units	1,700	1,800	1,500	700	1,400	800	100	3,300	**11,300**
	Demand (AFY)	600	700	600	200	600	200	40	1,400	**4,340**
2040	Housing Units	1,800	1,900	1,700	700	1,600	800	100	3,600	**12,200**
	Demand (AFY)	700	800	700	300	700	300	50	1,400	**4,950**

4.6 Climate Change Impacts

EMWD has considered the impacts of climate change on water demands as part of long-term strategic planning. Climate change is expected to cause a rise in temperatures in the region which will increase evapotranspiration and water demand. This is particularly true for EMWD's agricultural sector. Additionally, in urbanized areas with limited vegetation, climate change can exacerbate the heat island effect which may result in increased energy and cooling demands.

EMWD's service area lies within the Santa Ana River and Santa Margarita River Watersheds. The Santa Ana River Watershed is covered under the Santa Ana Watershed Planning Authority's (SAWPA)'s Integrated Regional Water Management (IRWM) Plan for the Santa Ana River Watershed. A climate change vulnerability assessment was completed for the region as part of the 2014 IRWM Plan update. Key demand vulnerabilities identified by the SAWPA Region that relate to EMWD's service area include:

- Increased temperature could lead to increases in industrial cooling water needs
- Seasonal outdoor water use is expected to increase
- Climate-sensitive crops will be impacted
- Continued education and increased employment of efficient use technologies will be required

- Changes in snowmelt patterns in the future may make it difficult to balance water demands

EMWD continues to work toward decreasing demands for potable water through water conservation programs and full utilization of recycled water. EMWD's conversion of agricultural, landscape and industrial uses to recycled water has helped EMWD mitigate climate change impacts on these demands.

Chapter 5 Baseline and Targets

5.1 Water Conservation Act of 2009

The Water Conservation Act of 2009, SBx7-7, set a requirement for water agencies to reduce their per capita water use by the year 2020. The overall goal is to reach a statewide reduction of per capita urban water use of 20 percent by December 31, 2020, with an intermediate 10 percent reduction by December 31, 2015. Demand reduction can be achieved through both conservation and the use of recycled water as a potable demand offset.

An urban water provider's 2015 UWMP must include a target for per capita water use in 2020 and must demonstrate compliance with the established interim water use target for 2015. Effective 2016, urban water retailers who do not meet their water conservation targets are ineligible for state water grants or loans unless one of two exceptions is applicable. The first exception states that an urban supplier may be eligible if they have submitted a compliance schedule, financing plan and budget to DWR for approval, showing how they will meet their target per capita water use by 2020. The second exception states that an urban water supplier may be eligible for funding if their entire water service area qualifies as a disadvantaged community.

Any one of four methods can be used to determine the per capita water use targets. Three methods were specified in the legislation, and the fourth was developed by DWR. The four methods are:

- **Method 1:** Use 80 percent of the baseline as the per capita water use target.
- **Method 2:** Use an efficiency standard with targets for indoor use, landscape use, and commercial, industrial and institutional (CII) use and an optional target for agricultural use.
- **Method 3:** Use 95 percent of the applicable state hydrologic region target developed by DWR and published in the state's 20X2020 Water Conservation Plan.
- **Method 4:** Use an alternative method developed by DWR that accounts for water savings due to water metering and achieving water conservation measures in three water use sectors.

DWR, through a public process, developed and published Methodologies for Calculating Baseline and Compliance Urban Water Per Capita Use, last updated February 2011, for consistent application of SBx7-7 throughout the state.

For the 2015 UWMP, water purveyors are required to recalculate baseline population using 2010 Census data. Agencies may change the years selected for their baseline periods compared to the 2010 UWMP based on changes to the calculated population. Agencies may also select a different target methodology than was used for the 2010 UWMP, though this methodology must remain consistent for the 2020 UWMP.

5.2 Baseline Periods

Water purveyors must define a continuous 10- to 15-year baseline period ending between December 31, 2004 and December 31, 2010 and calculate an average water use over this period. If the percentage of recycled water used in the year 2008 was at least 10 percent of the total water used, the agency may use up to a 15-year period. If the percentage of recycled water was less than 10 percent, a 10-year baseline period is required. Additionally, a continuous five-year period ending between December 31, 2007 and December 31, 2010 is used to confirm that the selected 2020 target meets the minimum water use reduction requirements.

EMWD selected a 10-year baseline period beginning 1999 and ending 2008 despite providing more than 10 percent recycled water in 2008. A 5-year baseline period was chosen between 2003 and 2007 for the target confirmation. Table 5-1 summarizes the base period ranges.

Table 5-1: Base Period Ranges

Baseline	Parameter	Value	Units
10- to 15-Year Base Period	2008 total water deliveries	125,284	AF
	2008 total volume of delivered recycled water	28,100	AF
	2008 recycled water as a percent of total deliveries	22.4	percent
	Number of years in base period	10	years
	Year beginning base period range	1999	--
	Year ending base period range	2008	--
5-Year Base Period	Number of years in base period	5	years
	Year beginning base period range	2003	--
	Year ending base period range	2007	--

5.3 Gross Water Use

Gross water use was calculated using the best available meter data for water entering and exiting EMWD's distribution system. The distribution system includes potable water service for both domestic and agricultural demand, and raw water service to a few agricultural customers.

Potable sources include potable groundwater wells, treated water from two desalination plants, imported water from MWD and water imported from other agencies. Imported water from MWD includes water delivered directly to the potable distribution system and raw water treated at EMWD facilities. Small amounts of water are also delivered from Western Municipal Water District. Only water delivered to the distribution system is included in the gross water calculations. The single source for the raw water system is imported raw water from MWD.

EMWD sells a portion of the water that enters its distribution system to wholesale customers. Some MWD connections also have a portion of water that is diverted to other agencies without entering EMWD's distribution system. RCWD, EMWD's largest wholesale customer, has dedicated connections to MWD's system and does not impact EMWD's distribution system. Table 5-2 summarizes the gross water use calculations.

Table 5-2: Gross Water Use Calculations (AFY) – 1999-2008

	Potable Wells	Desalters	MWD Treated Imported Water	MWD Raw Water	EMWD Water Filtration Plants	Imported from other Agencies	Exported to other Utilities	Gross Water Use
1999	20,280	0	62,896	0	0	76	-13,862	**69,390**
2000	21,287	0	68,454	0	0	111	-17,847	**72,005**
2001	18,536	0	68,260	0	0	39	-16,776	**70,059**
2002	18,861	4	77,313	1,064	0	36	-15,995	**81,283**
2003	17,574	999	74,516	760	3,741	35	-11,309	**86,316**
2004	16,564	1,440	60,798	233	7,911	37	-7,006	**79,977**
2005	18,064	855	73,029	108	5,636	31	-3,046	**94,677**
2006	19,644	4,802	72,515	91	8,405	39	-4,665	**100,831**
2007	19,489	4,792	70,430	41	17,271	37	-7,682	**104,378**
2008	20,043	2,973	62,900	353	16,594	831	-6,510	**97,184**

5.4 Service Area Population

EMWD's retail baseline population was calculated using data from the 1990, 2000, and 2010 U.S. Census and DWR's Population Tool. The Population Tool uses preloaded Census data for the years 1990, 2000, and 2010 and uploaded service area boundary maps for the corresponding years to calculate service area population in Census years. The annual numbers of single family and multi-family connections in EMWD's retail service area to were used to calculate a population-per-connection ratio for Census years using data on the number of single family and multi-family households. The Population Tool interpolated the population-per-connection ratio between Census years and used the annual numbers of single family and multi-family connections in EMWD's service are to estimate population for non-Census years.

To estimate population for the 2015 interim water use target, EMWD used a methodology similar to DWR's Population Tool, but consistent with annual reporting to the SWRCB. To determine 2015 retail population, EMWD added the number of new EDUs that have been installed since 2010 and multiplied the new EDUs by the estimated persons-per-connection factor. This alternative methodology was pre-approved by DWR. EMWD's retail baseline and 2015 population is summarized in Table 5-3.

Table 5-3: Baseline Retail Population

Baseline Year	Year	Population
Year 1	1999	292,123
Year 2	2000	303,678
Year 3	2001	317,457
Year 4	2002	357,783
Year 5	2003	364,893
Year 6	2004	389,897
Year 7	2005	430,314
Year 8	2006	468,467
Year 9	2007	486,901
Year 10	2008	500,589
--	2015	546,146

5.5 Baseline Daily per Capita Water Use

Table 5-4 summarizes the retail service area population and daily per capita water use, reported in gallons per capita per day (GPCD), for the 10-year baseline period that are used to calculate the baseline per capita use. Table 5-5 summarizes the retail service area population and daily per capita use values used to calculate the minimum per capita reduction estimated for the five-year baseline period.

Using the methodology established by DWR, EMWD has calculated its baseline water use to be 197 GPCD, based on the average GPCD between 1999 and 2008.

Table 5-4: 10-Year Baseline Daily Per Capita Use – 1999-2008

Base Years	Service Area Population	Gross Water Use (AF)	Daily Per Capita Water Use (GPCD)
1999	292,123	69,390	212
2000	303,678	72,005	212
2001	317,457	70,059	197
2002	357,783	81,283	203
2003	364,893	86,289	211
2004	389,897	79,977	183
2005	430,314	94,677	196
2006	468,467	100,831	192
2007	486,901	104,378	191
2008	500,589	97,184	173
10-Year Average Baseline GPCD			**197**

Table 5-5: Five-Year Baseline Daily Per Capita Use – 2003-2007

Base Years	Service Area Population	Gross Water Use (AF)	Daily Per Capita Water Use (GPCD)
2003	364,893	86,289	211
2004	389,897	79,977	183
2005	430,314	94,677	196
2006	468,467	100,821	192
2007	486,901	104,378	191
5-Year Average Baseline GPCD			**195**

5.6 Water Use Targets

EMWD has selected DWR's Target Method 2 to determine compliance with SBx7-7. Target Method 2 utilizes the sum of three efficiency standards for water demand to calculate the 2015 and 2020 targets:

- **Efficient Indoor Residential Use:** Indoor residential per capita use to meet target demand of 55 GPCD.
- **Landscape Water Use Equivalent to Model Ordinance:** Landscape irrigation, delivered either through a residential meter or a dedicated landscape meter to meet the efficiency standards of the MWELO. Agricultural water use also to meet the efficiency standards of the MWELO.
- **CII Water Use:** Ten percent reduction in water use from baseline CII use.

In 2009, EMWD implemented a budget-based tiered rate program. For residential and landscape customers, these budgets are based on persons per household and the irrigated landscape areas. To develop budgets for over 130,000 accounts, EMWD estimated irrigated areas using parcel data supplied by the County of Riverside. Since 2009, EMWD has measured over 13,000 acres of landscape area using GIS and aerial photography or field verification. This information was used to estimate the remaining irrigated area for 2020. Actual irrigated area will be determined in the compliance year.

Agricultural areas were also measured using aerial photography and are anticipated to decrease through 2020. Agricultural areas are referred to as "Special Landscape Areas" and receive an Evapotranspiration Adjustment Factor (ETAF) of up to1.0. Actual ETAF is based on the crop coefficient; 0.55 for citrus, 0.8 for vegetables and other row crops and 1.0 for grain. EMWD has also assessed all of its dedicated meters at school sites to determine recreational landscape areas. These have been added to the Special Landscape Areas. Landscape installed pre-2010 receives an ETAF of 0.8 and landscape installed after 2010 receives an ETAF of 0.7 according to the MWELO. Table 5-6 summarizes the pre-2010 landscape, post-2010 landscape and agricultural landscape irrigated areas and target water uses.

Table 5-6: Landscape Irrigated Area Efficiency Standard

ETo for Service Area (inches/year) from Landscape Parcels Table		58.8
Landscape Parcels	**Acres**	**Water Use (AF)**
Acres of landscape installed pre-2010 (ETAF 0.8)[1]	15,559	61,014
Acres of landscape installed post-2010 (ETAF 0.7)[1]	999	3,428
Acres of Special Landscape Area (ETAF 0.55)[1]	134	361
Acres of Special Landscape Area (ETAF 0.8)[1]	1,500	5,882
Acres of Special Landscape Area (ETAF 1.0)[1]	384	1,885
Target Landscape Water Use for 2015		**72,570**

1) ETAF - Evapotranspiration Adjustment Factor. Refer to the Model Water Efficient Landscape Ordinance.

Table 5-7 contains the calculation for the CII target per capita water use. CII water use does not include multifamily.

Table 5-7: Commercial, Industrial and Institutional, Daily Per Capita Use – 1999-2008

Base Years	Service Area Population	CII Water Use (AF)	CII Daily Per Capita Water Use (GPCD)
1999	292,123	6,740	20.6
2000	303,678	7,170	21.1
2001	317,457	7,120	20.0
2002	357,783	7,280	18.2
2003	364,893	7,230	17.7
2004	389,897	7,850	18.0
2005	430,314	7,280	15.1
2006	468,467	8,240	15.7
2007	486,901	8,370	15.3
2008	500,589	8,190	14.6
		Average GPCD	**17.6**
		CII Target GPCD (10% Reduction of Base)	**16**

Table 5-8 summarizes the three efficiency targets for a 2020 compliance target of 176 GPCD and a 2015 interim target of 187 GPCD. The 2020 compliance target is lower than the minimum five percent reduction of the five-year average GPCD, or 195 GPCD. The baselines and targets are summarized in Table 5-9.

Table 5-8: Target Method 2 Compliance Water Use Summary (GPCD)

2020 Population	617,100	
Sector	**Volume (AF)**	**GPCD**
Target Indoor Residential Water Use	38,016	55
Target Landscape Water Use	72,570	105
Target CII Water Use	10,966	16
2020 Target	**121,552**	**176**

Table 5-9: Baselines and Targets Summary

DWR Table 5-1 Baselines and Targets Summary *Retail Agency or Regional Alliance Only*					
Baseline Period	**Start Year**	**End Year**	**Average Baseline GPCD**	**2015 Interim Target GPCD**	**Confirmed 2020 Target GPCD**
10-15 year	1999	2008	197	187	176
5 Year	2003	2007	195	--	--

5.7 2015 Compliance Daily per Capita Water Use

Agencies must demonstrate compliance with the 2015 interim water use target. In 2015, EMWD's gross water use was 78,815 AF as shown in Table 5-10. Gross water use includes all potable and raw water into EMWD's retail distribution, excluding exports to other agencies as described in Section 5.3. EMWD's retail population in 2015 is estimated at 546,146 as described in Section 5.4. Therefore, EMWD's actual 2015 per capita use is 129 GPCD, which is well below the 2015 interim water use target as shown in Table 5-11. No optional adjustments were employed to reduce the 2015 actual GPCD any further.

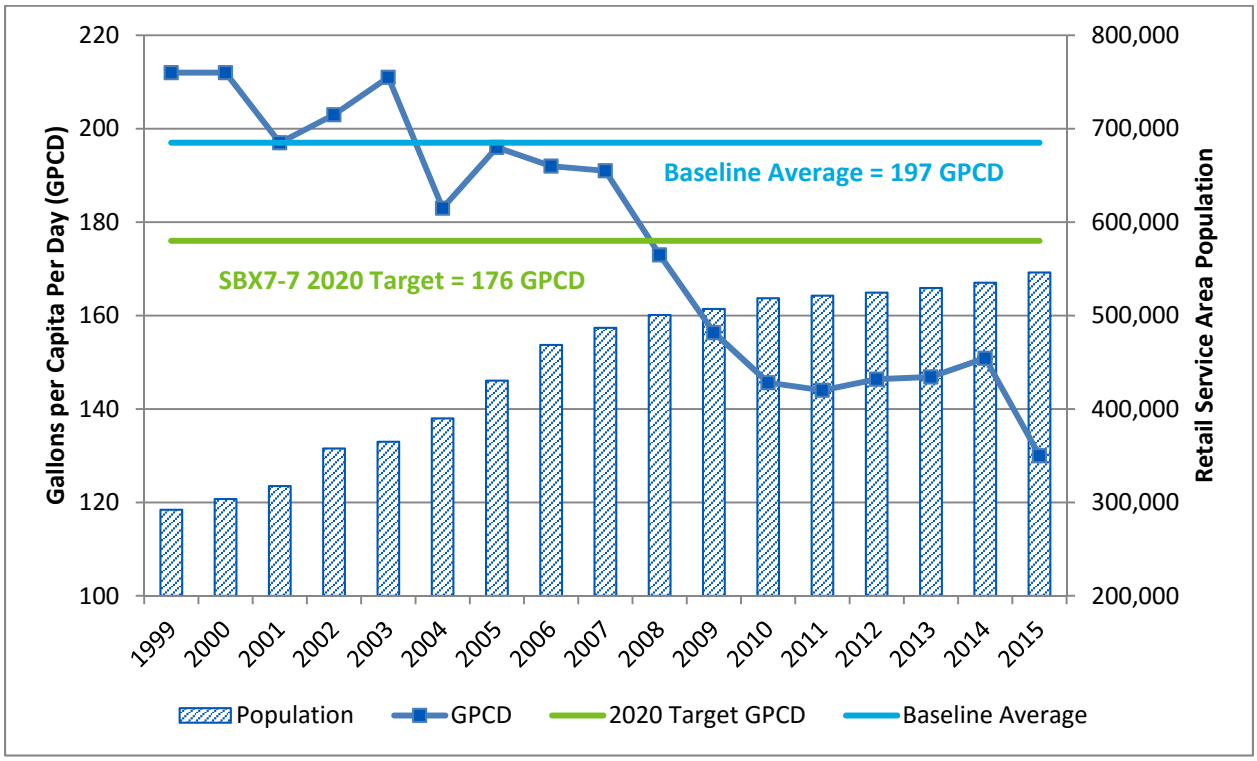
Table 5-10: Gross Water Use for 2015 (AFY)

Supply Source	**2015**
Potable Wells	14,570
Desalters	7,288
Mills and Skinner Plants	39,222
MWD Raw Water	941
EMWD Water Filtration Plants	18,628
Raw Water Augmentation	682
Exported to other Utilities	-2,516
Gross Water Use	**78,815**

Table 5-11: 2015 Compliance

DWR Table 5-2: 2015 Compliance *Retail Agency or Regional Alliance Only**								
		Optional Adjustments to 2015 GPCD						
Actual 2015 GPCD	2015 Interim Target GPCD	Extra-ordinary Events	Economic Adjustment	Weather Normalization	TOTAL Adjustments	Adjusted 2015 GPCD	2015 GPCD	Did Supplier Achieve Targeted Reduction for 2015?
129	187	0	0	0	0	129	129	Yes

Figure 5-1: Progress Towards SBx7-7 Target



As seen in Figure 5-1, EMWD's GPCD dropped significantly in 2015 due to mandatory conservation standards in place. Even before mandatory restrictions were implemented, EMWD's GPCD was trending lower than both its 2015 and 2020 target. EMWD will continue to reduce potable water demand to meet the goals of SBx7-7 by using recycled water to offset potable demand and reducing demand for water through conservation. Conservation efforts are focused on three methods: 1) a budget-based tiered rate, 2) requirements for water efficiency in new construction and 3) an active conservation program. Water use reduction will continue to be focused on outdoor demand reduction by all customer types. Using the above three conservation methods and expanded use of recycled water, EMWD anticipates it will be able to meet its 2020 water use target of 176 GPCD and comply with all the requirements of SBx7-7. EMWD's retail water use efficiency methods are described in more detail in *Chapter 9 – Demand Management Measures*.

5.8 Measures to Reduce Wholesale Customer Demands

As a wholesaler, EMWD is required to provide an assessment of its present and proposed future measures, programs, and policies that will help its wholesale customers achieve their SBx7-7 water use reduction targets. As both a wholesaler and a retailer, EMWD currently participates in and supports programs developed and implemented by MWD that benefit its entire service area, including wholesale customers. These programs include region-wide rebates for both commercial and residential customers, conservation messaging and outreach, and research and development of new conservation programs and devices. EMWD also actively promotes conservation throughout Riverside County through participation in organizations such as the Riverside County Water Task Force and the San Jacinto Valley Conservation League. EMWD will continue to support water reduction by wholesale customers through the use of outreach, technical support and participation in regional programs. EMWD's wholesale water conservation efforts are described in more detail in *Chapter 9 – Demand Management Measures*.

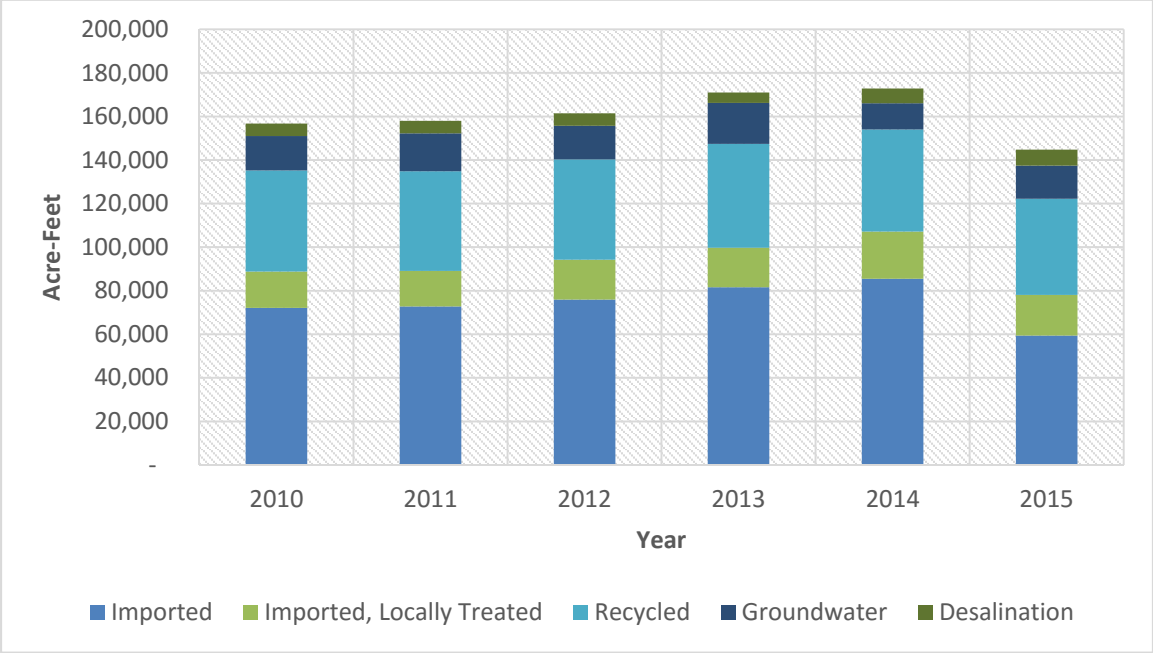
Chapter 6 System Supplies

6.1 Supply Overview

EMWD has a diverse portfolio of local and imported supplies. Local supplies include recycled water, potable groundwater, and desalinated groundwater. EMWD is a leader in recycled water production and use. Since 2014, EMWD has used 100 percent of its recycled water to irrigate landscape and agricultural fields and provide water for industrial customers. Groundwater is produced from two management areas within the service area. EMWD works diligently with other stakeholders to protect the quality and integrity of the groundwater basins. These efforts include recharging the basins with imported water and limiting native groundwater production when appropriate. Currently, EMWD is developing a plan to expand groundwater recharge to improve reliability for its customers during normal and dry year demand periods. In addition to the production of potable groundwater, EMWD treats brackish groundwater at two locations. EMWD's groundwater desalination program has the benefit of not only providing a sustainable, reliable source of potable water for its customers, but also protecting higher quality groundwater from rising levels of brackish groundwater. These local supplies help EMWD meet regional goals for supply reliability and help limit the impact of imported water shortages.

In addition to local supplies EMWD receives imported water from MWD in three forms: delivered directly as potable water, delivered to EMWD as raw water and then treated at EMWD's two local filtration plants, or delivered to EMWD as raw water for non-potable use and groundwater recharge. Figure 6-1 illustrates the volumes of EMWD's imported water, locally imported water, recycled water, groundwater, and desalinated groundwater supplies from 2010 to 2015 in AFY.

Figure 6-1: Water Received by Source (AF) – 2010 – 2015



EMWD depends on MWD for approximately half of its retail water supply. For the past five years, EMWD has been able to maintain a balance of local and imported water even as new connections were added. This was accomplished through the implementation of local supply projects and increased water use efficiency. In 2015, EMWD's reliance on MWD was lower than average due to mandatory restrictions put in place by SWRCB, which required EMWD customers to reduce their demands. This demand reduction resulted in reduced imported water purchases by EMWD in 2015.

Information about EMWD's historical and current water supplies for its retail and wholesale service areas is included in Table 6-1 and Table 6-2, respectively. These supplies are discussed in more detail in the sections that follow.

Table 6-1: Total Historical and Current Retail Water Supply (AFY) – 2010 – 2015

Type	Source	2010	2011	2012	2013	2014	2015
Imported – Treated	MWD	49,709	46,979	53,181	52,293	52,910	36,706
Imported – Locally Treated	MWD	16,629	16,266	18,283	18,154	21,616	18,628
Imported – Raw	MWD	512	691	554	764	768	941
Groundwater	Hemet/San Jacinto and West San Jacinto Basins	15,748	17,465	15,490	18,824	12,037	15,252[1]
Desalination	West San Jacinto Basin	5,787	5,706	5,665	4,800	6,776	7,288
Recycled	EMWD Regional Water Reclamation Facilities	46,451	45,756	46,021	47,638	46,872	44,150
	Total	**134,836**	**132,863**	**139,194**	**142,473**	**140,979**	**122,965**

1) Includes raw, brackish groundwater used to augment the recycled water system.

Table 6-2: Total Historical and Current Wholesale Water Supply (AFY) – 2010 – 2015

Type	Source	2010	2011	2012	2013	2014	2015
Imported – Treated	MWD	11,004	11,667	12,092	13,445	17,303	6,532
Imported – Raw	MWD	10,924	13,461	10,127	15,105	14,532	15,236
Recycled	EMWD Regional Water Reclamation Facilities	871	728	812	1,239	1,172	1,235
	Total	**22,799**	**25,856**	**23,031**	**29,789**	**33,007**	**23,003**

6.2 Imported Water

EMWD relies on MWD for the majority of its potable water supply. Over the past five years, deliveries from MWD to EMWD's retail service area ranged between 56,275 AF and 75,294 AF. In 2015, approximately 40 percent of EMWD's total retail supply was imported water delivered through MWD. Reduced imported water use in 2015 was a direct result of the SWRCB's mandatory restrictions put in place to meet a statewide reduction of 25 percent. The sections that follow provide background information on MWD and its relationship to EMWD.

6.2.1 MWD Overview

MWD was formed in 1928 by thirteen Southern California cities to develop, store and distribute water for domestic and municipal purposes to the residents of Southern California. Today, the MWD service area stretches across the Southern California coastal plain to 26 member agencies and includes portions of Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. In 2014, MWD's service area

population was estimated to be 18,508,000 people, approximately 86 percent of the population in the six counties served by MWD.

MWD is a wholesale water provider and has no retail customers. It provides treated and untreated water directly to its member agencies. Over the last ten years, MWD has provided between 50 percent and 60 percent of the municipal, industrial, and agricultural water used in its nearly 5,200-square mile service area. The remaining water is provided through local resources and imported water from other sources.

EMWD is one of the 26 member agencies that make up MWD, which include fourteen cities, ten other municipal water districts and one county water authority. The statutory relationship between MWD and its member agencies establishes the scope of EMWD's entitlements from MWD. EMWD, like other member agencies, receives deliveries at different points in the system and pays for the service through a rate structure made up of multiple components. Each year member agencies advise MWD how much water they anticipate they will need during the next five years. MWD then works with member agencies to develop forecasts of long-term future water supply. MWD delivers supply to member agencies from two sources, the CRA, which it owns and operates, and the SWP, owned and operated by DWR. Figure 6-2 shows MWD facilities in California. Additional information about MWD is provided in MWD's 2015 UWMP.

Current Challenges

In the past five years, MWD has encountered several challenges in delivering an adequate, reliable, high quality water supply to its member agencies. Many of these challenges can be tied to dry hydrologic conditions that persisted through 2015. The water conditions were shaped by several extraordinary events including:

- Historic drought in California leading to record low SWP allocation of five percent in 2014 and 20 percent in 2015;
- An extended 16-year drought on the Colorado River watershed that has decreased storage levels in Lake Mead and Lake Powell and kept storage below surplus levels through 2015;
- Low groundwater and local reservoir levels throughout Southern California due to dry hydrology;
- Significant reduction in SWP deliveries due to the restrictions in place to protect endangered Delta smelt and salmon which result in sizable losses of water supply to the ocean;
- Lake Oroville dropping within ten thousand AF (TAF) of its historic lowest operating levels in 2014; and
- Drought and environmental mitigation impacting the supply available from the Los Angeles Aqueduct.

These challenges led to significant withdrawals from MWD's surface reservations and groundwater banking and conjunctive use programs to meet demand. MWD also responded with a record amount of water-saving rebates and refocused its efforts to develop local resources.

Hydrologic conditions show signs of improvement in 2016 with snow pack and rain fall close to average in Northern California and an expected SWP allocation of 45 percent or better. However a single year cannot restore all of the storage that has been depleted over several years. It remains important that MWD and its member agencies maintain flexible and adaptive regional planning strategies.

Figure 6-2: MWD Facilities in California

6.2.2 Colorado River Aqueduct Overview

MWD was established more than eighty years ago to obtain an allotment of Colorado River water and today the CRA continues to be a core supply for Southern California. The CRA, with a 1.2 million AF (MAF) capacity, transports water from Lake Havasu, at the border of California and Arizona, approximately 242 miles to Lake Mathews in Riverside County.

Since 1999, the Colorado River has been experiencing a prolonged drought. During 2005, 2008 and 2009, drought conditions eased somewhat with near or above average inflow conditions and net gains in storage. Drought conditions resumed in 2012 with the runoff situation being among the four driest in history. During the drought conditions, Colorado system storage has decreased to approximately 50 percent of capacity.

MWD's goal for the CRA is to "maintain current supplies and programs, while also maintaining flexibility through dry-year programs and storage." MWD has a legal right to receive water from the Colorado River under a permanent service agreement with the Secretary of the Interior and holds a basic apportionment of 550 TAF of water from the Colorado River. In 2003, the Quantification Settlement Agreement among Imperial Irrigation District, Coachella Valley Water District, and MWD established entitlements for each agency and facilitated the transfer of water from agricultural agencies to urban uses. Over the years, MWD has increased the reliable supply from the CRA through funding and implementing programs including: farm and irrigation district conservation programs, land management programs, improved reservoir system operations, and water transfers and exchanges through arrangements with agricultural water districts in Southern California and entities in Arizona and Nevada that use Colorado River delivered by the U.S. Department of the Interior, Bureau of Reclamation (USBR). Through these efforts MWD is able to obtain between 1.16 and 1.39 MAF of water during normal, historic single-dry and historic multiple-dry years. MWD also has an additional 25 TAF of supplies under development. In addition to MWD supplies, the CRA is also used to convey non-MWD supplies to other parties including over 200 TAF to the San Diego County Water Authority (SDCWA) as part of an agreement between SDCWA and the Imperial Irrigation District. Since the capacity of the CRA is limited to 1.2 MAF, the maximum supply MWD can deliver is limited to 1.2 MAF in any given year, including conveyance obligations. A detailed description of the limitations and management strategy for the CRA can be found in Section 3.1 of MWD's 2015 UWMP.

6.2.3 State Water Project Overview

The SWP is owned by the State of California and operated by the DWR. More than two thirds of California's residents depend on the SWP for a portion of their drinking water. The SWP faces several environmental and water quality challenges as well as concerns about vulnerability to natural disasters.

The 600 mile SWP delivers water to Southern California from Northern California through a series of pump stations, reservoirs and aqueducts. At the hub of the SWP is the San Francisco Bay/Sacramento-San Joaquin Delta (Bay-Delta). The Bay-Delta's declining ecosystem, caused by a number of factors including agricultural runoff and operation of water pumps that can alter the direction of flow, has led to historic restrictions on water supply deliveries from the SWP.

In 1960, MWD signed a contract with DWR to receive water from the SWP. MWD is one of the 29 agencies with long-term contracts for water service from DWR; and it is the largest agency in terms of population served, contracted amount of SWP water (46 percent), and annual payments made to DWR. The original contract MWD held was for 1,911 TAF of SWP water. Before 1994 the SWP water reliability was rapidly deteriorating. MWD estimated its SWP delivery would be reduced to 171 TAF, about 8.9 percent of its SWP contract, under a dry year scenario. After the 1994 Bay-Delta Accord established new operating criteria, DWR estimated that MWD's allocation under a dry year scenario would increase to 418 TAF. Although the Bay-Delta Accord improved conditions, MWD continues to address concerns that threaten reliability in the SWP.

The listing of several species as threatened or endangered in the Bay-Delta region has impacted operations and limited the flexibility of the SWP. Operations have been curtailed due to restrictions put into place to protect Delta smelt, salmon, and other species that spawn in rivers flowing to the Bay-Delta, which are federal and state-listed threatened fish species that inhabit the estuaries of the region. Changes in SWP operation have affected the manner in which water is diverted from the Bay-Delta and have limited deliveries. Between 2008 and 2014, restrictions on Bay-Delta pumping reduced deliveries of SWP

water to MWD by approximately 1.5 MAF. SWP operations may also be restricted by new biological opinions for listed species under the federal Endangered Species Act (ESA) or by the California Department of Fish and Wildlife (CDFW)'s issuance of incidental take authorizations under the California ESA. Additional new litigation, listing of additional species, or new regulatory requirements could also restrict operations and limit water supply. To address potential constraints on the SWP, MWD has developed near- and long-term action plans to increase water supply reliability.

MWD is also working with stakeholders throughout the state to develop and implement long-term solutions to the problem in the Bay-Delta. The Bay Delta Conservation Plan (BDCP) and preferred alternative called the California WaterFix are being prepared through a collaboration of state and federal agencies, local water agencies, environmental organizations, and other interested parties. The purpose is to design physical and operational improvements to the SWP system in the Bay-Delta to improve supply reliability, improve water quality, and restore and protect ecosystem health. In evaluating the supply reliability for the 2015 UWMP, MWD assumed the long-term Bay-Delta improvements would be fully operational by 2030.

In Section 3.2 of MWD's 2015 UWMP, MWD provides details about the planned actions and achievements to date in improving the reliability of the SWP. MWD also describes other challenges affecting the SWP including water quality and climate change.

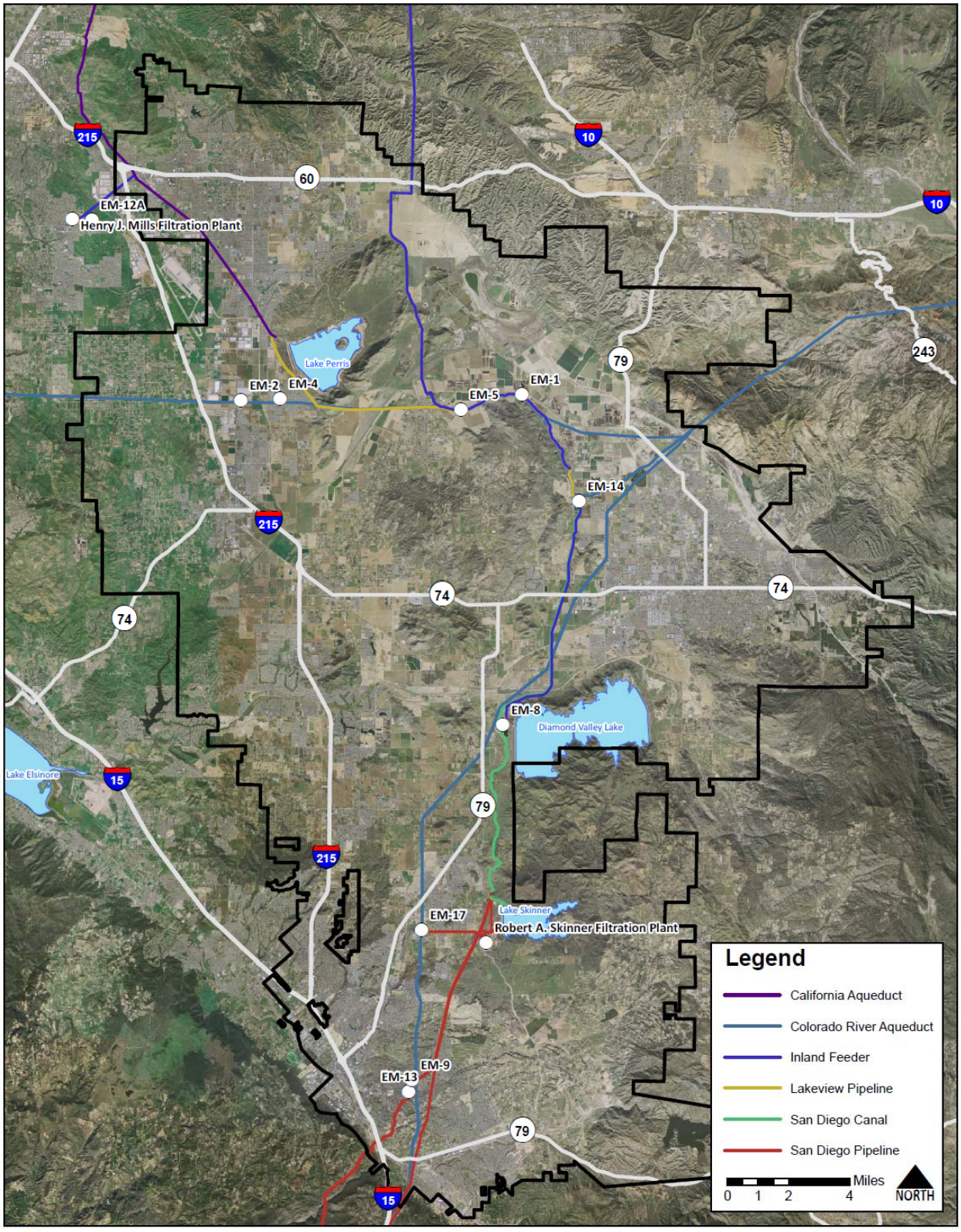
6.2.4 EMWD and MWD

The original mission of MWD was to build the CRA, bringing Colorado River water to Southern California. As MWD was constructing the San Jacinto Tunnel Portion of the project, a large amount of seepage was encountered in the pipeline. As the seepage began to affect local water resources within the region, residents began to organize to protect their water supply. Around the same time, the region experienced a period of dry weather conditions and the groundwater basin began to experience overdraft. It became clear that a source of imported water was necessary. EMWD was formed in 1950 to bring imported water into the area. In 1951, it was annexed into MWD and the first major sale of Colorado River water within EMWD began in July of 1952.

In 1960, MWD contracted for additional water supplies from the SWP, operated by DWR. In 1972, the SWP began conveying water from the wet climate of northern California to the dry climate of Southern California. Through the 1980s, EMWD built facilities to take advantage of the SWP water available, and today, the largest portion of EMWD's water supply is provided from Northern California. Treated potable water is available in the North from the Mills Water Treatment Plant and in the south through the Skinner Water Treatment Plant. EMWD also owns and operates two water filtration plants that treat raw imported water: Perris Water Treatment Plant and Hemet Water Treatment Plant. Raw imported water is also used for recharge purposes and to meet agricultural demands.

MWD does not provide supply projections for each member agency. Instead MWD uses a regional approach to developing projections. MWD calculates the demand for the entire region as discussed in Appendix A.1 of the MWD's 2015 UWMP. Using information about existing and proposed local projects, MWD then determines the amount of imported water supply and demand. Throughout the preparation of the 2015 UWMP, EMWD has provided to MWD information about local supply and projects, clarifications on boundary information, and population projections. Based on this information and information provided by other member agencies, MWD has determined it is able to meet the demands of all member agencies through 2040.

Figure 6-3: MWD Facilities within EMWD's Service Area



emwd

Eastern Municipal Water District
Metropolitan Water District Facilities

6.3 Groundwater

EMWD produces potable groundwater from two management plan areas within the San Jacinto Groundwater Basin. The areas are the West San Jacinto Groundwater Basin Management Plan area (West San Jacinto Basin) and the Hemet/San Jacinto Water Management Plan area (Hemet/San Jacinto Basin). EMWD also owns and operates two desalination plants that convert brackish groundwater from the West San Jacinto Basin into potable water. These plants not only provide a reliable source of potable water, they also protect potable sources of groundwater and support EMWD's groundwater salinity management program.

EMWD is a key player in three cooperative efforts to protect groundwater quality and reliability. The West San Jacinto Basin is subject to the West San Jacinto Groundwater Basin Management Plan (WSJ Management Plan), developed in 1995 and included in Appendix E of this UWMP. The Hemet/San Jacinto Basin is subject to the HSJ Management Plan, developed in 2007 and included in Appendix F of this UWMP. The HSJ Management Plan is implemented by the Hemet-San Jacinto Watermaster (Watermaster). The Watermaster was appointed and supervised by the Superior Court of the State of California for the County of Riverside, pursuant to the Stipulated Judgment entered in April 2013 (Appendix G). Additionally, a subset of participants (EMWD, LHMWD and the Soboba Band of Luiseño Indians [Soboba Tribe]) also actively manage water levels under a separate agreement under the Canyon Operating Plan.

Native potable groundwater production in the Hemet/San Jacinto Basin is limited according to HSJ Management Plan provisions to prevent continued overdraft. EMWD anticipated the limitations on native groundwater production it has experienced and has developed alternatives to assure reliability including an Integrated Recharge and Recovery Program (IRRP), filtration plants to treat and deliver imported water to areas dependent on groundwater, and recycled water use for irrigation of landscape and agriculture. In addition to the existing IRRP, EMWD is developing the Enhanced Recharge and Recovery Program (ERRP) to increase conjunctive use and facilitate groundwater banking. Phase 1 of the ERRP program is included in the Santa Ana River Conservation & Conjunctive Use Program (SARCCUP), a cooperative program to store imported water during wet years for use during dry years. Both management plan areas are part of the San Jacinto Groundwater Basin (DWR Bulletin 118 Groundwater Basin Number 8-05).

Portions of EMWD also overlay the Santa Margarita Valley Groundwater Basin. Pumping from the Santa Margarita Valley Groundwater Basin is not addressed further in this document because EMWD does not extract groundwater from the Santa Margarita Valley Groundwater Basin and has no plans to do so.

6.3.1 Basin Descriptions

The West San Jacinto Basin and the Hemet/San Jacinto Basin are both located within the San Jacinto Groundwater Basin. Groundwater management zones within the San Jacinto Groundwater Basin were delineated based areas of lower groundwater flow, groundwater divides, and changes in groundwater quality (Santa Ana River Basin Plan, 2004 Revision). The Hemet/San Jacinto Basin is comprised of the Hemet South, Canyon, and San Jacinto Upper Pressure Management Zones, as well as the Hemet North portion of the Lakeview/Hemet North Management Zone. The West San Jacinto Basin covers the Perris North, Perris South, San Jacinto Lower Pressure, and Menifee Management Zones, and the Lakeview portion of the Lakeview/Hemet North Management Zone. EMWD produces water for potable use or blending in four of the management zones: Perris North, Hemet South, San Jacinto Upper Pressure and Canyon. Desalter production wells are located in the Perris South and Lakeview/Hemet North Management Zones. The Groundwater Management Zones are outlined in Figure 6-4 and are described below.

Canyon Management Zone

The boundaries of the Canyon Management Zone include the San Jacinto Mountains to the east, north, and south, as well as the San Jacinto fault zone to the west. The San Jacinto Mountains are composed of

consolidated crystalline bedrock and semi-consolidated sedimentary rocks. These rocks are relatively impermeable, providing limited groundwater seepage into the basin and bound the water-bearing, alluvium-filled canyons within this management zone. A branch of the San Jacinto fault zone extends southeast along the channel of Bautista Creek until it intersects the Park Hill fault and acts as an impermeable barrier at depth. The barrier effect of the fault forces groundwater upwards within the San Jacinto River upstream of the fault causing muddy areas at the surface. This area is known as the Cienega and is an area of significant municipal groundwater production.

San Jacinto Upper Pressure Management Zone

The San Jacinto Upper Pressure Management Zone is bounded by the San Jacinto fault to the northeast, the Casa Loma and Bautista Creek fault zones to the southwest and the flow system boundary with the San Jacinto Lower Pressure Management Zone to the northwest. The Claremont fault is a known barrier to groundwater flow, and separates the San Jacinto Graben from both the San Timoteo Badlands and the San Jacinto Mountains. East of the City of San Jacinto, a branch of the San Jacinto fault zone cuts the alluvial fill by extending southeast across the San Jacinto River and along the channel of Bautista Creek until it intersects the Park Hill fault. This branch of the San Jacinto fault zone separates the San Jacinto Upper Pressure Management Zone from the Canyon Management Zone. The Casa Loma and Bautista Creek fault zones are generally known barriers to groundwater flow. However, studies show groundwater leaks across portions of the Casa Loma Fault zones as underflow along the Hemet South and Lakeview/Hemet North Management Zones.

San Jacinto Lower Pressure Management Zone

Boundaries of the San Jacinto Lower Pressure Management Zone include the Claremont fault to the northeast; the Casa Loma fault and its northwestward extension; various crystalline bedrock outcrops to the north and west; and the flow system boundary with the San Jacinto Upper Pressure Management Zone to the southeast. The Casa Loma fault zone is a leaky barrier to groundwater flow to the Perris North Management Zone in this section of the San Jacinto Groundwater Basin. Recharge rates along with water quality differences between San Jacinto Upper Pressure and San Jacinto Lower Pressure characterize the location of the barrier between the two zones.

Lakeview/Hemet North Management Zone

Boundaries of the Lakeview/Hemet North Management Zone include the Casa Loma fault zone to the east; the groundwater divide near Esplanade Avenue to the south; the Lakeview Mountains to the west and south; the Bernasconi Hills to the north; and a bedrock constriction/saddle to the west. The Casa Loma fault zone is a partial barrier to groundwater flow. Generally, groundwater leaks across the fault zone as underflow from the San Jacinto Upper Pressure Management Zone. Impermeable, crystalline bedrock outcrops that compose the Bernasconi Hills and the Lakeview Mountains to the north and south, respectively, are hard rock barriers to groundwater flow. To the west, the gap between the Bernasconi Hills and the Lakeview Mountains becomes narrow and the buried bedrock surface forms a saddle. This area of constriction in the water-bearing alluvium is the boundary between the Perris South and Lakeview/Hemet North Management Zones.

Hemet South Management Zone

The Hemet South Management Zone boundaries include the Casa Loma and Bautista Creek fault zones to the east; the groundwater divide near Esplanade Avenue to the north; the Lakeview Mountains to the northwest; the groundwater divide in the Winchester area to the west; and various crystalline bedrock outcrops to the south. The Casa Loma and Bautista Creek fault zones are generally known barriers to groundwater. However, groundwater leaks across portions of the Casa Loma Fault Zone as underflow into the San Jacinto Upper Pressure Management Zone.

Perris North Management Zone

Boundaries of the Perris North Management Zone include the Casa Loma fault to the northeast bordering the San Jacinto Lower Pressure Management Zone; a bedrock constriction to the south bordering the

Perris South Management Zone; the Bernasconi Hills and the Lakeview Mountains to the west; and the bedrock and surrounding hills the north and west. The Casa Loma fault zone is a generally not a barrier to groundwater flow in this section of the fault. Therefore, groundwater leaks across the fault zone as underflow from the San Jacinto Lower Pressure Management Zone.

Lake Perris is located to the east of the Perris North Management Zone and is surrounded by the Bernasconi Hills and Lakeview Mountains to the north, east, and south, and a dam on the west side. Seepage is known to occur under the dam through a subterranean channel into the Perris North Management Zone.

Perris South Management Zone

Boundaries of the Perris South Management Zone include a groundwater divide in the Winchester area; bedrock constrictions/saddles bordering the Menifee Management Zone; a bedrock constriction/saddle bordering the Lakeview/Hemet North Management Zone; a bedrock constriction bordering the Perris North Management Zone; and the surrounding bedrock mountains and hills. A groundwater high exists in the Winchester area near Highway 79. The divide is likely an artifact of natural and artificial recharge and groundwater production patterns. As such, the position (or the very existence) of this groundwater divide may vary with changing seasons, artificial recharge and/or production patterns.

Southwest of EMWD's Winchester Ponds, a narrow constriction in the bedrock coincides with a buried bedrock saddle. This area of constriction in the water-bearing alluvium is a boundary between the Perris South and Menifee Management Zones. Groundwater can flow through this bedrock gap from the Winchester area into the Menifee Management Zone; this is especially true during times of high groundwater levels. Southeast of Sun City, a bedrock constriction in the water-bearing alluvium is also a boundary between the Perris South and Menifee Management Zones. Groundwater flows through this bedrock gap from the Sun City area into the Menifee Management Zone.

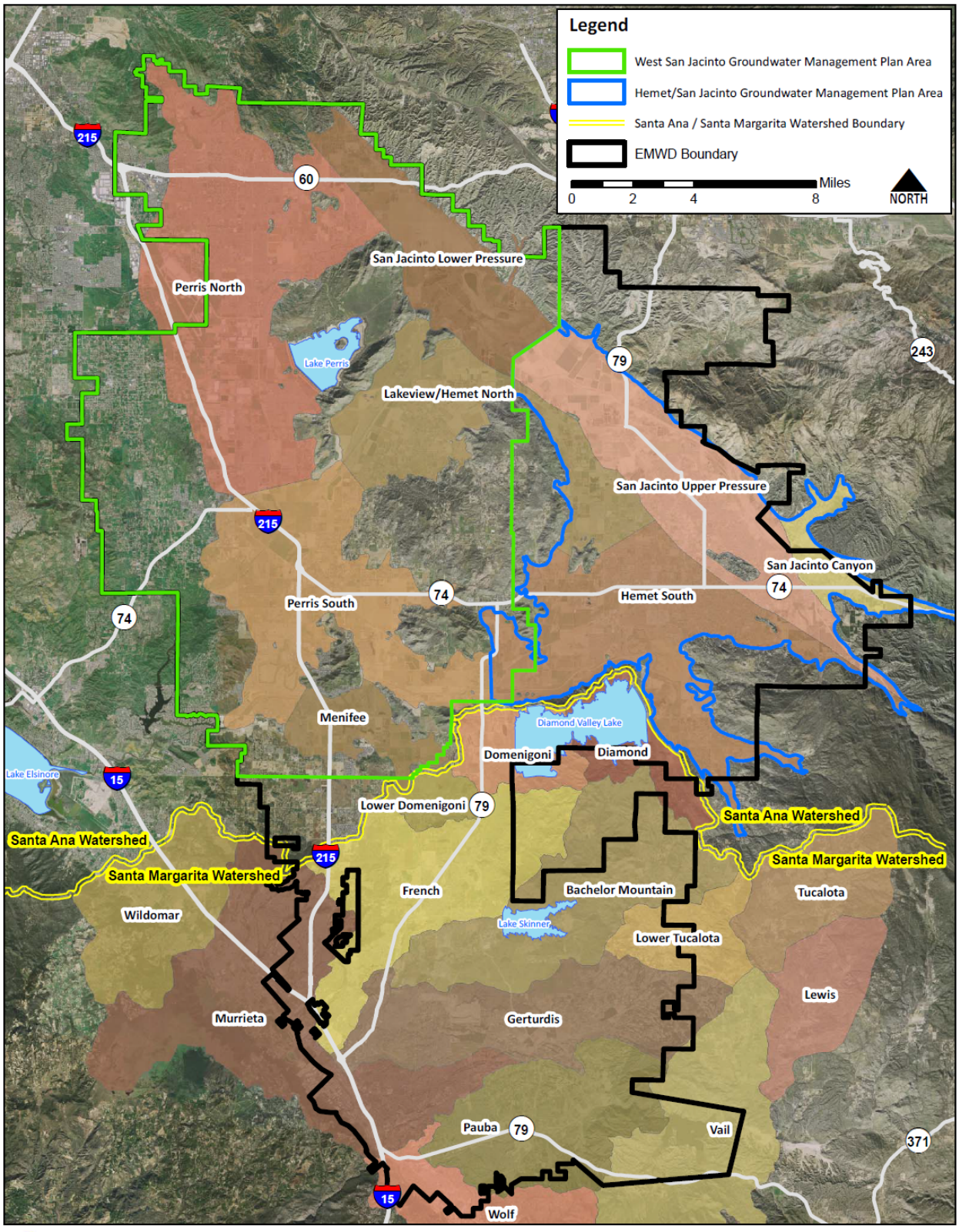
To the northeast, the gap between the Bernasconi Hills and the Lakeview Mountains becomes narrow and the buried bedrock surface forms a saddle. This area of constriction in the water-bearing alluvium is the boundary between the Perris South and Lakeview Management Zones. Under historic flow conditions, groundwater flowed westward from Lakeview into Perris South. However, groundwater currently flows from Perris South eastward into Lakeview toward a “pumping depression” in the groundwater table.

Menifee Management Zone

Boundaries of the Menifee Management Zone include the bedrock constrictions/saddles bordering the Perris South Management Zone, a bedrock constriction to the east, and the surrounding bedrock mountains and hills. Southwest of the Winchester Ponds, a narrow constriction in the bedrock coincides with a buried bedrock saddle surface. This area of constriction in the water-bearing alluvium is a boundary between the Perris South and Menifee Management Zones. Groundwater can flow through this bedrock gap from the Winchester area into the Menifee Management Zone, especially during times of high groundwater levels.

Southeast of Sun City, a bedrock constriction in the water-bearing alluvium is also a boundary between the Perris South and Menifee Management Zones. Groundwater flows through this bedrock gap from the Sun City area into the Menifee Management Zone. The groundwater management zones in the San Jacinto Watershed within EMWD's service area are shown on Figure 6-4.

Figure 6-4: Groundwater Management Zones



emwd

Eastern Municipal Water District
Groundwater Management Zones

6.3.2 Groundwater Management

West San Jacinto Basin

In the West San Jacinto area, a cooperative groundwater management plan is already in place to insure the reliability and quality of the water supply. In June 1995, EMWD adopted the WSJ Management Plan in accordance with the statutes in the California Water Code Sections 10750 through 10755 resulting from the passage of AB 3030. The plan was adopted after extensive public outreach and meetings with interested individuals and agencies. A copy of the Management Plan is included in Appendix E.

Implementation of the WSJ Management Plan began directly after its adoption. Initial efforts to implement the WSJ Management Plan included establishing an advisory committee; prioritizing the management zones; evaluating groundwater resources including establishing groundwater quality, level, and extraction monitoring programs; and conducting hydro-geophysical investigations. The West San Jacinto Groundwater Basin Management Plan Annual Report, documenting the implementation of the plan and activities in the groundwater management zones, has been published annually since 1996.

Hemet/San Jacinto Basin

In 2001, the Cities of Hemet and San Jacinto, LHMWD, EMWD, and representatives of the private groundwater producers, with DWR acting as an impartial mediator, began working on a groundwater management plan for the Hemet/San Jacinto Basin. The group discussed and resolved several controversial issues, including San Jacinto Tunnel seepage water, the Fruitvale Judgment and Decree, export of groundwater from the basins, and how to maximize the use of recycled water. As a result of their efforts, a final HSJ Management Plan was completed in 2007 (Appendix F) and a Stipulated Judgment was entered with the Superior Court of the State of California for the County of Riverside in April of 2013 (Appendix G).

The HSJ Management Plan:

- Limits the amount of water being extracted from the basin free of the replenishment charge to a sustainable yield.
- Implements continued recharge of the basin using imported water through the IRRP.
- Ensures settlement claims by the Soboba Tribe are facilitated and accommodated.
- Expands the existing water production and water services system to meet future urban growth through the use of imported water recharged into the basin.
- Protects and/or enhances water quality in the Hemet/San Jacinto Basin.
- Supports cost-effective water supplies and treatment by the public agencies.
- Eliminates groundwater overdraft and enhances basin yield.
- Continues the monitoring program to promote and provide for best management and engineering principles to protect water resources.

Long-term groundwater management includes plans for artificial recharge using MWD replenishment water via permanent facilities through the IRRP Program. An agreement with the Soboba Tribe (described in the following section) requires MWD to deliver, on average, 7,500 AFY of water for the next 30 years to EMWD, LHMWD, and the Cities of Hemet and San Jacinto as part of an effort to recharge groundwater in the Hemet/San Jacinto Basin, fulfilling the Soboba Tribe's water rights and addressing chronic groundwater overdraft.

EMWD's rights under the HSJ Management Plan will be a long-term base groundwater production right of 7,303 AFY. EMWD's base production right will be gradually reduced to the long-term value. In 2015, EMWD's base production right was 9,300 AF, not including previously recharged water credited to it. Any pumping above that amount is subject to replenishment fees.

Soboba Settlement Act

On June 7, 2006, after eleven years of negotiations, the Soboba Tribe, MWD, EMWD, and LHMWD signed the Soboba Band of Luiseño Indians Water Settlement Agreement (Soboba Settlement Agreement) at a 4:00 pm ceremony at The Country Club at Soboba Springs in San Jacinto. Tribal Chairman Robert Salgado, Jr., signed the Settlement Agreement for the Soboba Tribe. A copy of the Agreement is included in Appendix H.

On March 1, 2007, Congresswoman Mary Bono (CA-45) introduced The Soboba Band of Luiseño Indians Settlement Act of 2007 (Soboba Settlement Act) which was co-sponsored by Congressmen Jerry Lewis (R, CA-41), Joe Baca (D, CA-43), and Dale Kildee (D, MI-5), and codifies the agreement between the Soboba Tribe, MWD, EMWD, and LHMWD.

In 2008, Congress passed and the President signed the Soboba Settlement Act that provided to the Soboba Tribe an annual water supply of 9,000 AF, 128 acres of land near Diamond Valley Lake for commercial development, and approves and ratifies the Soboba Settlement Agreement that set forth $17 million from the local water districts for economic development. Additionally, the United States government provided the Soboba Tribe with $11 million for water development.

The agreement terminated litigation against MWD and EMWD, which was filed by the Soboba Tribe in April 2000 (Soboba Band of Luiseño Indians v. MWD). The lawsuit sought damages and injunctive relief for the continuing drainage of water from the Soboba Reservation into MWD's nearby San Jacinto Tunnel which was constructed in the 1930s. The bill mandates, on average, an annual delivery of 7,500 AF of water by MWD for the next 30 years to EMWD, LHMWD, and the cities of Hemet and San Jacinto, as part of an effort to recharge the San Jacinto Groundwater Basin, fulfilling the Soboba Tribe's water rights and addressing chronic groundwater overdraft.

As outlined in the Soboba Settlement Act, the cities and agencies also received $10 million in federal funds to build the facilities to recharge the aquifer with the imported water, and between 6,100 and 4,900 AFY of the Soboba Tribe's water (on a declining scale over a 50 year period) to be used towards basin replenishment. The Soboba Tribe will also make 98 acres of Soboba Reservation land available for endangered species habitat, on an acre for acre basis, to replace EMWD land found to be not suitable for mitigation.

In 2015, the Canyon Operating Plan, an agreement between EMWD, LHMWD and the Soboba Tribe, was completed as a result of a Memorandum of Understanding (MOU) related to the Soboba Settlement Act. The Canyon Operating Plan provides a framework for operating the Canyon Management Zone in a manner to avoid significant impacts to the Soboba Tribe's wells and does not reduce the overall supply available in the Hemet/San Jacinto Basin.

6.3.3 Groundwater Overdraft and Replenishment

The HSJ Management Plan recognizes that the Hemet/San Jacinto Basin is presently in a condition of groundwater overdraft. In 2007, the overdraft was estimated to range from 10,000 to 15,000 AFY. The Watermaster has implemented long-term base production rights that will eliminate overdraft conditions within the Hemet/San Jacinto Basin, with interim production rights that step down gradually. In 2015, EMWD's annual base production right in the Hemet/San Jacinto Basin was 9,300 AF. The long-term annual base production right for EMWD is 7,303 AF.

Through pilot programs and using temporary facilities, EMWD has recharged groundwater in the Hemet/San Jacinto Basin with imported surplus water from MWD since 1990. In April of 2004, EMWD, LHMWD, and the Cities of Hemet and San Jacinto executed a MOU for an Interim Water Supply Plan. The purpose of the plan was to address the deteriorating situation in the Hemet/San Jacinto Basin by providing recharge of imported water from the SWP into the aquifer at two sites – the Conjunctive Use Ponds in the Intake portion of the San Jacinto Upper Pressure Management Zone, and the Grant Avenue Ponds in the Canyon Management Zone. Approximately 20,819 AF of imported water from the SWP was

recharged into the aquifer in the period spanning from 2004 through 2007. Due to dry conditions, environmental restriction, and the level of demands in its service area, MWD curtailed Replenishment Service effective as of May 1, 2007. Since then, permits to recharge water at the two sites have expired. To replace the temporary recharge facilities, long-term facilities are being operated as part of the IRRP, an integral piece of the HSJ Management Plan and the Soboba Settlement Agreement. The IRRP consists of 35 acres of basins or ponds for recharging SWP from MWD; three extraction wells; three monitoring wells; modification to two existing pump stations; and pipelines within, and adjacent to, the San Jacinto River.

EMWD and the other three local agencies are also contributing to the replenishment of the basin by providing recycled water in lieu of groundwater production. The Recycled In-Lieu Program supplies recycled water for agricultural irrigation in-lieu of pumping native groundwater. The project can deliver up to 8,540 AFY to local agricultural water producers. The project costs are jointly funded by EMWD, LHMWD, and the Cities of Hemet and San Jacinto. Agreements that set limits on groundwater production and provide for a payment of a portion of the operation and maintenance costs have been in place since 2008.

6.3.4 Groundwater Pumping

EMWD has an existing potable well capacity of 43.7 cubic feet per second (CFS). In the Hemet/San Jacinto Basin, well capacity is 35.62 CFS, including three wells dedicated to the IRRP. The IRRP will recharge Soboba Settlement Water into the basin. In the West San Jacinto Basin, there is 8.06 CFS of well capacity. Table 6-3 summarizes the existing potable well capacities that deliver water to EMWD's distribution system.

Table 6-3: Existing Potable Groundwater Production Capability (CFS)

Facility	Capacity
San Jacinto Upper Pressure	
EMWD Wells	12.09
IRRP Wells	10.25
Hemet South	2.03
Canyon	11.25
Perris North	8.06
Total	**43.68**

EMWD's total potable groundwater extraction varied from a low of 12,037 AFY up to 18,824 AFY from 2011 through 2015. Potable groundwater in the West San Jacinto Basin is monitored by the WSJ Management Plan. There are no restrictions on the amount of water that can be extracted. Current production in the Hemet/San Jacinto Basin is limited by the base production rights set in the HSJ Management Plan and is administered by the Watermaster. Production in recent years is reflective of a reduction in demand due to conservation, economic conditions and weather patterns and not of supply reliability.

The volume of groundwater pumped by EMWD from 2011-2015 is reported in Table 6-4. The volumes in the table include potable groundwater pumped from the Hemet/San Jacinto Basin and the West San Jacinto Basin as well as brackish groundwater pumped from the West San Jacinto Basin that is treated at EMWD's desalters before being used as a potable supply. Brackish groundwater volumes reported in Table 6-4 below are reported as a desalinated water supply in other supply tables of this UWMP (Table 6-1, Table 6-18, and Table 6-20). As documented in Table 6-5, groundwater is not used to meet wholesale demands.

Table 6-4: Retail Groundwater Volume Pumped

DWR Table 6-1 Retail: Groundwater Volume Pumped						
Groundwater Type	**Location or Basin Name**	**2011**	**2012**	**2013**	**2014**	**2015**
Alluvial Basin	Hemet/San Jacinto Basin portion of the San Jacinto Groundwater Basin (DWR 8-05)[1]	12,709	10,091	13,828	8,021	9,559
Alluvial Basin	West San Jacinto Basin portion of the San Jacinto Groundwater Basin (DWR 8-05)	4,756	5,399	4,996	4,016	5,011
Alluvial Basin	Brackish Groundwater from the West San Jacinto Basin portion of the San Jacinto Groundwater Basin (DWR 8-05)[2]	7,533	7,139	6,501	9,897	10,089
	Total	**24,998**	**22,629**	**25,325**	**21,934**	**24,659**

1) There was additional EMWD pumping (641 AF in 2014; 1,284 AF in 2015) in the Hemet/San Jacinto Basin that was wheeled as part of sub-agency groundwater rights under the Hemet/San Jacinto Management Plan.
2) Brackish groundwater pumped from the West San Jacinto Basin is not a direct supply – it is used to feed desalination facilities. The treated volume of this supply is shown in the other supply tables of this chapter as desalinated water instead of groundwater.

Table 6-5: Wholesale Groundwater Volume Pumped

DWR Table 6-1 Wholesale: Groundwater Volume Pumped	
☑	Supplier does not pump groundwater[1].

1) EMWD does not pump groundwater for its wholesale customers.

6.4 Surface Water

EMWD holds a right to divert up to 5,760 AFY of San Jacinto River flows for recharge and subsequent use from September 1st through June 30th each year. EMWD's diversion and recharge of San Jacinto River surface water to the Canyon Management Zone takes place at EMWD's Grant Avenue Ponds in the Valle Vista area. EMWD's diverted water is recharged into the groundwater aquifer of the Canyon Management Zone and is not used for direct use or sale. The San Jacinto River is an ephemeral river and, consequently, river flows may be insufficient for any diversion at all in some years. Water that is recharged helps the regional water balance and contributes to the safe yield of the basin.

6.5 Stormwater

The San Jacinto Water Harvesting Project allows EMWD to capture stormwater for the purposes of recharging the groundwater aquifers in the Hemet/San Jacinto Basin. The San Jacinto Water Harvesting Project uses the San Jacinto Reservoir as a retention basin for flows rerouted from Riverside County Flood Control and Water Conservation District storm drain Line E. The San Jacinto Water Harvesting Project is currently not monitored; however, at time of construction, the project was estimated to capture 300 to 320 AFY of storm water on a long-term average.

Additionally, the planned ERRP project, discussed in Section 6.9, may have a stormwater capture component.

6.6 Desalinated Water

EMWD currently uses groundwater desalination to remove salts from basins in the West San Jacinto Basin. This 250 square mile area experiences increasing water levels due to the inward migration of high total dissolved solids (TDS) groundwater and decreased production. The high TDS groundwater is

migrating into the Lakeview portion of the Lakeview/Hemet North Management Zone, which is an area of good quality groundwater. Lowering groundwater levels and removal of saline groundwater is an integral element of the WSJ Management Plan. To address these concerns, EMWD implemented a Groundwater Salinity Management Program. This program currently consists of two desalination facilities owned and operated by EMWD. These facilities recover high TDS groundwater from the Menifee and Perris South Management Zones, and the Lakeview portion of the Lakeview/Hemet North Management Zone, for potable use. In addition to being a source of potable water, the main role of the desalters is to play a part in managing the groundwater management zones by addressing the migration of brackish groundwater into areas of good quality groundwater.

Desalter wells pump water to an integrated brackish water system that delivers water to the desalination plants where it is treated prior to entering the distribution system. The Menifee Desalter was the first desalter to be built. This facility began producing potable water in 2003. The second desalter, the Perris I Desalter, is located next to the Menifee Desalter in Sun City. This plant began production in 2006 and has a production capacity of 10.5 CFS. Groundwater extraction for use in the desalter program has caused local declines in water levels to date; but the overall West San Jacinto Basin shows groundwater levels that continue to exhibit a stable or upward trend.

High iron and manganese concentrations along with silica irreversibly impact the desalter membranes and have resulted in several brackish groundwater extraction wells being offline. In 2004, an effort was initiated to evaluate alternative technologies for removal of iron and manganese prior to desalination. In late 2013, iron and manganese removal facilities were placed online and allowed EMWD to begin producing from four previously inactive wells. Around 9,000 AF of brackish groundwater was pumped in 2014 and 2015, which fed roughly 7,000 AF of potable water into the retail system, a significant increase over the 4,800 AF of potable water generated from the desalters in 2013.

EMWD has designed a third desalter, the Perris II Desalter, which will be located across the street from the existing desalters to the north. The Perris II Desalter is designed to have a capacity of 3.5 to 5.4 million gallons per day and is scheduled to be built in two phases, with the first coming online sometime in the 2020 to 2025 timeframe.

6.7 Wastewater and Recycled Water

EMWD provides wastewater collection, treatment, and recycled water services throughout its service area. Recycled water is extensively used in EMWD's service area to meet non-potable demands. The supply of recycled water will continue to increase with EMWD's population size (though it is also impacted by conservation measures). The four RWRFs that EMWD operate have recently completed expansions. Recycled water is currently used for both municipal and agricultural purposes. Municipal customers use recycled water for landscape irrigation and industrial process water. Agricultural customers use recycled water for irrigation of crops. A portion of agricultural demand for recycled water is provided in-lieu of using groundwater. Due in part to drier conditions and higher demands, EMWD has been able to meet its goal of eliminating discharges and using all of the recycled water available within EMWD for the past two years. Some of the recycled water use offsets demands of existing potable customers

6.7.1 Recycled Water Planning and Coordination

As a full-spectrum provider of water, wastewater collection, and treatment and recycled water services, EMWD has been active in developing local and regional plans for expanded water recycling in its service area. EMWD's first Recycled Water Facilities Master Plan was developed in 1990 and was formally updated in 2010. In 2009, EMWD completed a Recycled Water System Strategic Plan that provides guidelines for moving forward with recycled water projects. Information from the strategic plan was incorporated into the EMWD Integrated Resource Plan (IRP) to evaluate potential recycled water projects. EMWD is in the process of updating all three planning efforts with the development of its 2015

Recycled Water Strategic and Master Plan and its 2015 IRP. EMWD's local water recycling plan is also incorporated into the 2014 IRWM Plan developed by SAWPA for the Santa Ana River Watershed.

EMWD has worked closely with the Santa Ana Regional Water Quality Control Board in updating local basin plans and developing a long-term salinity management plan to support and ensure compliance with local basin objectives for salinity and nitrogen. EMWD is also participating in the development of a Total Maximum Daily Load analysis for impacted surface waters in the Santa Ana River Watershed.

EMWD is involved with a variety of local agencies and public interest groups in recycled water planning efforts and has coordinated these agencies as part of the development of this UWMP as explained in *Chapter 2 – Plan Preparation*. Table 6-6 lists agencies participating in recycled water planning.

Table 6-6: Recycled Water Coordinating Agencies

Group/Agency	Role
1) Santa Ana Watershed Project Authority	Regional Cooperative Planning
2) Santa Ana Regional Water Quality Control Board	Basin Planning / Salinity Management.
3) Rancho California Water District	Facility Planning / Market Development
4) West San Jacinto Groundwater Management Plan Advisory Board	Plan Review / Public Oversight
5) Hemet/San Jacinto Groundwater Management Plan Policy Committee (Cities of Hemet and San Jacinto, and Lake Hemet Municipal Water District)	Plan Review / Public Oversight
6) Elsinore Valley Municipal Water District	Facility Planning / Market Development
7) EMWD Recycled Water Advisory Committee	Plan Review / Public Oversight
8) San Jacinto Watershed Council	Plan Review / Public Oversight
9) Lake Elsinore/San Jacinto Watershed Authority	Plan Review / Water Quality
10) Metropolitan Water District of Southern California	Regional Urban Water Mgmt. Planning / Funding

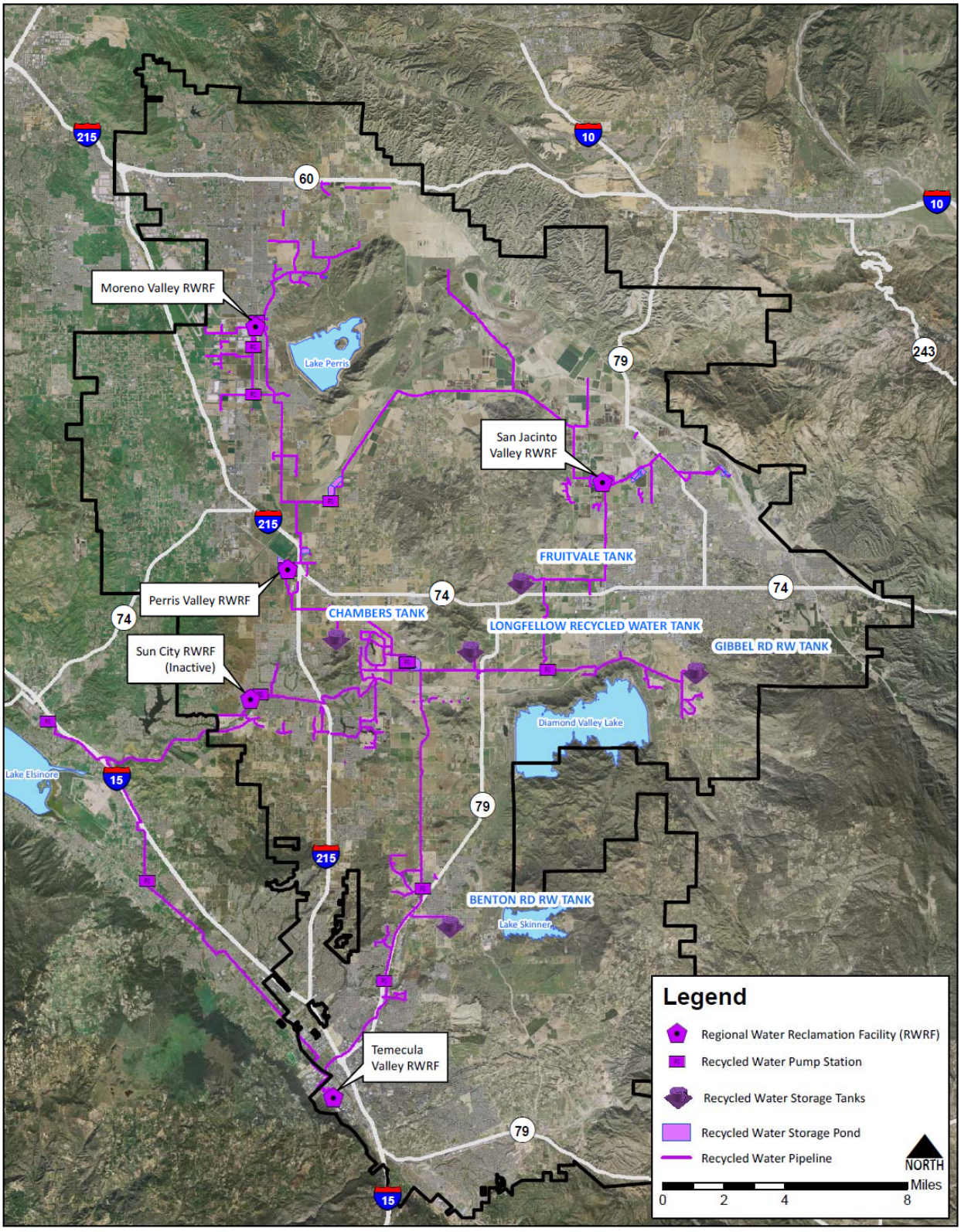
6.7.2 Wastewater Collection, Treatment, and Disposal

EMWD is responsible for all wastewater collection and treatment in its service area. It has four operational RWRFs located throughout EMWD as shown in Figure 6-5. Inter-connections between the local collections systems serving each treatment plant allow for operational flexibility, improved reliability, and expanded deliveries of recycled water. All of EMWD's RWRFs produce tertiary effluent, suitable for all Department of Health Services permitted uses, including irrigation of food crops and full-body contact. The four RWRFs have a combined capacity of 81,800 AFY as summarized in Table 6-7.

Table 6-7: RWRF Treatment Capacity (AFY)

Facility	Treatment Capacity (AFY)
San Jacinto Valley	15,700
Moreno Valley	17,900
Temecula Valley	20,200
Perris Valley	28,000
Total	**81,800**

Figure 6-5: Key Recycled Water Facilities



In addition to treatment facilities, EMWD has several recycled water storage ponds throughout EMWD (see Figure 6-5). Using existing storage ponds, EMWD is able to sell more than the recycled water produced by its treatment plants during the peak demand months (June – September). During the cooler, wetter parts of the year, surplus recycled water is stored in unlined surface impoundments, resulting in some degree of incidental groundwater recharge. If storage capacity is full, surplus recycled water is disposed of through a regional outfall pipeline to Temescal Creek and the Santa Ana River.

EMWD treats all of the wastewater collected in its service area to tertiary standards and disposes of its recycled water in one of three ways; 1) customer sales 2) discharge to Temescal Creek, or, 3) through percolation and evaporation while stored in ponds throughout EMWD. In 2015, EMWD collected and treated a total of 48,665 AF of wastewater at its four RWRFs. Table 6-8 and Table 6-9 summarize the amount of wastewater collected and treated in EMWD's service area in 2015. While EMWD sells recycled water to wholesale customers RCWD and EVMWD, the recycled water originates from wastewater collected and treated within EMWD's retail service area. Therefore, these volumes are accounted for in Table 6-9. EMWD does not provide supplemental treatment to the recycled water it distributes as documented in Table 6-10.

Table 6-8: Wastewater Collected within EMWD's Service Area

DWR Table 6-2 Retail: Wastewater Collected Within Service Area in 2015						
100	Percentage of 2015 service area covered by wastewater collection system					
100	Percentage of 2015 service area population covered by wastewater collection system					
Wastewater Collection			Receiving Wastewater Treatment			
Name of Wastewater Collection Agency	**Wastewater Volume Metered or Estimated?**	**Volume of Wastewater Collected in 2015**	**Name of Wastewater Treatment Agency Receiving Collected Wastewater**	**Treatment Plant Name**	**Is WWTP Located Within UWMP Area?**	**Is WWTP Operation Contracted to a Third Party?**
Eastern Municipal Water District	Metered	7,382	Eastern Municipal Water District	San Jacinto Valley RWRF	Yes	No
Eastern Municipal Water District	Metered	12,389	Eastern Municipal Water District	Moreno Valley RWRF	Yes	No
Eastern Municipal Water District	Metered	15,088	Eastern Municipal Water District	Temecula Valley RWRF	Yes	No
Eastern Municipal Water District	Metered	13,806	Eastern Municipal Water District	Perris Valley RWRF	Yes	No
Total Wastewater Collected from Service Area in 2015:		**48,665**				

Table 6-9: Wastewater Treatment and Discharge within EMWD's Service Area

DWR Table 6-3 Retail: Wastewater Treatment and Discharge Within Service Area in 2015									
Wastewater Treatment Plant Name	Discharge Location Name or Identifier[1]	Discharge Location Description	Method of Disposal	Does This Plant Treat Wastewater Generated Outside the Service Area?	Treatment Level	2015 volumes			
						Wastewater Treated	Discharged Treated Wastewater	Recycled Within Service Area[2,3]	Recycled Outside of Service Area
San Jacinto Valley RWRF	Reach 4 Dissipater	Temescal Creek	River or creek outfall	No	Tertiary	6,884	0	6,884	0
Moreno Valley RWRF	Reach 4 Dissipater	Temescal Creek	River or creek outfall	No	Tertiary	11,554	0	11,554	0
Temecula Valley RWRF	Reach 4 Dissipater	Temescal Creek	River or creek outfall	No	Tertiary	14,071	0	14,071	0
Perris Valley RWRF	Reach 4 Dissipater	Temescal Creek	River or creek outfall	No	Tertiary	12,876	0	12,876	0
					Total	**45,385**	**0**	**45,385**	**0**

1) All four of EMWD's RWRFs are connected through EMWD's regional recycled water system with one discharge point.
2) Because all four RWRF's are connected through one regional recycled water system, it is not possible to distinguish the volume of water recycled from each individual facility. Volumes recycled from each facility in the table were estimated based on the proportion of wastewater collected and treated at each plant compared to the total volume of wastewater treated.
3) Recycled water sold to RCWD and EVMWD is included in the total volume recycled within EMWD's service area and not reported separately in DWR Table 6-3 for wholesale. Recycled water deliveries to wholesale customers are distinguished from retail sales in DWR Table 6-4.

Table 6-10: Wastewater Treatment and Discharge Within EMWD's Wholesale Service Area

DWR Table 6-3 Wholesale: Wastewater Treatment and Discharge Within Service Area in 2015	
☑	Wholesale supplier does not provide supplemental treatment to recycled water it distributes[1].

1) EMWD sells recycled water to wholesale customers RCWD and EVMWD. These volumes are accounted for in the wastewater treated, discharged, and recycled in DWR Table 6-3 for retail.

6.7.3 Recycled Water System

In 2015, EMWD produced 45,385 AF of recycled water for distribution to retail and wholesale customers throughout its service area. The majority of recycled water sold is used for agricultural irrigation. A portion of the water sold for agriculture is used in lieu of groundwater, preserving the groundwater basin and improving water supply reliability. In addition to meeting agricultural demand, recycled sales to municipal customers are increasing rapidly as residential and urban development replaces irrigated farmland. Landscape irrigation is an emerging market and in 2008, EMWD started selling recycled water to a large industrial customer for cooling towers in a power generation plant. EMWD also sells recycled water to the CDFW for environmental use within the San Jacinto Wildlife Area and to recreational customers that are comprised of private duck clubs and bird sanctuaries that use recycled water for ponds. EMWD uses existing storage facilities to store water during off peak periods for delivery in peak months and maximize the amount of recycled water sold. EMWD's current and projected retail recycled water sales are summarized in Table 6-11.

Much of EMWD's increase in recycled water use will come from customers that will use recycled water for landscape irrigation or industrial processing. Agricultural use is projected to decrease as more agricultural land use is converted to residential. Currently, agricultural customers use recycled water to grow short-term row crops. Using potable water would not be cost-effective and their profitability is based on the availability of low-cost recycled water and low-cost land available for lease. The location of these agricultural accounts frequently changes each year depending on land availability. As more residential development takes place and the population grows, land is becoming less accessible for agricultural use. In the future, EMWD expects to have fewer and fewer agricultural accounts. Other agricultural accounts use recycled water to irrigate crops that require a long-term investment such as citrus trees. These accounts would use potable water, if needed, to protect their investment. Recycled water is also being used by some agricultural accounts in lieu of potable ground water.

EMWD's wholesale customer category consists of recycled water delivered to other agencies for use in their service areas. EMWD delivers recycled water to EVMWD and RCWD. EMWD's wholesale current and projected recycled water use is shown in Table 6-12.

Table 6-11: Current and Projected Retail Recycled Water Direct Beneficial Uses

DWR Table 6-4 Retail: Current and Projected Recycled Water Direct Beneficial Uses Within Service Area								
Name of Agency Producing (Treating) the Recycled Water:		Eastern Municipal Water District						
Name of Agency Operating the Recycled Water Distribution System:		Eastern Municipal Water District						
Supplemental Water Added in 2015[1]		682 AF						
Source of 2015 Supplemental Water		Raw, Brackish Groundwater from the West San Jacinto Basin						
Beneficial Use Type	**General Description of 2015 Uses**	**Level of Treatment**	**2015**	**2020**	**2025**	**2030**	**2035**	**2040**
Agricultural irrigation		Tertiary	22,979	18,784	17,912	17,784	17,756	17,756
Landscape irrigation (excludes golf courses)		Tertiary	2,464	5,124	6,124	7,124	8,124	9,624
Golf course irrigation		Tertiary	1,572	2,375	2,750	3,125	3,500	3,500
Commercial use		Tertiary	0	300	300	300	300	300
Industrial use		Tertiary	1,067	2,912	3,348	3,784	4,220	4,220
Geothermal and other energy production								
Seawater intrusion barrier								
Recreational impoundment		Tertiary	1,177	1,250	1,400	1,400	1,400	1,400
Wetlands or wildlife habitat		Tertiary	3,507	4,500	4,500	4,500	4,500	4,500
Groundwater recharge (IPR)*[1]								
Surface water augmentation (IPR)*								
Direct potable reuse								
Other *(Provide General Description)*	Storage Pond Incidental Recharge/ Evaporation	Tertiary	11,384	10,000	12,000	12,000	12,000	12,000
		Total:	**44,150**	**45,245**	**48,334**	**50,017**	**51,800**	**53,300**
**IPR - Indirect Potable Reuse*								

1) Raw, brackish groundwater from the West San Jacinto Basin was used in the recycled water system in 2015 to help meet higher than average agricultural demands for recycled water. This volume was removed from the agricultural beneficial uses volume in the table above.
2) Additional recycled water supply is available to EMWD from 2020 through 2040 that is planned for IPR. This volume is not included in the table as a projected beneficial use as IPR is still a conceptual project. The available supply will be redirected to other demands, including agricultural irrigation and landscape irrigation, if the IPR project is not implemented.

Table 6-12: Current and Projected Wholesale Recycled Water Direct Beneficial Uses

DWR Table 6-4 Wholesale: Current and Projected Retailers Provided Recycled Water Within Service Area							
Name of Receiving Supplier or Direct Use by Wholesaler[1]	**Level of Treatment**	**2015**	**2020**	**2025**	**2030**	**2035**	**2040**
Elsinore Valley Municipal Water District	Tertiary	251	289	400	400	400	400
Rancho California Water District	Tertiary	984	1,367	4,366	4,783	5,200	5,200
Total		**1,235**	**1,656**	**4,766**	**5,183**	**5,600**	**5,600**

6.7.4 Planned Versus Actual Recycled Water Use

In 2015, EMWD delivered approximately 44,150 AF to retail customers. This is 250 AF more than projected in the 2010 UWMP, as shown in Table 6-13. Agricultural irrigation was higher than projected in 2010, which may be due to drought conditions increasing evapotranspiration. Landscape irrigation use, on the other hand, was less than were projected in 2010, likely due to mandatory restrictions on outdoor water use decreasing irrigation demands across EMWD's service area. Additionally, the anticipated demands for the CDFW's San Jacinto Wildlife Area have increased since 2010.

EMWD has continued to increase the percentage of recycled water sold and decrease the amount of recycled water discharged. This was achieved through implementing operational practices that encourage the storage of water in the winter for use during peak periods. Recycled water was also used to recharge groundwater basins through an in lieu agricultural program. EMWD is aggressively pursuing recycled water policies and programs that reduce discharge and increase recycled water use.

Table 6-13: 2010 UWMP Retail Recycled Water Use Projection Compared to 2015 Actual

DWR Table 6-5 Retail: 2010 UWMP Recycled Water Use Projection Compared to 2015 Actual			
Use Type		**2010 Projection for 2015**	**2015 Actual Use**
Agricultural irrigation		20,000	22,979
Landscape irrigation (excludes golf courses)		5,100	2,464
Golf course irrigation		--	1,572
Commercial use		--	--
Industrial use		5,800	1,067
Geothermal and other energy production		--	--
Seawater intrusion barrier		--	--
Recreational impoundment		--	1,177
Wetlands or wildlife habitat		2,000	3,507
Groundwater recharge (IPR)		--	--
Surface water augmentation (IPR)		--	--
Direct potable reuse		--	--
Other	Storage Pond Incidental Recharge / Evaporation	11,000	11,384
Total		**43,900**	**44,150**

In EMWD's 2010 UWMP, recycled water wholesale deliveries were not projected for 2015. Actual 2015 recycled water wholesale deliveries to RCWD and EVMWD are shown in Table 6-14.

Table 6-14: 2010 UWMP Wholesale Recycled Water Use Projection Compared to 2015 Actual

DWR Table 6-5 Wholesale: 2010 UWMP Recycled Water Use Projection Compared to 2015 Actual		
Name of Receiving Supplier or Direct Use by Wholesaler	**2010 Projection for 2015[1]**	**2015 Actual Use**
Elsinore Valley Municipal Water District	--	251
Rancho California Water District	--	984
Total	**0**	**1,235**

1) Projections for wholesale recycled water deliveries were not provided in the 2010 UWMP.

6.7.5 Actions to Encourage and Optimize Future Recycled Water Use

EMWD is in the process of completing its 2015 Recycled Water Strategic and Master Plan. The plan examines several options for the expansion of recycled water use in EMWD's service area and considers the current and potential constraints and opportunities for reducing discharge and increasing use of recycled water. Demand opportunities exceed projected supply through 2045, so an optimized profile of demands will be recommended as part of the strategic plan evaluation.

Historically, EMWD has used recycled water to meet the needs of agricultural development with increasing landscape demand, as land use changes from agricultural to urban. Water has also been used for environmental purposes at the CDFW's San Jacinto Wildlife Area. Recently, new demands have emerged for manufacturing and industrial processes and for use in lieu of groundwater. Other proposed special projects include Indirect Potable Reuse (IPR) using recycled water from the San Jacinto Valley RWRF for groundwater recharge.

IPR is included in EMWD's IRP and modeled under several hydraulic and supply conditions. EMWD's Recycled Water Strategic and Master Plan also evaluates the storage and system improvements needed to offset peak demand. Additional storage is not required to fully utilize EMWD's recycled water supply.

To ensure that recycled water continues to be used to the fullest extent possible, EMWD uses five methods to expand the use of recycled water within its service area. These methods are:

Mandatory Recycled Water Use Ordinance – EMWD has adopted an ordinance requiring new and existing customers to use recycled water for appropriate permitted uses when it is available. This ordinance provides a basis for denying potable water service and providing recycled water for permitted uses.

Rate Incentives – Recycled water is currently priced below the cost of potable water for both municipal and agricultural use.

Water Supply Assessments – EMWD's Water Supply Assessments require all major new developments to use recycled water as a condition of service where it is available and permitted.

Public Education – EMWD actively promotes the use of recycled water with its water education program. EMWD also places prominent signage at public recycled water use sites promoting the benefits of water recycling.

Facilities Financing – EMWD will work with private parties to arrange or provide financing for construction of facilities needed to convert potable demands to recycled water.

EMWD does not have any data to support a projection of how much increased recycled water sales will result from each of the listed methods of encouraging recycled water use. Historically, the low cost of recycled water was the primary inducement for agricultural customers to use recycled water in-lieu of groundwater. However, as municipal customers continue to replace agriculture, it is reasonable to assume that the mandatory provisions of EMWD's Recycled Water Use Ordinance will play a major role in program expansion. Table 6-15 summarizes EMWD's methods to expand future retail recycled water use.

Table 6-15: Methods to Expand Future Recycled Water Use

DWR Table 6-6 Retail: Methods to Expand Future Recycled Water Use			
Name of Action	**Description**	**Planned Implementation Year**	**Expected Increase in Recycled Water Use[1]**
Mandatory Recycled Water Use Ordinance	The ordinance requiring new and existing customers to use recycled water for appropriate permitted uses when it is available	Ongoing	2,703
Rate Incentives	EMWD prices recycled water below the cost of potable water for both municipal and agricultural use	Ongoing	2,703
Water Supply Assessments	Assessments condition all major new developments to use recycled water as a condition of service where it is available and permitted	Ongoing	2,703
Public Education	EMWD has a recycled water public education campaign to promote the benefits of recycled water	Ongoing	2,703
Facilities Financing	EMWD helps arrange or provide financing for the construction of facilities needed to convert potable demands to recycled water	Ongoing	2,703
		Total	**13,515**

1) EMWD does not have any data to support a projection of how much increased recycled water sales will result from each of the listed methods of encouraging recycled water use. Historically, the low cost of recycled water was the primary inducement for agricultural customers to use recycled water in-lieu of groundwater. However, as municipal customers continue to replace agriculture, it is reasonable to assume that the mandatory provisions of EMWD's Recycled Water Use Ordinance will play a major role in program expansion.

6.8 Exchanges or Transfers

The five regional water agencies in the Santa Ana River Watershed have identified a watershed-scale project to store imported water during wet years in order to help meet dry-year demands, called SARCCUP. The group includes representatives from the following regional water agencies:

- Eastern Municipal Water District
- Inland Empire Utilities Agency
- Orange County Water District
- San Bernardino Valley Municipal Water District
- Western Municipal Water District

The program goals of SARCCUP include:

- Providing watershed-wide benefits based upon regional collaboration
- Creating significant new dry-year yield (about 70,000 AFY in Phase 1)
- Increasing resiliency and reliability of water supply

The SARCCUP includes four separate groundwater banks. The total storage proposed in Phase 1 of the program is about 180,000 AF. Each of the banks is expected to be able to recharge and extract one-third of its storage capacity in any year. The combined extraction capacity is 60,000 AFY. Since the participants are sharing the benefits equally, each agency receives 20 percent (1/5) of the total capacity, resulting in each of the SARCCUP agencies receiving 12,000 AFY of new dry-year yield. This will

require transfers, in-lieu, or exchanges between the five agencies in both wet and dry years. Phase 1 of EMWD's ERRP will be constructed as EMWD's contribution to the SARCCUP.

In early 2016, SAWPA was formally notified that it had been awarded $64,268,000 by DWR for its Proposition 84 2015 IRWM grant proposal, which included the SARCCUP. From the grant, SAWPA governance designated $55 million for SARCCUP implementation. The SARCCUP Proposition 84 grant award includes the development of a Watershed-Scale Master Plan which encompasses the proposed SARCCUP facilities, and identifies additional facilities that could be included in future phases of the program. The total cost of Phase 1 of the SARCCUP program is just over $100 million.

The SARCCUP agencies will continue work to finalize all of the individual agreements needed to facilitate construction, implementation, funding, and operations of the facilities and water purchases. These agreements would be presented to EMWD's Board for approval prior to completion of the SARCCUP facilities. Other agreements needed for the program include an agreement between the SARCCUP agencies and MWD to allow MWD facilities to be used to transfer water between the agencies under specified conditions, such as during droughts and emergencies.

6.9 Future Water Projects

6.9.1 EMWD Strategic Master Planning

EMWD is in the process of completing master planning documents for wastewater, water and recycled water supplies and facilities. The Water Supply Strategic Plan and Recycled Water Strategic and Master Plan build on EMWD's 2008 IRP to map out guidelines for EMWD's supply portfolio through build-out. The Water Supply Strategic Plan evaluated EMWD's demand assumptions and supply alternatives for potable water. The analysis covered the relative performance of different supply portfolios under different assumptions and determined a superior alternative. Scoring criteria included:

- Cost effectiveness
- System reliability
- Adaptability
- Water Quality
- Drought Reliability

EMWD will expand desalting, local treatment of imported water, and increase the amount of water being delivered from both the Mills and Skinner Water Treatment Plants.

The Recycled Water Strategic and Master Plan examines several options for the expansion of recycled water use in EMWD's service area and considers the current and potential constraints and opportunities for reducing discharge and increasing use of recycled water.

EMWD's expected future water supply projects and programs are discussed in the sections below. Those projects that have a quantifiable increase in supply and are reasonably expected to be implemented over the next 25 years are summarized in Table 6-16 and

Table 6-17 for EMWD's retail and wholesale systems. While other projects and programs are likely to be implemented in the future, they were not included in EMWD's supply projections and are, therefore, not quantified in Table 6-16 and Table 6-17.

6.9.2 Full Utilization of Recycled Water

The 2008 IRP results demonstrated the benefit of expanding the use of recycled water and examined multiple options for expanding the recycled water program, allowing for flexibility in implementation as EMWD's demands increase. The Recycled Water Strategic and Master Plan built on the earlier IRP and examines several options for the expansion of recycled water use in EMWD's service area. The plan considers the current and potential constraints and opportunities for reducing discharge and increasing use of recycled water.

Using EMWD's entire recycled water supply to offset demand for potable water will decrease the dependence of EMWD on imported water supplies and provide additional supply reliability. Several recycled water projects have been identified as candidates to assist EMWD in meeting its water supply goal. These potential projects include IPR, using advanced treated water for recharge of groundwater basins in the Hemet/San Jacinto area.

In addition to IPR, storage and/or augmentation is needed to offset the balance between winter and summer demands and fully utilize recycled water. As EMWD continues to invest in the development of the recycled water program, reliability will improve and all the recycled water produced by EMWD's treatment plants will be utilized. As recycled water is produced year-round, during all climate conditions, the supply can be used during average, dry, and multi-dry years.

6.9.3 Expanded Desalter Program

EMWD has an existing desalination program that recovers high TDS groundwater from the Menifee and Perris South Management Zones, and the Lakeview portion of the Lakeview/Hemet North Management Zone, for potable use. A third desalination plant, the Perris II Desalter, has been designed and is projected to be online in 2020. The Perris II Desalter is expected to provide 3,000 to 6,000 AFY of potable supply.

A fourth desalter could be warranted to meet salinity management requirements for the Hemet/San Jacinto Basin. The requirement to reduce salinity associated with the use of recycled water could also be met with the implementation of the IPR project.

6.9.4 Local Groundwater Banking

EMWD has initiated a groundwater banking project under the ERRP. The ultimate goal of the ERRP is to overcome up to three years of MWD cutbacks during drought years through the conjunctive use of groundwater. Lower cost imported water is to be recharged during wet years and pumped during dry years. Conceptually, new facilities may include a new MWD turnout, raw water pipeline, three recharge sites with the option to capture stormwater, and 11 new production wells. The San Jacinto portion of the ERRP is expected to provide an additional 45,000 AFY of potable supply during dry years. The first Phase of the ERRP will be EMWD's contribution to the SARCCUP program as discussed in Section 6.8.

6.9.5 Groundwater Development Programs

EMWD has initiated two programs to develop new groundwater supplies within the West San Jacinto Basin. Up to three new wells will be completed as part of the Moreno Valley Groundwater Development Program. Long-term estimates of groundwater yield in the area show that up to 2,000 AFY are available in the Moreno Valley area, which currently has limited pumping and rising groundwater levels. One of the new wells will replace an old EMWD well that collapsed. Within the northern portion of the City of Perris, EMWD is planning one new well under the North Perris Groundwater Development Program, which will augment the District's existing wells in the area and optimize production capabilities in an area of rising groundwater levels within the Perris North Groundwater Management Zone. The targeted yield of the North Perris Groundwater Development Program is 1,000 AFY.

6.9.6 Water Transfers

EMWD currently relies on MWD for any transfers or exchanges. As a member agency, EMWD benefits from MWD's efforts to improve supply reliability through transfers and exchanges, as detailed in MWD's 2015 UWMP.

In addition to relying on MWD, water transfers have been identified as a method of improving reliability, especially during periods of water shortage. As explained in Section 6.8, EMWD is one of five agencies developing the SARCCUP. This water banking program will recharge imported water in local groundwater basins in wet years for use in dry years. This will require transfers or exchanges between the five agencies in both wet and dry years. The SARCCUP agencies will continue work to finalize all of the

individual agreements needed to facilitate construction, implementation, funding, and operations of the facilities and water purchases.

Table 6-16: Expected Future Retail Water Supply Projects or Programs

DWR Table 6-7 Retail: Expected Future Water Supply Projects or Programs						
Name of Future Projects or Programs	**Joint Project with other agencies?**		**Description**	**Planned Implementation Year**	**Planned for Use in Year Type**	**Expected Increase in Water Supply to Agency**
	Y/N	***If Yes, Agency Name***				
San Jacinto ERRP[1,2]	Yes	Inland Empire Utilities Agencies, Orange County Water District, San Bernardino Valley Municipal Water District, Western Municipal Water District, DWR	Project to be completed in phases and includes conjunctive use of groundwater recharge and stormwater capture.	2020	Multi-Dry Year	45,000 AFY
Moreno Valley Groundwater Development	No	--	Completion of up to 3 new wells in the Moreno Valley area	2020	Average Year	2,000 AFY
North Perris Groundwater Development	No	--	Completion of a new well in the North Perris area	2020	Average Year	1,000 AFY
Perris II Desalter	Yes	Army Corps of Engineers	Project includes 4 new wells, 2 of which will be drilled by Army Corps of Engineers	2020	Average Year	3,000-6,000 AFY
Full Utilization of Recycled Water (Potential IPR)[3]	No	--	Advanced treated recycled water used to recharge the Hemet/San Jacinto Basin	2020-2040	Average Year	18,500

1) EMWD is planning on meeting future demands with additional imported water. Implementation of future water supply projects or programs would be expected to result in reduced imported water usage with the exception of the ERRP project. The ERRP will include the use of imported water stored for dry weather use.
2) Phase 1 of the ERRP is EMWD's contribution to the SARCUPP. In addition to partnering with the SAWPA agencies, coordination will be required with the Hemet-San Jacinto Watermaster.
3) While the implementation of IPR is a potential future supply project, the volume is not included in EMWD's supply projections in DWR Table 6-9 for retail.

Table 6-17: Expected Future Wholesale Water Supply Projects or Programs

DWR Table 6-7 Wholesale: Expected Future Water Supply Projects or Programs	
☑	No expected future water supply projects or programs that provide a quantifiable increase to the agency's water supply.

1) EMWD's future supply projects are included in DWR's Retail Table 6-7. Future wholesale demands are expected to be met with imported water.

6.10 Summary of Existing and Planned Sources of Water

As described throughout this chapter, EMWD has developed a number of local supplies to offset imported water demand including recycled water, groundwater, and desalinated groundwater. EMWD's planned supply projects will increase supply reliability to mitigate against impacts to supply during dry and multi-dry years as described in *Chapter 7 – Water Supply Reliability Assessment*. Table 6-18 through Table 6-21 summarize EMWD's retail and wholesale current and projected supplies.

Table 6-18: Retail Water Supplies – Actual (AFY)

DWR Table 6-8 Retail: Water Supplies — Actual			
Water Supply	**Additional Detail on Water Supply**	**2015**	
		Actual Volume	**Water Quality**
Purchased or Imported Water	Treated water purchased from MWD	36,706	Drinking Water
Purchased or Imported Water	Untreated water purchased from MWD, treated at EMWD Filtration Plants	18,628	Drinking Water
Purchased or Imported Water	Raw Water for Agriculture	941	Raw Water
Groundwater	Potable water pumped from the Hemet/San Jacinto Basin portion of the San Jacinto Groundwater Basin (DWR 8-05)	9,559	Drinking Water
Groundwater	Potable water pumped from the West San Jacinto Basin portion of the San Jacinto Groundwater Basin (DWR 8-05)	5,011	Drinking Water
Groundwater[1]	Brackish water pumped from the West San Jacinto Basin portion of the San Jacinto Groundwater Basin (DWR 8-05) used to supplement the recycled water system	682	Raw Water
Desalinated Water[2]	Desalinated water pumped from the West San Jacinto Basin portion of the San Jacinto Groundwater Basin (DWR 8-05)	7,288	Drinking Water
Recycled Water	Includes Storage Pond Incidental Recharge / Evaporation	44,150	Recycled Water
	Total	**122,965**	

1) In 2015, brackish groundwater from the West San Jacinto Basin was used to supplement the recycled water system.
2) Desalinated water is brackish groundwater pumped from the West San Jacinto Basin that has been desalinated to provide drinking water quality. The volume in the table reflects the volume after treatment that is available for potable supply. The 2015 volume pumped from the basin before treatment was reported in DWR Table 6-1 as brackish groundwater.

Table 6-19: Wholesale Water Supplies – Actual (AFY)

DWR Table 6-8 Wholesale: Water Supplies — Actual			
Water Supply	Additional Detail on Water Supply	2015	
		Actual Volume	Water Quality
Purchased or Imported Water	Treated Water purchased from MWD	6,532	Drinking Water
Purchased or Imported Water	Raw Water purchased from MWD	15,236	Raw Water
Recycled Water		1,235	Recycled Water
Total		**23,003**	

Table 6-20: Retail Water Supplies – Projected (AFY)

DWR Table 6-9 Retail: Water Supplies — Projected						
Water Supply	Additional Detail on Water Supply	Projected Water Supply				
		2020	2025	2030	2035	2040
Purchased or Imported Water	MWD Treated/ Untreated	73,697	81,597	92,997	104,097	114,597
Purchased or Imported Water	Soboba Settlement Water[1]	7,500	7,500	7,500	7,500	7,500
Groundwater	Pumped from the Hemet/San Jacinto Basin	7,303	7,303	7,303	7,303	7,303
Groundwater	Pumped from the West San Jacinto Basin	5,000	5,000	5,000	5,000	5,000
Desalinated Water[2]	Desalinated water from the West San Jacinto Basin	7,000	10,100	10,100	10,100	10,100
Recycled Water	Includes Storage Pond Incidental Recharge / Evaporation	45,245	48,334	50,017	51,800	53,300
Total		**145,745**	**159,834**	**172,917**	**185,800**	**197,800**

1) 7,500 AFY is the annual amount delivered by MWD to meet the Soboba Settlement Agreement. This water is delivered to EMWD as the member agency of MWD but the groundwater supplies that result from this recharged water are divided between the Soboba Tribe and the participants of the Hemet/San Jacinto Management Plan.
2) Desalinated water is brackish groundwater pumped from the West San Jacinto Basin that has be desalinated to provide drinking water quality.

Table 6-21: Wholesale Water Supplies – Projected (AFY)

DWR Table 6-9 Wholesale: Water Supplies — Projected						
Water Supply	Additional Detail on Water Supply	Projected Water Supply				
		2020	2025	2030	2035	2040
Purchased or Imported Water	MWD Treated/ Untreated	65,500	69,700	73,800	77,800	82,200
Recycled Water		1,656	4,766	5,183	5,600	5,600
Total		**67,156**	**74,466**	**78,983**	**83,400**	**87,800**

6.11 Climate Change Impacts to Supply

EMWD has considered the impact of climate change on water supplies as part of its long-term strategic planning. Climate change has the potential to affect not only local demand and supplies, but to reduce the amount of water available for import. Warmer temperatures will lead to higher demand for water within EMWD's service area and throughout California. An increase in intensity and frequency of extreme weather events can impact both local and imported supplies. EMWD gets the majority of its supply from MWD which imports water from the Bay-Delta system through the SWP. Rising sea levels can increase the risk of damage to the Bay-Delta from storms and erosion of levees which decreases imported water reliability.

In its climate change vulnerability assessment for the Santa Ana River Watershed (2014), the SAWPA Region identified key supply vulnerabilities to climate change. The vulnerabilities identified in the assessment related to EMWD's supplies include:

- Reduction in the Sierra Nevada snowpack;
- Increased strain on imported supplies
- Inability to meet water demands during drought
- Shortage of long-term water storage

One of the outcomes of climate change could be more frequent limitations on imported supplies. To limit the impact of climate change, EMWD's long-term planning focuses on the development of reliable local resources and the implementation of water use efficiency. This includes the full utilization of recycled water and the recharge of local groundwater basins to increase supply reliability during periods of water shortage. EMWD is also focused on reducing demand for water supplies, especially outdoors. Increasing the use of local resources and reducing the need for imported water has the duel benefit of not only improving water supply reliability, but reducing the energy required to import water to EMWD's service area.

6.12 Energy Intensity of Water Supplies

In 2014, EMWD completed its Energy Management Plan. This plan provides a comprehensive assessment of EMWD's current and future energy portfolio and provides assistance in developing a road map to meet EMWD's strategic objective of reducing cost while meeting regulatory requirements and maximizing available resources. It evaluated several options to improve EMWD's energy efficiency and developed an implementation plan. The plan included:

- Process Optimization at Perris Valley RWRF;
- Converting Internal Combustion Engines, where cost effective;
- Equipment and Process Optimization at Perris Water Treatment Plant;
- Install microturbines at Perris Valley RWRF;
- Equipment Optimization at Perris Valley RWRF;
- Install up to five one megawatt Solar Photovoltaic Projects; and
- Improving the Moreno Valley Fuel Cell Capacity

These actions are already underway and will result in both a financial and energy savings for EMWD's ratepayers.

Chapter 7 Water Supply Reliability Assessment

7.1 Imported Water Supply Reliability

The majority of EMWD's current and projected water supplies are imported through MWD. MWD's resource management strategy depends on improving the reliability and availability of imported water supplies, increasing local storage and developing local resources. In MWD's 2015 UWMP, MWD evaluated challenges to supply reliability, including drought conditions, environmental regulations, water quality concerns, infrastructure vulnerabilities to natural disaster, and responses to variations in water supply availability from year to year.

MWD is facing significant challenges in providing adequate, reliable and high quality supplemental water for Southern California. Dry conditions have impacted water supply reliability on both the SWP and the CRA requiring MWD to make significant withdrawals from its storage reserves. MWD has progressively taken action to address these challenges including; increasing incentives for conservation and recycled water conversion, augmenting supplies through transfers and exchanges, and modifying its distribution system to increase CRA delivery capabilities. In 2015, MWD also implemented Level 3 (15 percent regional reduction) of is Water Supply Allocation Plan (WSAP) allocating water to its member agencies to preserve limited storage. MWD's forecast shows that under multiple-dry year hydrology, MWD could face reduced supply capabilities during the next three years. EMWD will respond to any potential shortages by reducing demand through its WSCP.

Moving forward, flexible and adaptive regional planning strategies are required. MWD's continued progress in developing a diverse resource will allow it to meet the region's water supply needs. MWD's 2015 UWMP detailed its planning initiatives and based on these efforts concluded that with the storage and transfer programs developed, MWD has sufficient supply capabilities to meet the expected demands of its member agencies from 2020 through 2040 under normal, historic single-dry and historic multiple-dry year conditions. EMWD is relying on MWD's 2015 UWMP to evaluate the reliability of imported supplies and the amount of imported water which will be available in EMWD's service area during normal, single dry, and multiple dry water year periods.

7.1.1 MWD Reliability Planning

MWD delivers water from two sources, the CRA and the SWP, and it takes a comprehensive and proactive approach to planning for future water supply needs. Through coordination with member agencies, MWD has developed regional targets for imported water, local resources and conservation to accommodate growth and face the challenges to future supply reliability. Through the past decade, MWD has undertaken several planning initiatives including the MWD Integrated Water Resources Plan (MWD IRP), the Water Surplus and Drought Management Plan (WSDMP), and the WSAP. These programs and plans provide a framework for future Southern California supply planning.

Integrated Resources Planning

In the 1990's, several years of drought and regulatory requirements began to affect the reliability of MWD water supplies. In response to this challenge, MWD and its member agencies began an IRP process to assess needed supply reliability and to find a cost-effective way to meet the goals established. The MWD IRP was a collective effort drawing input from several groups including MWD's Board of Directors; an IRP workgroup (comprised of MWD staff, member agencies and sub agency managers, as well as groundwater basin managers); and representatives from the environmental, agricultural, business and civic communities. It was important for the IRP process to be collaborative because its viability was contingent on the success of local projects and local plans in achieving their individual target goals for resource management and development.

The outcome of the IRP process was a "Preferred Resource Mix" which would ensure MWD and its member agencies' reliability through 2020. The MWD Board of Directors adopted the first IRP in

January of 1996. In November 2001, the MWD Board of Directors adopted a plan to update the IRP. The update focused on changed conditions, updated resource targets, and extending the planning horizon to 2025 and beyond. Again, the process was a collaborative effort. The 2003 MWD IRP Update was adopted in July of 2004.

MWD's 2010 IRP Update sought to stabilize MWD's traditional imported water supplies and establish additional water resources to withstand California's drought cycles. Challenges addressed in the 2010 MWD IRP included: limitations on SWP and CRA supplies due to environmental issues and drought, regulatory restrictions, economics and climate. The 2010 MWD IRP proposed an adaptive management strategy that balances the potential risks to water supplies with the need to avoid unnecessary investment in resources. The 2010 MWD IRP update demonstrated that MWD and its member agencies have moved the region toward the goal of long-term water reliability; major achievements include:

- Conservation
- Water recycling and groundwater recovery
- Storage and groundwater management programs within the Southern California region
- Storage programs related to the SWP and the Colorado River
- Other water supply management programs outside of the region

Throughout 2015, MWD developed its most recent update of its IRP. The 2015 MWD IRP Update approach recognizes that policy discussions will be essential to the development and maintenance of local supplies and conservation. The findings and conclusions of the 2015 MWD IRP Update include:

- Action is needed – Continued investment in conservation and local supplies is essential to avoiding an unacceptable level of shortage allocation frequency in the future.
- Maintain Colorado River supplies – To stabilize deliveries at 900,000 AFY, more than 900,000 AFY of planned actions will be required.
- Stabilize SWP supplies – Collaborate with state and federal agencies to resolve SWP operations and support better science and interagency collaboration to advance the coequal goals of Bay-Delta restoration and statewide supply reliability. Work collaboratively with state and federal agencies to invest in system modernization and support the California WaterFix and EcoRestore efforts.
- Develop and protect local supplies and water conservation – Increase targets for additional local supplies and conservation to embrace and advance regional self-sufficiency ethics.
- Maximize the effectiveness of storage and transfer – Utilize a comprehensive water transfer approach to stabilize and build storage reserves that will increase MWD's ability to meet water demands in dry years.
- Continue with the adaptive management approach – Update the MWD IRP and adaptive management strategies to incorporate improved understanding and changing conditions.

Water Surplus and Drought Management Plan

In order to ensure that water needs will be met during years of drought, surplus water must be managed during years of surplus. To accomplish this task, MWD developed the WSDMP. Adopted in April of 1999, this plan provides policy guidance for management of regional water to achieve the reliability goals of the IRP. The guiding principle of the WSDMP is to "Manage Metropolitan's water resources and management programs to maximize management of wet year supplies and minimize adverse impacts of water shortage to retail customers."

Water Supply Allocation Plan

In February 2008, MWD adopted its WSAP to allocate water based on need during periods of mandatory imported water allocations throughout the region. The WSAP contains a specific formula and methodology to determine member agency supply allocations. MWD works with member agencies to

periodically review the WSAP formula and make adjustments as needed. The most recent revision to the WSAP was completed in December of 2014. The plan takes into consideration:

a) The impact on retail customers and the economy

b) Population and growth

c) Changes and/or loss of local supply

d) Reclamation and recycling

e) Conservation

f) Investment in local resources

In the event allocation is required, the WSAP establishes base period demands and then adjusts them for population growth and changes in local supply; it then calculates the water supply allocation for each member agency based on the calculated needs. Regional shortages are defined in 10 stages and credits are given for conservation and investment in local supplies. It is MWD's intent to prevent member agencies from experiencing retail shortages that are greater than corresponding regional shortages.

In April 2015, MWD's Board approved implementation of the WSAP at a Level 3 Regional Shortage, effective July 1, 2015 through June 20, 2016. The WSAP allows member agencies to choose among various conservation strategies to help ensure that demands stay in balance with limited supplies.

7.1.2 MWD System Storage

Storage is an important element in MWD's dry-year water supply reliability. MWD has developed dry-year storage with a capacity of over 5.5 MAF through its groundwater storage and surface water reservoirs. Over the past several decades MWD has increased storage significantly through projects like Diamond Valley Lake (located within EMWD's service area) in order to ensure that water needs will be met during years of drought or during a catastrophic event such as an earthquake. The MWD WSDMP established long-term goals for in-basin storage and provides guidance for managing supplies in years of surplus and drought. MWD has been utilizing its dry year storage to meet demand when imported supplies are limited by hydrology.

The probability of MWD meeting dry year demands is dependent on the amount of water MWD has in its reserves. Under some conditions, MWD may choose to implement the WSAP proactively to preserve storage reserved for a future year.

7.2 Groundwater and Desalinated Groundwater Supply Reliability

Protecting the available groundwater supply is an integral component of EMWD's planning efforts. EMWD is actively working with other agencies and groups to ensure that groundwater will be a reliable resource far into the future. To improve groundwater reliability EMWD and other groundwater producers are reducing production of native groundwater and using imported water to supplement natural recharge.

EMWD and the other participants in the Hemet/San Jacinto area have agreed to reduce production. In 2015, EMWD's base production right for the Hemet/San Jacinto Basin was 9,300 AF. The long-term base production right for EMWD is 7,303 AFY.

Production over the base production right requires basin replenishment. There is a long-term agreement in place for MWD to provide an average of 7,500 AFY for replenishment in the Hemet/San Jacinto Basin. This water is to be used by the Soboba Tribe with any unused water available to the other municipal producers in the Hemet/San Jacinto Basin, as described in Section 6.3.2. EMWD has plans to expand recharge through the ERRP.

Potable groundwater production from the West San Jacinto Basin will remain stable, while brackish groundwater production will increase as EMWD's desalter program is expanded.

Desalination of groundwater from the West San Jacinto Basin increases groundwater supply reliability in the San Jacinto Basin by helping manage increasing groundwater levels that are due to decreased production. Desalination also prevents migration of brackish groundwater that could otherwise contaminate potable groundwater supplies.

7.3 Recycled Water Supply Reliability

As of 2014, EMWD reached its strategic goal of maximizing beneficial reuse of recycled water by reusing 100 percent of the wastewater generated in its service area as recycled water. Because recycled water supply is dependent on wastewater generation and not precipitation, it is considered a nearly 100 percent reliable, drought-resistant supply. EMWD also has optimization efforts underway to improve operation of the recycled water system, including the distribution storage facilities.

7.4 Water Quality

Promoting and protecting the quality of its water resources is a vital part of EMWD's planning and operations. Water quality constraints for imported water and groundwater are part of the criteria used to evaluate the value of a proposed project. EMWD does not anticipate a reduction in supply reliability due to water quality constraints. Contaminants of concern may require treatment or blending, but long-term supply planning indicates that the quantity of available water will not be diminished from projected levels due to quality.

7.4.1 Imported Water Quality

As part of the MWD IRP and other planning efforts, MWD has concentrated on maintaining the quality of source water and developing management programs that protect and enhance water quality. MWD has two water sources: the CRA and the SWP. MWD responds to water quality concerns by concentrating on protecting the quality of source water and developing water management programs that maintain and enhance water quality. Based on current knowledge, the only water quality threat to MWD water supplies that may require future treatment is the potential for increased salinity levels.

To date, MWD has not identified any other water quality issues that cannot be mitigated. Increased salinity may impact the amount of water available in the future. If additional treatment is required, MWD could experience a loss of up to 15 percent of the water processed. Since only a small portion of the total water supply would be treated and blended with the remaining unprocessed water, there is no significant risk to MWD's water supply availability.

Additional information and analysis of water quality is included in Section 4 of the 2010 RUWMP.

Colorado River

The most significant threat to the Colorado River supplies is salinity levels. Colorado River supplies are blended with SWP water to meet the MWD's adopted salinity standards. However, due to the recent severe drought, SWP is in limited supply and the Colorado River supply has not been blended. Therefore, salinity has increased. MWD has several programs in place to reduce the current salinity level of MWD supplies and protect salinity levels from rising in the Colorado River. In addition, MWD is also working to protect the Colorado River from threats of uranium, perchlorate and hexavalent chromium. MWD has also been active in efforts to protect CRA supplies from potential increases in nutrient loading, and occurrences of N-Nitrosodimethylamine (NDMA) and other the constituents of emerging concern. MWD fully expects its source protection efforts to be successful, therefore the only water quality concern with the potential to significantly impact the use of Colorado River water is salinity.

Salinity

Water imported via the CRA has the highest level of salinity of all of MWD's sources of supply, with TDS averaging around 630 milligrams per liter (mg/L) since 1976. Concerns about salinity led the seven Colorado River basin states to form the Colorado River Basin Salinity Control Forum (Forum) to

cooperatively address the issue. The Forum proposed and the U. S. Environmental Protection Agency (USEPA) approved water quality standards in 1975 that established numeric criteria for salt loading and required that the flow-weighted average annual salinity remain at or below the 1972 levels. The Forum developed and implemented the Colorado River Basin Salinity Control Program. The program is designed to prevent a portion of the salt supply from moving into the river system through the interception and control of non-point sources, such as surface runoff, as well as wastewater and saline hot springs. Salinity control projects have reduced salinity concentrations of Colorado River water TDS on average by over 100 mg/L or $264 million per year (2005 dollars) in avoided damages. During periods of high flow, salinity levels have been known to drop to 525 mg/L, but drought has brought the return of higher salinity levels.

Uranium

Near Moab, Utah, 750 feet from the Colorado River, a 16 million ton pile of uranium mill tailings is a potential source of water contamination. In 1999, the US Department of Energy (DOE) began the remediation of the site, including the removal and offsite disposal of the tailings and onsite groundwater remediation. DOE projects that the cleanup should be completed by 2025. MWD is monitoring cleanup efforts and encourages the on-going funding and rapid cleanup of the site.

In recent years, an increase in mining claims filed near Grand Canyon National Park and the Colorado River has caused concern. MWD has responded with letters to the Secretary of the Interior to bring attention to the importance of source water protection and advocate for close federal oversight over these activities. In 2009, Secretary of Interior Ken Salazar announced a two-year hold on new mining claims on 1 million acres adjacent to the Grand Canyon. In 2012, the U.S. Department of Interior instituted a 20-year moratorium on new mining within the Grand Canyon watershed region, covering approximately two-thirds of the lands included in the Greater Grand Canyon Heritage National Monument proposal.

Perchlorate

In June of 1997, percolate was first detected in Colorado River water and attributed to a chemical manufacturing site in Henderson, Nevada. Another large perchlorate plume has also been detected in the Henderson area but is not known to have reached the Las Vegas wash. Remediation began in 1998 and has reduced perchlorate loading entering the Colorado River system by 90 percent. Levels of perchlorate in the Colorado River measured at Lake Havasu have decreased from a high of 9 micrograms per liter (µg/L) to 2 µg/L since June of 2006. California's maximum contaminant level (MCL) for perchlorate is 6 µg/L in finished drinking water. In 2015, Office of Environmental Health Hazard Assessment (OEHHA) adopted a new public health goal (PHG) of 1 µg/L for perchlorate.

Chromium VI

On July 27, 2011, The OEHHA established a final PHG of 0.02 µg/L for Chromium VI in drinking water. A PHG is the level of a contaminant in drinking water for which there is no known or expected risk to health. OEHHA based these goals on the best available toxicological data in the scientific literature. On July 1, 2014, a California MCL of 10 µg/L for hexavalent chromium became effective. Currently there is no federal MCL for hexavalent chromium, only for total chromium. Chromium VI has been detected in a groundwater aquifer on the site of Pacific Gas and Electric (PG&E) near the vicinity of the Colorado River at Topock, Arizona. Currently PG&E is operating an interim groundwater extraction and treatment system that is protecting the Colorado River. MWD participates in various stakeholder workgroups and forums that are involved in the corrective action report. Results from Chromium VI monitoring of the Colorado River from sites upstream and downstream of the Topock site have ranged from not detected (<0.03 µg/L) to 0.06 µg/L.

Nutrients

High levels of nutrients (phosphorous and nitrogen compounds) can stimulate algae and aquatic weed growth that affect consumer acceptability and produce taste and odor concerns. Nutrients and the resulting algae and aquatic weed growth can also impede conveyance, increase operational costs and

provide a food source for invasive mussel species. The Colorado River naturally has low concentrations of phosphorous but population increases in the future could increase loadings. Additional phosphorous loadings could impact MWD's ability to blend Colorado River water with SWP water, which has higher concentrations of nutrients. To prevent an increase in nutrient loading in CRA water, higher levels of wastewater treatment are required at existing reclamation facilities along the Colorado River. MWD is engaged with these agencies to encourage enhanced wastewater management.

N-Nitrosodimethylamine

NDMA is a byproduct of disinfection of some natural water with chloramines. MWD uses chloramines as secondary disinfection at all of its treatment plants. MWD is in the process of understanding the watershed sources and developing treatment strategies to minimize NDMA formation. OEHHA set a PHG for NDMA of 0.003 µg/L. MWD has monitored sources waters and treated water on a quarterly basis since 1999 with results ranging from not detected to 0.014 µg/L. Due to the frequency at which NDMA was detected in the national UCMR2 sample set, it is likely that NDMA will be regulated by the USEPA in the future.

Pharmaceuticals and Personal Care Products

Pharmaceuticals and personal care products (PPCPs) are an emerging concern for the water industry. In 2007, MWD began a monitoring program to determine the occurrence of PPCPs in drinking water treatment plants and source water locations. PPCPs have been detected in source waters at very low part per trillion levels, consistent with the results from other water agencies. More work is required to improve testing and analytical methods, characterize PPCPs in drinking water sources and then determine the effects PPCPs may have on recycled water use and groundwater recharge.

State Water Project

Water quality issues in SWP include total organic carbon (TOC), bromides, arsenic, nutrients, NDMA, PPCPs, and salinity. TOCs and bromides present the greatest water quality concern for the SWP because they cause operational constraints and require additional treatment at MWD facilities. Due to the recent severe drought, SWP supply has been limited.

Total Organic Carbon and Bromides

TOC and bromide concentrations in SWP supplies present a significant challenge for MWD to maintain safe drinking water quality. High levels of TOC and bromide form disinfection byproducts (DBPs) during the water treatment processes. Agricultural drainage and seawater intrusion also increase the levels of TOCs and bromide. The BDCP has outlined several options for improving water quality in the Bay-Delta. In addition to addressing the protection of source water, MWD uses CRA water to blend with SWP to reduce TOC and bromide concentrations in two of their existing plants. MWD has upgraded both the Skinner and Mills Water Treatment Plants by installing ozone treatment. Ozone readily oxidizes organic compounds to reduce the formation of disinfection byproducts, taste, and odor compounds. However, ozone can cause bromate formation when bromide is present in water from the SWP.

Arsenic

Historically, arsenic in MWD supplies has been detected at very low levels that do not require treatment or blending. However, some of the groundwater basins used by MWD for storage programs have higher levels of arsenic that are at or near the threshold requiring additional treatment. MWD has had to restrict flow from one program to meet arsenic limits in the SWP. One groundwater banking partner has installed a pilot treatment program increasing the cost of the groundwater banking program. MWD has also invested in solids handling facilities and implemented operational changes to manage arsenic in solids resulting from treatment.

Nutrients

The SWP has significantly higher nutrient levels than the CRA. Agricultural discharges, wastewater discharges and nutrient rich Bay-Delta soils contribute to higher concentrations of nutrients in the Bay-

Delta. Algae growing in nutrient rich water also can release taste and odor compounds into the water. MWD reservoirs containing SWP water have been bypassed at times to avoid taste and odor complaints, causing short-term supply reliability concerns. To address nutrient levels, MWD is working with other agencies receiving Bay-Delta water to reduce nutrient loading in the Bay-Delta. MWD also uses a comprehensive algae monitoring program to provide early warning of problems and to better monitor water quality in the system. Implementation of ozonation at the Mills and Skinner Water Treatment Plants has also helped with taste and odor problems associated with algae blooms. The water produced by EMWD's Hemet and Perris Water Treatment Plants, which may be sourced from the SWP, does not have the benefit of ozonation. When there is an algae bloom in the source water system, EMWD is unable to remove the taste and odor causing compounds.

N-Nitrosodimethylamine

As described under CRA supplies, NDMA is an emerging concern and MWD is active in efforts to monitor and address NDMA.

Pharmaceuticals and Personal Care Products

As described under CRA supplies, PPCPs are an emerging concern and MWD is active in efforts to monitor and address PPCPs.

7.4.2 Groundwater and Desalinated Groundwater Quality

EMWD has an extensive and proactive groundwater monitoring program that includes collecting, compiling and analyzing data related to groundwater quality. There are no known significant threats to EMWD's groundwater supply that cannot be mitigated by treatment or blending and EMWD does not anticipate a significant loss of supply due to water quality issues. EMWD may occasionally alter operational patterns to support treatment or blending.

EMWD protects groundwater supplies from potential water quality risks including contamination from salinity, nitrates, and chlorinated and other volatile organic compounds. Other contaminants have also been found in local groundwater sources at levels exceeding PHGs and may require additional treatment in the future.

Salinity and Nitrates

In partnership with other agencies, EMWD is responsible for the protection and preservation of local groundwater under the authority of the HSJ Management Plan and the WSJ Management Plan. Salinity and nitrate levels in groundwater increase due to agricultural activities, urban use, and recycled water use. EMWD monitors the salinity and nitrate levels in local basins as part of the groundwater management plan. EMWD also evaluates the ambient water quality for the basins and the data indicates that the basins are slowly increasing in concentrations of salinity and nutrients. Typically, the groundwater water quality meets the safe drinking water standards for salinity and nutrients and can be used directly. Where the salt and nutrients exceed the drinking water standards, EMWD addresses water quality through the efforts of the desalination program. Two operational desalination plants and one planned plant are part of EMWD's effort to remove salts and nutrients from the brackish water supply. In addition to supplying a source of drinking water, desalination also prevents the migration of brackish groundwater into other management zones.

Chlorinated Solvents and Other Volatile Organic Compounds

In the WSJ Management Plan, chlorinated solvents and other volatile organic compounds have been found in amounts that exceed PHGs. Chlorinated solvents are volatile organic compounds (VOCs) that contain chlorine. In general, they are used in aerospace and electronics industries, dry-cleaning, and degreasing industries. EMWD is vigilant in protecting groundwater basins from VOC contamination by closely monitoring the construction of new businesses such as gas stations and manufacturing within the vicinity of production wells. Through the review of proposed new development, EMWD works with local land agencies to ensure that groundwater quality is protected.

Arsenic

Arsenic is a naturally occurring compound found in rocks, soil, water and air. Arsenic has been found in several of EMWDs wells at levels that range from not detected to 12 µg/L (2015 data). In 2006, the MCL for arsenic in domestic water supplies was lowered to 10 µg/L by the USEPA. Currently, high arsenic concentration sources are blended with lower concentration sources to comply with the MCL. Should California lower the State's MCL below the federal level, some of EMWD's production wells could be impacted, requiring additional treatment facilities to utilize these wells.

Pharmaceuticals and Personal Care Products

PPCPs are constituents of emerging concern and EMWD has been and will continue to be proactive in addressing water quality concerns that arise. EMWD participates in the USEPA's Unregulated Contaminant Monitoring Rule program, which recently has included monitoring for PPCPs.

7.4.3 Recycled Water Quality

EMWD has an extensive recycled water program and this supply is used for landscape, agricultural, environmental, and industrial (cooling tower) uses. It significantly offsets non-potable water demands throughout the EMWD. Water quality issues with recycled water include high salinity, nutrients, and PPCPs.

Salinity and Nutrient Management

One of the challenges with the use of the recycled water is that it has salinity and nutrient concentrations that exceed the Santa Ana Region's basin plan objectives. EMWD has a Salinity and Nutrient Management Program (SNMP) specifically designed to evaluate and address the salinity and nutrient impacts that may be associated with the use of recycled water. The SNMP determines whether or not the recycled water complies with the basin plan water quality objectives. In the basins where the recycled water does not meet the water quality objectives, the SNMP determines the excess loading to the basin and describes EMWD's offset mitigation measure to address the added salt and nutrient load. Because recycled water offers a great benefit to the region and reduces the demand on the potable water system for non-potable water purposes, the basin plan allows the excess salt and nutrient load to be mitigated. The SNMP describes the approved offset mitigation measures utilized by EMWD. This offset program ensures that for every excess pound of salt or nutrient added to the basin, a corresponding pound is removed by desalinization wells or mitigated by replenishment with higher quality water.

Pharmaceuticals and Personal Care Products

PPCPs are a source of concern in EMWD's recycled water. In 2008, EMWD participated with SAWPA to form a Task Force to develop a plan to characterize emerging constituents (ECs) throughout the region. In 2009, the Task Force presented an acceptable monitoring plan to the Santa Ana Regional Water Quality Control Board to monitor specific ECs. The plan included monitoring by SAWPA members to evaluate EC levels in wastewater effluent, local receiving streams and other raw water supplies imported into the area. Samples were collected in the spring of 2010 and a final report was prepared by SAWPA in late 2010. The results indicated the presence of some ECs at trace levels (parts per trillion) in the wastewater effluent that are consistent with the results from other wastewater agencies. EMWD tests for ECs in recycled water every three years, and monitors efforts towards the development of regulations.

7.4.4 Summary of Potential Water Quality Impacts to Supplies

There are no known water quality concerns that will significantly impact water supply reliability. Water supplies will be managed to protect water quality to the greatest extent possible, and treatment will be implemented if necessary. Table 7-1 summarizes projected reductions in water supplies due to water quality issues.

Table 7-1: Estimated Reduction in Water Supplies Due to Water Quality

Water Source	Description of Condition	2015	2020	2025	2030	2035	2040
Imported Water	MWD has not identified any water quality issues that cannot be mitigated	0	0	0	0	0	0
Groundwater	EMWD has not identified any water quality issues that cannot be mitigated	0	0	0	0	0	0
Recycled Water	EMWD has not identified any water quality issues that cannot be mitigated	0	0	0	0	0	0

7.5 Reliability by Year Type

Since the majority of EMWD's retail and wholesale supplies are imported from MWD, EMWD's normal, single-dry and multi-dry year conditions are based on the same years used by MWD in its 2015 UWMP. As described in MWD's 2015 UWMP, these years are based on hydrological conditions impacting SWP supplies. EMWD's single-dry year condition is represented by 1977 hydrology and the multiple-dry year condition is represented by 1990-1992 hydrology. EMWD's average year is represented by the average of the 1922-2004 hydrologic conditions. Table 7-2 and Table 7-3 summarize the basis of water data for EMWD's retail and wholesale supplies, respectively.

Table 7-2: Retail Basis of Water Year Data

DWR Table 7-1 Retail: Basis of Water Year Data			
Year Type	Base Year	Available Supplies if Year Type Repeats Agency may provide volume only, percent only, or both	
		Volume Available	% of Average Supply[1]
Average Year	1922-2004	--	100%
Single-Dry Year	1977	--	100%
Multiple-Dry Years 1st Year	1990	--	100%
Multiple-Dry Years 2nd Year	1991	--	100%
Multiple-Dry Years 3rd Year	1992	--	100%

1) The MWD IRP simulations show no risk of shortages (allocation) for MWD supply, for the average, single-dry year (1977) and multiple-dry year (1990–1992) conditions.

Table 7-3: Wholesale Basis of Water Year Data

DWR Table 7-1 Wholesale: Basis of Water Year Data			
Year Type	Base Year	Available Supplies if Year Type Repeats	
		Agency may provide volume only, percent only, or both	
		Volume Available	% of Average Supply[1]
Average Year	1922-2004	--	100%
Single-Dry Year	1977	--	100%
Multiple-Dry Years 1st Year	1990	--	100%
Multiple-Dry Years 2nd Year	1991	--	100%
Multiple-Dry Years 3rd Year	1992	--	100%

1) The MWD IRP simulations show no risk of shortages (allocation) for MWD supply, for the average, single-dry year (1977) and multiple-dry year (1990–1992) conditions.

7.6 Supply and Demand Assessment

Based on the information provided in the MWD 2015 UWMP, EMWD has the ability to meet current and projected water demands through 2040 during normal, historic single-dry and historic multiple-dry year periods using imported water from MWD with existing supply resources. Planned local supplies will supplement imported supplies and improve reliability for EMWD and the region.

7.6.1 Average Year

The average water year selected by EMWD uses the historic average hydrology of years 1922-2004. Table 7-4 and Table 7-5 demonstrate that EMWD will have sufficient supplies to meet both retail and wholesale demands from 2020 to 2040 under average year conditions.

Table 7-4: Retail Normal Year Supply and Demand Comparison (AFY)

DWR Table 7-2 Retail: Normal Year Supply and Demand Comparison					
	2020	2025	2030	2035	2040
Supply totals	145,745	159,834	172,917	185,800	197,800
Demand totals	145,745	159,834	172,917	185,800	197,800
Difference	0	0	0	0	0

Table 7-5: Wholesale Normal Year Supply and Demand Comparison (AFY)

DWR Table 7-2 Wholesale: Normal Year Supply and Demand Comparison					
	2020	2025	2030	2035	2040
Supply totals	67,156	74,466	78,983	83,400	87,800
Demand totals	67,156	74,466	78,983	83,400	87,800
Difference	0	0	0	0	0

7.6.2 Single-Dry Year

The single-dry year represents the year with the lowest water supply available to the agency. EMWD's single-dry year is represented using 1977 hydrologic conditions. EMWD's Water Supply Strategic Plan (2016) conducted a study to analyze potential changes in demand due to dry, hot conditions. The study estimated up to a 14 percent increase in retail water demand could occur under these conditions. EMWD

has developed programs to help accommodate increases in demand during dry years including the planned ERRP project (described in Sections 6.8 and 6.9) which would allow EMWD to rely more heavily on groundwater supplies to meet demand in dry years. Additionally, EMWD would could import more water from MWD to meet increases in demand. Table 7-6 and Table 7-7 demonstrate that EMWD will have sufficient supplies to meet both retail and wholesale demands from 2020 to 2040 under single-dry year conditions, despite an increase in demands.

Table 7-6: Retail Single-Dry Year Supply and Demand Comparison (AFY)

DWR Table 7-3 Retail: Single Dry Year Supply and Demand Comparison					
	2020	**2025**	**2030**	**2035**	**2040**
Supply totals	166,300	182,400	197,400	212,000	225,700
Demand totals	166,300	182,400	197,400	212,000	225,700
Difference	0	0	0	0	0

Table 7-7: Wholesale Single-Dry Year Supply and Demand Comparison (AFY)

DWR Table 7-3 Wholesale: Single Dry Year Supply and Demand Comparison					
	2020	**2025**	**2030**	**2035**	**2040**
Supply totals	75,600	84,000	89,100	94,100	99,200
Demand totals	75,600	84,000	89,100	94,100	99,200
Difference	0	0	0	0	0

7.6.3 Multiple-Dry Year

The multiple-dry year period represents the lowest average water supply availability to the agency for a consecutive three-year period. EMWD's multiple-dry year period is represented using hydrologic conditions similar to the 1990-1992 period. EMWD analyzed demands during the 1990-1992 hydrologic period and found an overall increase in demands of 14 percent of average in the first year of the multiple-dry year period. Demands during these conditions decreased to 88 percent of average during the second year, likely as the result of conservation messaging, followed by 92 percent of average in the third year. EMWD applied these demand fluctuations to its demand projections for a multiple-dry year period in Table 7-8 and Table 7-9 below. As demonstrated in the tables, EMWD will have sufficient supplies to meet both retail and wholesale demands from 2020 to 2040 under multiple-dry year conditions. During periods of increase demands, EMWD would be able to utilize stored groundwater from the proposed ERRP project (described in Sections 6.8 and 6.9) or import more water from MWD to meet demands, if needed.

Table 7-8: Retail Multiple-Dry Years Supply and Demand Comparison (AFY)

DWR Table 7-4 Retail: Multiple Dry Years Supply and Demand Comparison						
		2020	2025	2030	2035	2040
First year	Supply totals	166,300	182,400	197,400	212,000	225,700
	Demand totals	166,300	182,400	197,400	212,000	225,700
	Difference	0	0	0	0	0
Second year	Supply totals	142,500	155,400	167,400	179,000	190,100
	Demand totals	142,500	155,400	167,400	179,000	190,100
	Difference	0	0	0	0	0
Third year	Supply totals	149,500	162,700	175,100	186,900	198,600
	Demand totals	149,500	162,700	175,100	186,900	198,600
	Difference	0	0	0	0	0

Table 7-9: Wholesale Multiple-Dry Years Supply and Demand Comparison (AFY)

DWR Table 7-4 Wholesale: Multiple Dry Years Supply and Demand Comparison						
		2020	2025	2030	2035	2040
First year	Supply totals	75,600	84,000	89,100	94,100	99,200
	Demand totals	75,600	84,000	89,100	94,100	99,200
	Difference	0	0	0	0	0
Second year	Supply totals	61,800	68,500	72,400	76,400	80,300
	Demand totals	61,800	68,500	72,400	76,400	80,300
	Difference	0	0	0	0	0
Third year	Supply totals	66,000	71,900	76,100	80,200	84,300
	Demand totals	66,000	71,900	76,100	80,200	84,300
	Difference	0	0	0	0	0

7.7 Regional Supply Reliability

EMWD anticipates it will have enough supplies to meet demands under all water year conditions from 2020 through 2040. To supplement MWD imported sources and improve reliability, EMWD has several local resource programs. Production of local groundwater has been a source of supply for EMWD's service area for decades, but overproduction of groundwater has led to a need for groundwater management. Native production is limited and plans are in place to recharge local ground water basins to increase supply reliability. Desalination of high TDS groundwater also provides a reliable local supply of water.

Recycled water production and sales reduce the demand for imported water and provide a sustainable supply. EMWD's continued investment in improved facilities will continue to grow the market for recycled water, and innovative planning and recycled water management will allow EMWD's recycled water supply to bring an even greater benefit to the service area.

EMWD also has several planned projects that will increase regional supply reliability by increasing local supplies and decreasing demands for imported water from MWD. These projects include increasing local groundwater banking through the ERRP, expanding the desalter program with the Perris II Desalter, and full utilization of recycled water through implementation of IPR. These planned projects are described in detail in Section 6.9.

In addition to the development of local resources, EMWD aggressively promotes the efficient use of water. Through the implementation of local ordinances, conservation programs and an innovative tiered pricing structure, EMWD is reducing demands on retail accounts. Reducing demands allows existing and proposed water supplies to stretch farther and reduces the potential for water supply shortages.

Chapter 8 Water Shortage Contingency Planning

Recognizing the need to preserve and protect public health and safety, EMWD's WSCP applies regulations and restrictions on the delivery and consumption of potable outdoor and indoor water use during water shortages. EMWD's WSCP, originally adopted by ordinance, is now Article 10 to Title 5 of EMWD's Administrative Code. Modification is made to the WSCP from time to time. The most recent modification, adopted January 20, 2016, included additional restriction on water use in Stage 4c of the WSCP. The WSCP is attached as Appendix I.

The WSCP is based on the following priorities:

- Public safety, health and welfare
- Sustaining economic vitality
- Quality of life

Restrictions are structured to protect the safety, health and welfare of the public and minimize the impact a water shortage may have on the local economy and quality of life. This is done mainly through the use of EMWD's allocation-based tiered rate structure, focusing on those customers with wasteful behaviors first and then targeting other customers as a shortage becomes more severe.

Over ninety percent of EMWD's customers are either single-family residential, multi-family residential or landscape customers. These customers are subject to allocation-based tiered rates. There are four tiers in EMWDs rate structure; the first two tiers apply to indoor and outdoor use respectively, the third tier is applied to water use up to 50 percent above the Tier 1 and 2 budgets, and Tier 4 is applied to any water use in excess of Tier 3. In times of water shortage the thresholds for Tiers 2 and 3 are reduced as shortage levels increase. Under the most extreme shortage conditions, no outdoor water use is allowed and indoor water use may be restricted up to 50 percent.

CII and agricultural customers must also reduce demand during periods of shortage. These customers face event-driven penalties and could face fines if found violating water use restrictions. Wholesale customers are allocated water using the formula and methodology in MWD's WSAP.

8.1 Stages of Action

The WSCP limits water demand during times of shortage in five stages. These stages can be triggered when there is water deficiency caused by limitations on supply or by limitations on EMWD's delivery system. The plan shall be implemented in case of a long or short-term water deficiency, or in case of an emergency water shortage.

EMWD will implement an appropriate stage based on current water conditions such as:

- EMWD water supply conditions and storage levels
- Statewide water supply conditions
- Local water supply and demand conditions
- MWD WSAP implementation or other actions requiring a reduction in water demand
- Actions of surrounding agencies

Higher stages will be implemented as shortages continue and/or if customer response does not bring about desired water savings.

When implementation of the WSCP is triggered by anticipated limitations in supply or delivery, EMWD's General Manager shall request the Board of Directors to authorize and implement the provisions of the WSCP. The request shall be made at a regular or special meeting of the Board of Directors, to implement provisions of the WSCP. The Board of Directors has the authority to initiate or terminate the water shortage contingency measures described in the WSCP. When a water shortage

emergency occurs, the WSCP authorizes the General Manager to declare the extent of a potable water shortage emergency and to implement the appropriate water shortage contingency measures.

8.1.1 Retail Stages of Action

The WSCP stages for EMWD's retail customers are summarized in the table below. The first two stages of the WSCP are voluntary, while the successive stages are mandatory and include sub-stages to reflect changes to the tiered rate structure. These stages are discussed further in Section 8.2.

Table 8-1: Retail Stages of WSCP

DWR Table 8-1 Retail: Stages of Water Shortage Contingency Plan		
Stage	**Percent Supply Reduction**	**Water Supply Condition[1]**
1	up to 10%	Supply watch. Customers will be asked to reduce up to 10% of demand voluntarily.
2	up to 25%	Supply alert. Customers will be asked to reduce 25% of demand voluntarily.
3	up to 25%	Mandatory Waste Reduction. At this stage efforts will be focused on a mandatory reduction of excessive water use.
4	up to 50%	Mandatory Outdoor Reduction. At this stage efforts will be focused on mandatory reduction of outdoor water use.
5	50% or greater	Mandatory Indoor Reduction. At this stage efforts will be focused on mandatory reduction of indoor water use. This stage would only be implemented in response to a catastrophic loss of supplies requiring a 50 percent or more reduction in demand.

1) EMWD has built flexibility into its WSCP. Stages are not directly tied to water supply conditions. The WSCP can be implemented as needed to meet a reduction in demand or to respond to other conditions. In 2015 and 2016, EMWD implemented Stage 4 of its WSCP to meet the requirements of the SWRCB Emergency Regulation. The required reduction did not reflect EMWD's supply reliability..

8.1.2 Wholesale Stages of Action

During mandatory water shortage stages, wholesale customers will be required to reduce their retail water demands such that they are equivalent to EMWD's retail water demand reductions. If MWD imposes limited supply allocations on EMWD and other member agencies, supply to EMWD's wholesale customers will be allocated using the formula and methodology based on MWD's WSAP. EMWD will establish base period demands and then adjust them for growth and changes in local supply. Regional shortages will be phased in 10 stages. At each stage, wholesale customers will not experience shortages on the wholesale level that are greater than one-and-a-half times the percentage shortage of regional water supplies. The wholesale customers will also not face a retail shortage less than the regional shortage. Credits will be given for conservation and investment in local supplies. Penalty rates apply for use over allocations.

Table 8-2: Wholesale Stages of Water Shortage Contingency Plan

DWR Table 8-1 Wholesale: Stages of Water Shortage Contingency Plan		
Stage	**Percent Supply Reduction[1]**	**Water Supply Condition**
1	5%	MWD regional shortage level 1
2	10%	MWD regional shortage level 2
3	15%	MWD regional shortage level 3
4	20%	MWD regional shortage level 4
5	25%	MWD regional shortage level 5
6	30%	MWD regional shortage level 6
7	35%	MWD regional shortage level 7
8	40%	MWD regional shortage level 8
9	45%	MWD regional shortage level 9
10	50%	MWD regional shortage level 10

1) Percentages represent MWD's regional shortage level and not retail shortages. EMWD will pass through MWD's WSAP to its wholesale customers.

8.2 Prohibitions on End Uses

The WSCP prohibitions and reduction methods are organized by customer groups with different limitations on each group. Stages 1 and 2 start with voluntary measures. As the water deficiency increases, measures become mandatory and are intended to lead to the needed reduction in water demand.

8.2.1 Reduction Requirements

The WSCP targets a reduction in demand in specific tiers for single-family residential, multi-family residential and landscape customers. Table 8-3 summarizes the required reduction in each tier by stage.

Table 8-3: Tiered-Rate Water Reduction Requirements

Stage	Tier 1 Indoor Use	Tier 2 Outdoor Use	Tier 3 Excessive Use	Tier 4 Wasteful Use
1	Voluntary Reduction up to 10%			
2	Voluntary Reduction up to 25%			
3a	No variances or adjustments will be allowed for filling swimming pools, establishing new landscapes or leaks that are not repaired within 48 hours.			
3b			50% reduction	
3c			100% reduction	
4a		10% reduction	100% reduction	
4b		up to 50% reduction	100% reduction	
4c		up to 100% reduction	100% reduction	
5a	10% reduction	100% reduction	100% reduction	
5b	30% reduction	100% reduction	100% reduction	
5c	50% reduction	100% reduction	100% reduction	

Due to the most recent drought, EMWD is currently implementing Stage 4b of its WSCP with a mandatory 30 percent water budget reduction for Tier 2 outdoor use. This action was taken to meet

SWRCB mandatory demand reduction requirements and does not reflect a shortage in EMWD's water supply.

CII, Agricultural customers and any other customer without a water budget will be assigned a water budget based on historical water use. Allocations will be decreased according to the percentages listed for Stages 5a-5c, and the current Tier 4 rate will be applied to any use above the decreased allocation value.

8.2.2 Prohibitions

In order to reduce EMWD's retail demand in the case of deficiency in water supply, EMWD developed water use efficiency requirements that are to be followed at all times. Additional prohibitions on end uses are implemented at higher stages of water shortage in addition to the on-going water use efficiency requirements. As part of EMWD's WSCP, voluntary and mandatory water use reductions are expected through the on-going enforcement of the water use efficiency requirements, EMWD's water allocation-based tiered rates, and penalties for run off. Table 8-4 summarizes the water use efficiency requirements and additional prohibitions for each stage of EMWD's WSCP. Under the most extreme deficiencies, these prohibitions would reduce demand by more than 50 percent.

Table 8-4: Restrictions and Prohibitions on End Uses

DWR Table 8-2 Retail Only: Restrictions and Prohibitions on End Uses			
Stage	**Restrictions and Prohibitions on End Users**	**Additional Explanation or Reference**	**Penalty, Charge, or Other Enforcement?**
1	Other - Prohibit use of potable water for washing hard surfaces	Except for health or sanitary reasons	Yes
1	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Repair leaks within 48 hours of occurrence	Yes
1	Landscape - Limit landscape irrigation to specific times	Only between 9:00 p.m. and 6:00 a.m. except when: -manually watering -establishing new landscape -temperatures are predicted to fall below freezing -it's for very short periods of time to adjust or repair an irrigation system	Yes
1	Landscape - Prohibit certain types of landscape irrigation	Unattended irrigation systems using potable water are prohibited unless they are limited to no more than fifteen (15) minutes watering per day, per station. This limitation can be extended for: -Very low flow drip irrigation systems when no emitter produces more than two (2) gallons of water per hour -Weather based controllers or stream rotor sprinklers that meet a 70% efficiency	Yes
1	Landscape - Restrict or prohibit runoff from landscape irrigation	Avoid over watering or watering of hardscape and the resulting runoff	Yes
1	Other water feature or swimming pool restriction	Decorative fountains must be equipped with a recycling system	Yes
1	Other	Allowing water to run while washing vehicles is prohibited	Yes

Table 8-4: Restrictions and Prohibitions on End Uses *(Continued)*

DWR Table 8-2 Retail Only: Restrictions and Prohibitions on End Uses *(Continued)*			
Stage	Restrictions and Prohibitions on End Users	Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
1	Other	Install new landscaping with low-water demand trees and plants. New turf shall only be installed for functional purposes	Yes
1	Landscape - Other landscape restriction or prohibition	Watering during rain, or within 48 hours after measurable rain, is prohibited	Yes
2	Landscape - Other landscape restriction or prohibition	Reduce watering or irrigating of lawn, landscape or other vegetated areas with sprinklers by one day a week	Yes
2	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	All leaks, breaks, or other malfunctions in the water user's plumbing or distribution system repaired within 72 hours	Yes
2	Other water feature or swimming pool restriction	Refrain from filling or re-filling of ornamental lakes or ponds	Yes
2	Other	Refrain from using potable water to wash or clean a vehicle, including but not limited to, any automobile, truck, van, bus, motorcycle, boat or trailer, whether motorized or not	Yes
3a	Other	No variances or adjustments will be allowed for filling swimming pools, establishing new landscapes or leaks that are not repaired within 48 hours	Yes
3b	Other	Tier 3 (Excessive Use) water budget decreased by 50%	Yes
3c	Other	Tier 3 (Excessive Use) water budget decreased by 100%	Yes
4	Landscape - Other landscape restriction or prohibition	Watering or irrigating of lawn, landscape, or other vegetated areas with sprinklers should be limited to the following schedule: -June – August: A maximum of two days a week -September – May: A maximum of one day a week	Yes
4a	Other	Tier 2 (Outdoor Use) water budget decreased by 10%	Yes
4b	Other	Tier 2 (Outdoor Use) water budget decreased by up to 50%	Yes
4c	Other	Tier 2 (Outdoor Use) water budget decreased by up to 100%	Yes
5a	Other	Tier 1 (Indoor Use) water budget decreased by 10%	Yes
5b	Other	Tier 1 (Indoor Use) water budget decreased by 30%	Yes
5c	Other	Tier 1 (Indoor Use) water budget decreased by 50%	Yes
5	Other	CII, Agricultural, and any other customer without a water budget will be given a water budget based on historical water use, and allocations will be reduced according to the percentages listed for stages 5a-5c (up to 50 percent)	Yes

8.3 Determining Water Shortage Reductions

EMWD measures and determines the actual water savings made by implementing each stage of the WSCP by relying on water meters that record the production and consumption of water. Each level of the WSCP has an associated metered reduction.

8.4 Penalties, Charges, Other Enforcement of Prohibitions

For Stages 1 and 2 of the WSCP, demand reduction is voluntary; but it will be encouraged through the on-going enforcement of EMWD's water budget based tiered rates and penalties for runoff. Stage 3 of the WSCP is focused on a mandatory reduction of excessive water use through following the conserving actions detailed in Stages 1 and 2. Beginning with Stage 3 event-driven penalties can be imposed for violating any of the restrictions in the WSCP.

Demand reductions will be enforced through changes to EMWD's water budget based tiered rate structure and observation-based penalties. Violations of the water runoff requirement are cumulative over a 12-month period. Table 8-5 lists penalties for event driven restrictions.

Table 8-5: Event Driven Penalties and Charges

Stage	Customer Category	First Violation	Second Violation	Third Violation	Fourth and Subsequent Violations
3	Single-Family	Written Notice	$25 Fine	$50 Fine	$100 Fine
	Multi-Family, CII, Agricultural, and Landscape	Written Notice	$100 Fine	$200 Fine	$300 Fine
4-5	Single-Family	Written Notice	$50 Fine	$100 Fine	$200 Fine
	Multi-Family, CII, Agricultural, and Landscape	Written Notice	$200 Fine	$400 Fine	$600 Fine

Any funds collected from penalties will be dedicated to funding EMWD's conservation programs.

8.5 Consumption Reduction Methods

EMWD utilizes consumption reduction methods to reduce demands for potable water within its service area. EMWD's methods include supplementing its water conservation program during WSCP implementation and implementing its allocation-based tiered rate billing structure by progressively reducing allocations for tiers as higher stages of the WSCP are implemented. Consumption reduction methods that can be used in EMWD's service area to comply with the WSCP are summarized in Table 8-6.

Table 8-6: Consumption Reduction Methods

DWR Table 8-3 Retail Only: Stages of Water Shortage Contingency Plan – Consumption Reduction Methods		
Stage	**Consumption Reduction Methods by Water Supplier**	**Additional Explanation or Reference**
1-5	Expand Public Information Campaign	EMWD will continue to implement its conservation program and may supplement programs during WSCP implementation.
3	Other[1]	Stage 3 progressively reduces the tier 3 allocation. Any water used over the allocations for tiers 1-3 is charged at the tier 4 rate[2].
4	Other[1]	Stage four eliminates the tier 3 allocation and progressively reduces the tier 2 allocation. Any water used over the allocations for tiers 1-2 is charged at the tier 4 rate[2].
5	Other[1]	Stage 5 eliminates the tier 3 and 4 allocations and progressively reduces the tier 1 allocation. Any water used over the allocations for tiers 1 is charged at the tier 4 rate[2].

1) EMWD has four tiers in its allocation-based tiered rate structure
2) The current tier 4 rate is $11.16 per hundred cubic feet

8.6 Resolution or Ordinance

EMWD's WSCP was added as Article 10 to Title 5 of EMWD's Administrative code by Resolution No. 2014-033 on March 26, 2014. The WSCP was amended on July 2, 2014 by Resolution No. 2014-098, on March 18, 2015 by Resolution No. 2015-011, on August 19, 2015 by Resolution No. 2015-103, and on January 20, 2016 by Resolution No. 2016-016. The amended WSCP is included as Appendix I of this UWMP.

8.7 Catastrophic Supply Interruption

EMWD is dependent on MWD for the majority of its supply. MWD has prepared for emergencies using a combination of storage, facility design and redundant power sources. Emergency storage requirements are based on the potential for a major earthquake that renders major water transportation facilities out of service for six months. Assuming 100 percent of its supplies are unavailable for six months, MWD has enough water storage to sustain 75 percent of normal year firm deliveries. In the event of a major power outage, water supply can be delivered by gravitational feed from recreational reservoirs, including Diamond Valley Lake Reservoir. For treatment plants, MWD has backup power generators in place in case of electrical outages. Additional information about addressing catastrophic supply interruption can be found in Section 2.5 of MWD's 2015 UWMP.

To protect EMWD customers in the case of an emergency, EMWD has developed the Water Shortage Emergency Operations Plan (WSEOP). This plan determines the operation response to many types of emergencies. It specifies chain of command and provides the authority to respond. Elements of that response can include interdepartmental staff notification and mobilization; activation of alternative water supply sources (i.e., interagency connections), use of temporary pumping facilities; use of power generators; public notification; and activation of conservation measures. An emergency is defined as any time period when MWD or EMWD facilities are incapable of supplying potable water. An emergency could be caused by a natural disaster such as an earthquake or through facility failures. The WSEOP describes the coordination required between operational staff, management, community involvement staff and other EMWD employees. In addition, communication and cooperation will be required with the community and other agencies such as the Department of Health Services and MWD. In the event that one or more water supply sources are unavailable, remaining sources of supply will be maximized to meet demand. If needed, the WSCP could be implemented to conserve water and reduce demand. If an electrical or gas power outages occur, some of EMWD's booster facilities have backup generators. Facilities without redundant power sources may be served on a priority basis by portable generators.

8.8 Revenue and Expenditure Impacts

As a result of a water shortage or emergency situation, there may be a reduction of revenue from water sales. To protect EMWD from financial hardship in such a situation, a financial reserve account (Rate Stabilization Reserve) has been established to meet the fixed costs associated with water delivery that may not be met in the case of reduced water sales. Table 8-7 and Table 8-8 summarize the anticipated WSCP implementation impacts on revenue and expenditures, respectively. Table 8-9 describes the proposed measures to overcome these potential impacts.

Table 8-7: Actions and Conditions that Impact Revenue

Type	Anticipated Revenue Reduction
Reduced Water Sales	Water sales are approximately 40% of EMWD's annual revenue. A reduction in the demand of water by 50% would also mean a reduction in revenue from water sales of 50% leaving a shortfall of approximately 20% of EMWD annual revenue. This reduction would be offset in part by a reduction in water purchased from MWD.

Table 8-8: Actions and Conditions that Impact Expenditures

Category	Anticipated Cost
Increased Staff Cost	Staff costs for implementing the WSCP could vary depending on the stage triggered by a deficiency in water supply. Stages 1 and 2 would probably be implemented with only current staff members. Stages 3 or 4 of the plan may require additional staff to implement. The amount and level of staff will vary greatly depending on the public's response to the plan.
O&M Cost	Operations and maintenance cost may be minimally impacted by the implementation of the WSCP, but these costs are projected to have minimal impact on EMWD's total revenue.
Cost of Supply and Treatment	Cost of supply would decrease due to a decrease in demand and would offset some of the costs associated with reduced water sales.
Public Outreach Costs	Costs associated with informing the public about implementing the WSCP will vary based on the public's response and the stage of the plan implemented.

Table 8-9: Proposed Measures to Overcome Revenue Impacts and Increased Expenditures

Name of Measure	Summary of Effect
Rate Adjustment	Part of the WSCP is the ability to impose a penalty rate. This may offset some of the lost revenue due to a decrease in water sales.
Reserve Policy	EMWD, as a matter of policy, keeps a reserve of funds equivalent to 90 days of operational expenses. This reserve fund could be used to mitigate revenue shortfalls.
Rate Stabilization Fund	EMWD also has a rate stabilization fund available to offset increased costs and decreased sales.

8.9 Estimate of Minimum Supply

The UWMP Act requires a retailer to quantify the minimum water supply available during the next three years (2016 to 2018), assuming a repeat of the driest three-year historic sequence. As detailed in *Chapter 7 – Water Supply Reliability Assessment*, this corresponds to the period of 1990, 1991 and 1992 for EMWD's supplies.

Under a typical dry year scenario, EMWD would increase deliveries from MWD to account for any losses in local supply. After several dry years, MWD could face reduced supply capabilities during the next three years. If a shortage occurs, MWD may implement its water supply allocation plan for member agencies in order to preserve storage reserves. The WSAP charges significantly higher rates for water deliveries over the allocated amount for each member agency.

EMWD and its sub agencies have already reduced demand significantly due to mandatory SWRCB reduction requirements. MWD water deliveries are well below the allocation EMWD received under the current implementation of the MWD WSAP Level 3 regional shortages. If dry conditions continue, EMWD will meet allocation targets through demand reductions as outlined in the EMWD WSCP.

Table 8-10 and Table 8-11 show the minimum supplies available by supply type for EMWD's retail and wholesale supplies, respectively. Comparing these supplies to the demand projections, EMWD would have adequate supplies available to meet projected demands should a multiple-dry year period occur the next three years. Table 8-12 and Table 8-13 summarize the total minimum supply available for the next three years for EMWD's retail and wholesale customers.

Table 8-10: Minimum Supply Next Three Years for Retail Service Area (AFY), by Supply Type

	2016	2017	2018
Imported Water	64,900	68,700	72,500
Groundwater	13,600	13,000	12,500
Groundwater Desalters	7,000	7,000	7,000
Recycled Water	43,000	43,000	43,000
Total Supply	**128,500**	**131,700**	**135,000**
Demand	128,500	131,700	135,000
% of Normal	**100%**	**100%**	**100%**

Table 8-11: Minimum Supply Next Three Years for Wholesale Service Area (AFY), by Supply Type

	2016	2017	2018
Imported Water	23,900	24,500	25,200
Recycled Water	2,000	2,000	2,000
Total Supply	**25,900**	**26,500**	**27,200**
Demand	25,900	26,500	27,200
% of Normal	**100%**	**100%**	**100%**

Table 8-12: Minimum Retail Supply Next Three Years (AFY)

DWR Table 8-4 Retail: Minimum Supply Next Three Years			
	2016	2017	2018
Available Water Supply	128,500	131,700	135,000

Table 8-13: Minimum Wholesale Supply Next Three Years (AFY)

DWR Table 8-4 Wholesale: Minimum Supply Next Three Years			
	2016	**2017**	**2018**
Available Water Supply	25,900	26,500	27,200

Chapter 9 Demand Management Measures

The CWC and UWMP Act require water agencies to describe the Demand Management Measures (DMMs) that the agency is implementing as part of its overall water conservation program. These align with the best management practices (BMPs) identified by the California Urban Water Conservation Council (CUWCC) in its MOU Regarding Urban Water Conservation in California. As a signatory of the MOU, EMWD pledged to make a good faith effort to implement a prescribed set of urban water conservation BMPs. As both a retail and wholesale water agency, EMWD is responsible for fulfilling the requirements of both the retail and wholesale BMPs.

In December 2008, the Urban MOU was amended and the BMPs were revised. The revision reorganized CUWCC's 14 BMPs into five categories. Two of the categories, Utility Operations and Education, are referred to as "Foundational BMPs" because they are considered to be essential water conservation activities by any utility and are adopted for implementation by all signatories to the CUWCC as ongoing practices with no time limits. The remaining three categories are "Programmatic BMPs" and include Residential; CII; and Landscape. Table 9-1 provides a list of the CUWCC's 14 original BMPs and a mapping of the new BMPs Categories.

Programmatic BMPs are designed to achieve quantifiable water savings. Compliance with these BMPs can be demonstrated with two approaches: traditional implementation as prescribed by the components of the BMP category or by the Flex Track Menu Alternatives option, included in each programmatic BMP. Requirements for compliance are determined using base year data from single family residential (SFR) customers, multi-family residential (MFR) units, and CII customers. EMWD has chosen to use the Flex Track approach to demonstrate Programmatic BMP compliance.

Table 9-1: Original CUWCC BMPs and New BMP Categories

Original BMP Description	Applied to		New BMP Category
	Retail	Wholesale	
Residential Water Surveys	Yes	No	Programmatic: Residential
Residential Plumbing Retrofits	Yes	No	Programmatic: Residential
System Water Audits, Leak Detection	Yes	Yes	Foundational: Utility Operations – Water Loss Control
Metering and Commodity Rates	Yes	No	Foundational: Utility Operations – Metering
Large Landscape Audits	Yes	No	Programmatic: Landscape
High Efficiency Washing Machines	Yes	No	Programmatic: Residential
Public Information	Yes	Yes	Foundational: Education – Public Information Programs
School Information	Yes	Yes	Foundational: Education – School Education Programs
Commercial, Industrial, Institutional	Yes	No	Programmatic: Commercial, Industrial, Institutional
Wholesale Agency Assistance	No	Yes	Foundational: Utility Operations – Operations
Conservation pricing	Yes	Yes	Foundational: Utility Operations – Pricing
Conservation Coordinator	Yes	Yes	Foundational: Utility Operations – Operations
Water Waste Prohibition	Yes	No	Foundational: Utility Operations – Operations
Residential ULFT Replacement	Yes	No	Programmatic: Residential

In 2014, the section of the CWC addressing DMMs was significantly modified to simplify, clarify, and update the DMMs reporting requirements in UWMPs. The retail agency requirements were streamlined from 14 specific measures to six general requirements plus an "other" category. The requirements for wholesale agencies were streamlined to three specific measures, an "other" category, and a narrative description of asset management and wholesale supplier assistance programs. Table 9-2 provides a comparison of the CUWCC's 14 original BMPs with the new 2015 UWMP DMM groupings.

Table 9-2: UWMP Demand Management Measures and CUWCC Best Management Practices

UWMP DMMs	CUWCC BMP Organization and Names (2009 MOU)			
DMM Name	**BMP #**	**BMP Name**	**Type**	**Category**
(i) Water Waste Prevention Ordinances	1.1.2	Water Waste Prevention	Foundational	Utility Operations Program
(ii) Metering	1.3	Metering with commodity Rates		
(iii) Conservation Pricing	1.4	Retail Conservation Pricing		
(iv) Public Education and Outreach	2.1	Public Information Programs		Education Programs
	2.2	School Education Programs		
(v) Programs to Assess and Manage Distribution System Real Loss	1.2	Water Loss Control		Utility Operations Program
(vi) Water Conservation Program Coordination and Staffing Support	1.1.1	Conservation Coordinator		
(vii) Other Demand Management Measures	3.1	Residential Assistance Program	Programmatic	Residential
	3.2	Landscape Water Survey		
	3.3	High Efficiency Clothes Washers		
	3.4	WaterSense Specification (WSS) Toilets		
	4	Commercial, Industrial, and Institutional		Commercial, Industrial, and Institutional
	5	Landscape		Landscape
Wholesale Supplier Assistance Programs	1.1.3	Wholesale Agency Assistance Programs	Foundational	Utility Operations Program

9.1 CUWCC MOU Compliance

EMWD is both a retail and wholesale agency, and therefore is responsible for complying with all of the 14 CUWCC BMPs. As a signatory to the CUWCC MOU, EMWD continues to support and implement both the retail and wholesale BMPs and is in full compliance with the MOU. Signatories to the MOU that are in full compliance with the CUWCC's MOU are allowed by CWC Section 10631 to include their 2013-2014 annual CUWCC BMP reports in the 2015 UWMP to meet the requirements of the DMM sections of the UWMP Act. EMWD has chosen to comply with the requirements of the UWMP Act by providing its 2013-2014 BMP annual reports as well as describing the DMMs in the sections below.

EMWD's 2013-2014 retail and wholesale BMP annual reports are included as Appendix J along with documentation from the CUWCC that EMWD has met the MOU coverage requirements.

9.2 Retail Area Demand Management Measures

9.2.1 Water Waste Prevention Ordinances

Water Waste Prevention (BMP 1.1.2)

Coverage requirements: The water agency shall do one or more of the following: (a) enact and enforce an ordinance or establish terms of service that prohibit water waste; (b) enact and enforce an ordinance or establish terms of service for water efficient design in new development; (c) support legislation or regulations that prohibit water waste; (d) enact an ordinance or establish terms of service to facilitate implementation of water shortages response measures; (e) support local ordinances that prohibit water waste; and/or (f) support local ordinances that establish permit requirements for water efficient design in new development.

Compliance method: EMWD has met the coverage requirements in the following ways:

- Ordinance 72.25 – Water Use Efficiency Ordinance, implemented January 1991. EMWD reviews ordinances on a regular basis with the most recent revision effective February 2016. This ordinance prohibits water waste, imposes penalties for runoff, and requires efficient design in new development. The ordinance is enforced in two ways, (1) through EMWD's allocation-based tiered rate structure for single family, multi-family and landscape accounts utilizing the domestic water system; and (2) through penalties for runoff.
- Ordinance 117.2 – Water Shortage Contingency Plan, implemented July 2005. EMWD reviews the WSCP on a regular basis with the most recent modification adopted January 2016. This ordinance is designed for the purpose of protecting the integrity of water supply facilities (infrastructure), and implementing a contingency plan in times of drought, supply reductions, failure of water distribution systems or emergencies.
- EMWD supports legislation and local ordinances that prohibit water waste, and supports local ordinances that establish requirements for water efficient design in new development. As a member of the Riverside County Water Task Force, EMWD participated in updating Riverside County's Water Efficient Landscape Requirements Ordinance 859.
- In mid-2015, EMWD adopted new development standards to further promote conservation throughout its service area. Beginning in July 2015, all new developments are prohibited from having non-functional turf, including turf in the front yards of new homes. With more than 60 percent of water in EMWD's service area being used outdoors, this was designed to be a long-term strategy to minimize the impact of new development. EMWD's service area is currently 40 percent built out, making it one of the few regions in Southern California that will see significant population growth in the coming decades. EMWD also helped the County of Riverside adopt a similar ordinance prohibiting turf in the front yards of new homes in all unincorporated areas of Riverside County.
- EMWD has also prohibited the installation of non-functional turf in all new CII developments. While turf is being allowed in functional areas of new development, including parks and schools, it is no longer permitted within common area landscaping that provides no functional community benefit. Non-functional turf can best be described as turf that is only ever walked on when it is being mowed.

9.2.2 Metering

Metering with Commodity Rates for All New Connections and Retrofit of Existing Connections (BMP 1.3)

For consistency with CWC Section 525b, this BMP refers to potable water systems. A water meter is defined as a device that measures the actual volume of water delivered to an account in conformance with the guidelines of the AWWA.

Coverage requirements: (1) Meter all new service connections; (2) Establish a retrofit program for existing unmetered service connections; (3) Read meters and bill customers by volume of use; (4) Prepare a written plan, policy or program for meters that includes census, testing, repair and replacement; (5) Identify barriers to retrofitting mixed use commercial accounts with dedicated landscape meters and conduct feasibility study(s) to assess the merits of providing incentives to switch mixed use accounts to dedicated landscape meters.

Compliance method: EMWD has met the coverage requirements for this measure; (1) meters are required on all new service connections; (2) all service connections in EMWD's service area are metered; (3) meters are read on a monthly basis and billed monthly in hundred cubic feet; (4) EMWD's program for meter testing and replacement is referenced in Table 9-3 below; (5) EMWD has identified and measured all commercial customers with mixed use meters and is in the process of creating water budgets for these customers; (6) in an effort to reduce leaks, a continuous water use notification system was implemented in February 2016 which notifies customers of the presence of a constant water flow running through their meter (for every hour for several days), which is a strong indication of a possible leak; (7) as part of the Water Loss Analysis that takes place every few years, EMWD now sends back approximately 30 small (5/8"-2") meters each month for random testing to ensure accuracy; (8) to better serve its customers in a more accurate and efficient manner, EMWD began installing Advanced Metering Infrastructure (AMI) meters in 2005 and to date has installed 39,000 AMI meters and 45,500 Flex Net Meters, with the goal of complete conversion to Flex Net meters for residential and commercial customers by 2026.

Table 9-3: Meter Testing and Replacement

Meter Type	Meter Size	Monthly Consumption (hundred cubic feet)	Meter Testing Frequency	Meter Replacement Frequency
Residential	5/8" – 2"	Not Applicable	Customer Request	Upon Failure
Commercial	3" and Larger	1001 – Above	6 Months	Upon Failure
Commercial	3" and Larger	401 – 1000	12 Months	Upon Failure
Commercial	3" and Larger	201 – 400	24 Months	Upon Failure
Commercial	3" and Larger	0 – 200	36 Months	Upon Failure
Sample	Not Applicable	Not Applicable	Bi-Annually[1]	Upon Failure

1) Based on age segment (1960's, 1961 – 1969, 1970 – 1979, etc.)

9.2.3 Conservation Pricing

Retail Conservation Pricing (BMP 1.4)

Retail Water Services Rates

Definition: Conservation pricing provides economic incentives (a price signal) to customers to use waster efficiently. Because conservation pricing requires a volumetric rate, metered water service is a necessary condition of conservation pricing.

This BMP is intended to reinforce the need for water agencies to establish a strong nexus between volume-related systems costs and volumetric commodity rates. Conservation pricing requires volumetric rates. The goal of this BMP is to recover the maximum amount of water sales revenue from volumetric rates that is consistent with utility costs (which may include utility long-run marginal costs), financial stability, revenue sufficiency, and customer equity. In addition to volumetric rates, conservation pricing may also include service connection charges, meter service charges and/or special rates and charges for temporary service, fire protection service and other irregular services provided by the utility.

The following volumetric rate designs are potentially consistent with the above definition:

1) Uniform rate in which the volumetric rate is constant regardless of the quantity consumed
2) Seasonal rates in which the volumetric rate reflects seasonal variation in water delivery costs
3) Tiered rates in which the volumetric rate increases as the quantity used increases
4) Allocation-based rates in which the consumption tiers and respective volumetric rates are based on water use norms and water delivery costs established by the utility

Coverage requirements: Maintain a rate structure that satisfies at least one of the two options listed in the CUWCC's MOU. Conformance will be assessed by using (1) most recent year data or (2) average revenue from three most recent years when most recent year data does not satisfy the option.

Compliance method: EMWD has met the coverage requirements in the following ways:

In February 2009, EMWD implemented an allocation-based tired rate structure for single family residential, multi-family residential and landscape accounts. The rate structure was instituted to promote the efficient use of water, and is designed to provide customers a significant economic incentive to use the proper amount of water required to serve indoor and outdoor (landscape) demands. This is accomplished by setting a customized "allocation" for each customer account based on a variety of factors such as: irrigated area, daily weather characteristics, size of household, and other more unique characteristics such as the presence of a pool, livestock or medical needs. Water is then sold to customers under a four tier structure based upon their monthly allocation which varies for landscape use relating to daily weather patterns. Customers using water within their allocation purchase water in the lower two tiers. Customers using in excess of their allocation also purchase water in the remaining two tiers that generally will result in relatively high water bills which can send a strong price signal for excessive use. The tiered rate structure was also designed so that 70 percent of the rate is variable.

Retail Wastewater Rates

Conservation pricing of sewer service provides incentives to reduce average or peak use, or both. Such pricing includes: (a) rates designed to recover the cost of providing service, and (b) billing for sewer service based on metered water use.

The following characterizes conservation pricing of sewer services:

1) Uniform rates in which the unit rate is the same across all units of service
2) Increasing block rates in which the unit rate increases as the quantity of units purchased increases
3) Rates in which the unit rate is based upon the long-run marginal cost or the cost of adding the next unit of capacity to the sewer system

Rates that charge customers a fixed amount per billing cycle for sewer service regardless of the unit of service consumed; and/or rates in which the typical bill is determined by high fixed charges and low commodity charges do not satisfy the definition of conservation pricing of sewer services.

Coverage requirements: Maintain a rate structure for sewer service consistent with the characteristics of conservation pricing for services.

Compliance method: EMWD has met the coverage requirements in the following ways:

EMWD complies with an at least as effective approach. EMWD and RCWD, its largest sub agency, both have allocation-based tiered rate billing structures. The allocation-based tiered rate billing structure sends a strong price signal against using excessive water both indoors and outdoors. EMWD also uses the household size provided water budgets to tier sewer pricing. Finally, EMWD recycles all of its wastewater and reuses it within the service area. These method are at least as effective as a conserving rate structure for wastewater.

9.2.4 Public Education and Outreach

California water agencies have played a major role in promoting water use efficiency through both public information and school education programs. EMWD's Public and Governmental Affairs and Education Programs for its retail service area are described below.

Public Information Programs (BMP 2.1)

Public information programs are an effective tool to educate customers about the need for water use efficiency and to influence customer behavior towards conservation. The following actions are necessary to implement a public information program to promote water conservation and related benefits:

- Public speakers to employees, community groups and the media
- Advertising using paid and public service
- Customer communication using bill inserts and on bill comparison charts for multi-year usage
- Coordination with government agencies, industry groups, public interest groups and media
- Marketing designed to change attitudes and influence behavior

Coverage requirements: Maintain an active public information program to promote and educate customers about water conservation and water use efficiency. Minimum program components consist of: (1) providing public speakers to employees, community groups and the media; using paid and public service advertising; using bill inserts; providing information on customers' bills; providing public information to promote water conservation measures and coordinating with other government agencies, industry groups, public interest groups and the media; (2) social marketing elements which are designed to change attitudes and influence behavior. This includes seeking input from the public to shape the water conservation message, training stakeholders outside the utility staff in water conservation priorities and techniques; and developing partnerships with stakeholders who carry the conservation message to their target markets; and (3) wholesale agency or another lead regional agency may operate all or part of the education program.

Compliance method: EMWD has met the coverage requirements in the following ways:

1) EMWD provides public speakers at new employee orientation which is conducted twice each year; provides information to employees via intranet updates on a regular basis; and occasionally provides employees with fact sheets or talking points on industry issues that may be topics of discussion with individuals outside of EMWD. Public speakers are also provided to community groups, in a variety of settings such as rotary clubs, homeowners associations, religious organizations, mobile home parks, etc. EMWD's active speakers' bureau provides multiple presentations each month. EMWD maintains an active relationship with reporters by phone, email and direct contact regarding topical issues relating the need to encourage water use efficiency throughout its service area. EMWD utilizes a number of means for paid advertising such as the Riverside County Fair program, various Chambers of Commerce programs and newsletters, and Community Council newsletters. Monthly cable slides are used for public service advertising. Customer communication includes bill inserts, bill messaging, monthly usage comparisons on the water bills and bi-monthly newsletters.

2) EMWD provides public information to promote water conservation measures. In an effort to affect changes in attitude and influence behavior, EMWD has active pages on common social

media sites that are updated regularly, and a conservation website that is updated on a regular basis. Addressing the subject of training stakeholders, EMWD has hosted and/or conducted workshops for landscape professionals, providing certification opportunities for smart irrigation controller technologies. EMWD's Board members hold Director Advisory Committee meetings with stakeholders throughout the year; and staff members attend/participate at local city councils, planning commissions, and chambers of commerce events.

3) EMWD's Education Program uses a variety of grade-appropriate curriculum to educate area students about the importance of water use efficiency. Through its wide range of programs, EMWD reaches more than 60,000 students per year. The long-term objective of the program is to establish positive water use efficiency habits at a young age in order to have a future generation of ratepayers who understand the importance of using water efficiently. Among the programs offered are: school assembly programs, field trips to the San Jacinto Wetlands and Education Center, classroom presentations, annual "Write-Off" contests where students write and illustrate a water-themed book, and participation in regional poster contests.

EMWD participates in MWD's regional rebate programs administered through SoCal Water$mart for residential and commercial customers.

School Education Programs (BMP 2.2)

School education programs have been implemented to reach the youngest water users at an early age and reinforce the need to engage in water conservation as a life-long behavior. The following actions are necessary to implement school education programs to promote water conservation and related benefits:

1) Provide instructional assistance to school districts and private schools within service area
2) Provide educational materials and classroom presentations that identify urban, agricultural and environmental issues and conditions in the local watershed
3) Develop and/or provide grade appropriate educational materials that meet the state education framework requirements

Coverage requirements: Maintain an active school education program to educate students in the agency's service area about water conservation and efficient water use. Minimum program components consist of: (1) implement a school education program to promote water conservation and related benefits; (2) work with school districts and private schools in the service area to provide instruction assistance, educational materials and classroom presentations that identify urban, agricultural, and environmental issues and conditions in the local watershed. Educational materials must meet the state education framework requirements; and (3) wholesale agency or another lead regional agency may operate all or part of the education program.

Compliance method: EMWD has met the coverage requirements in the following ways:

1) EMWD has a very robust school education program that promotes water conservation and all aspects of environmental education. Additionally, EMWD works very closely with public and private schools within both its retail and wholesale service areas to provide educational materials which are in alignment with the California content standards for grades K-12.
2) EMWD provides classroom presentations covering water conservation, potable water treatment, wastewater treatment, and all aspects of environmental education. EMWD sponsors weekly field trips for students in eleven school districts throughout EMWD's service area to tour one of EMWD's wastewater treatment facilities and wetlands project and includes water education activities that are conducted in the education facility. EMWD provides materials developed by EMWD education staff and the MWD and for K-12 students. EMWD has also developed a variety of curriculum for K-5 students including.

- Wastewater Treatment for All Curious Beings – activity book

- Dewie the Dragon – curriculum packet
- Gobi's Adventure – curriculum packet
- Otis the Turtle gets Water Wise – curriculum packet
- Lily and the Seven Drops
- Bartholomew the Bird Investigates How to Use Water Wisely

The following contests are also promoted by EMWD on a quarterly basis:

- Grades K-5 Students – Poster contest "Water Use it Wisely" and "Get Savvy About Water Conservation"
- Grades 6-8 Students – Language Arts contest (resulted in a published book, written & illustrated by 6-8 grade students)
- Grades 9-12 Students – Solar Cup event (MWD provides boat hull for students to assemble and EMWD provides financial support for students to outfit the boat with a motor and solar panels)

EMWD participates in the following school and community activities:

- Environmental, science, health, and community fairs – provide activities and materials
- Annual environmental youth conference – provided in partnership with other agencies
- Sponsoring an environmental assembly program for schools in EMWD's service area

EMWD offers the following assistance for teachers in the service area:

- Financial assistance to take the online college-level course "Teaching the Water Story" (EMWD, in partnership with other local agencies, developed an online college-level course, "Teaching the Water Story." This course is offered to students worldwide through Fresno Pacific University)
- Training programs offered by EMWD and MWD
- Training workshops offered by EMWD in partnership with other agencies to spotlight programs
- Training for Project WET offered

EMWD is one of MWD's member agencies, as such MWD has taken the lead as the wholesale agency in the Student Art Program and the Annual Solar Cup Event. MWD has also provided curriculum for K-12 students.

9.2.5 Programs to Assess and Management Distribution System Real Loss

Water Loss Control (BMP 1.2)

The goals of modern water loss control methods include both an increase in water use efficiency in the utility operations and proper economic valuation of water losses to support water loss control activities. In May 2009, the AWWA published the 3rd Edition M36 Manual "Water Audits and Loss Control Programs." BMP 1.2 incorporates these new water loss management procedures and applies them in California. Agencies are expected to use the AWWA Free Water Audit Software to complete their standard water audit and water balance. For the 2015 UWMP, water agencies are required to calculate water loss using the AWWA software as discussed in *Chapter 4 – System Water Use*.

Coverage requirements: (1) Compile the standard water audit and balance annually, using the AWWA software, and beginning in the 2nd year of implementation agencies are to test source, import, and production meters annually. (2) During the first four years of implementation, agencies shall improve the data accuracy and data completeness of the standard water balance, and achieve a "Water Audit Data Validity" score of 66 or higher using the AWWA software; and achieve data validity level IV no later than the end of the 5th year of implementation. (3) During the first four years of implementation, seek training in the AWWA water audit method and component analysis process, and complete a component analysis of real losses; and update analysis no less than every four years. (4) During years five through ten

of implementation, agencies shall demonstrate progress in water loss control performance as measured by the AWWA software real loss performance indicator "gallons per service connection per day;" gallons per mile of mains per day;" or achieving a performance indicator score that is (a) less than the agency's score the previous year; (b) less than the average of the agency's scores for the previous three years; (c) in the top 20 percent of all signatory agencies reporting with a Data Validity Level IV or (d) in year six and beyond, reducing real losses to or below the benchmark value determined by the Council's process. (5) Repair all reported leaks and breaks to the extent cost effective, establish and maintain a record keeping system for the repair of reported leaks by the end of year two, and include estimated leakage volume and repair cost to report by the end of year four. (6) Locate and repair unreported leaks to the extent cost effective.

Compliance method: EMWD has met the coverage requirements in the following ways:

1) EMWD has compiled the standard water audit report for FY 2014/2015 and submitted it to CUWCC in February of 2016. The following methods are used to test source, import and production meters:

   Source Meters: Well meters are recalibrated annually. Filtration Plant and Desalter system supply meters are monitored against the raw water supply meters and serviced as needed. A program for scheduled meter maintenance is being developed.

   Import Meters: MWD tests their connection meters bi-annually. EMWD's system meters are recalibrated annually and flows are monitored daily. Significant differences with MWD deliveries are addressed jointly between EMWD and MWD.

   Production Meters: Production meters are bench tested by a certified independent laboratory. A plan to do volumetric testing at the sites is being developed.

2) EMWD has contracted with a qualified water loss control consultant, Water System Optimization, Inc. (WSO) to do an audit and balance; evaluate existing data, methods and procedures, and recommend a phased program of improvements to data accuracy and completeness. EMWD will pursue phased implementation of recommended improvements based on justification and cost effectiveness. EMWD currently has a Water Audit Data Validity score of 78.

3) Staff has attended AWWA sponsored training and a large cross section of staff attended a kick-off meeting to explain objectives and methodology.

4) EMWD has completed two component analyses of real losses for FY 2009/2010 and FY 2013/2014.

5) EMWD repairs reported leaks and breaks to the extent that are cost effective. Currently, a work order tracking system is used to track pipeline and service leaks by type and completed repairs. This system is effective on a general scale; however, a more detailed system is needed to identify and track leaks more accurately. WSO will assist EMWD in developing a detailed tracking system.

6) In order to identify unreported leaks, a continuous water use notification system was implemented in February 2016 which notifies customers of the presence of a constant water flow running through their meter (for every hour for several days), which is a strong indication of a possible leak.

9.2.6 Water Conservation Program Coordination and Staffing Support

Conservation Coordinator (BMP 1.1.1)

Coverage requirements: Staff maintains the position of trained conservation coordinator, or equivalent consulting support, and provides that function with the necessary resources to implement BMPs.

Compliance method: EMWD has met the coverage requirements for this practice; full time Conservation staff consists of one conservation analyst one conservation program manager, two conservation program specialists, and one conservation program assistant.

The conservation analyst serves as a liaison between EMWD and other public agencies, community and industry groups, and the media; recommends, develops and coordinates implementation of EMWD conservation programs; and assists in analyzing program goals, performance measures, and sources of funding. The conservation program manager participates in the implementation of conservation programs; develops and implements programs to inform, educate and assist with efficient water use and conservation; represents EMWD with customers in community events and meetings regarding conservation issues; and develops and implements methods to measure improvements in water use efficiency and customer satisfaction. The conservation program specialists assist in the development and implementation of conservation programs; conduct water leak investigations; issue citations to enforce mandatory water conservation ordinances during times of water shortage; and represent EMWD with customers and community events and meetings on conservation issues. The conservation program assistant performs a variety of customer service functions related to water conservation; assists with residential, landscape and CII water surveys; measures landscape area for water budgets; sends water waste notices; researches problems; and conducts related duties assigned.

9.2.7 Other Demand Management Measures

Residential (BMPs 3.1, 3.2, 3.3, and 3.4)

Residential water users throughout California depend on a reliable and safe supply of water for their homes. This BMP will define the best and most proven water conservation methods and measures that SFR and MFR customers, working in conjunction with water agencies, can implement to increase water use efficiency and reliability.

Compliance with the Residential Programmatic BMP category can be achieved by two approaches; traditional implementation as prescribed by the components of the BMP category or by the Flex Track Menu Alternatives option.

The traditional approach includes completing the coverage requirements, as defined in the BMP category for residential water surveys, residential plumbing retrofits, high efficiency washing machines and toilet replacements.

The Flex Track Menu Alternative allows an agency to achieve water savings by implementing alternative programs that are able to track water savings and/or focusing on one or more of the prescribed components of the BMP category.

Residential Assistance Program (BMP 3.1)

Traditional coverage requirements: Determine the current number of SFR accounts and MFR units in EMWD's service area. Provide site specific leak detection assistance that may include, (a) water conservation surveys; (b) water efficiency suggestions; and/or (c) inspection, to an average of 1.5 percent per year of current SFR accounts and 1.5 percent per year of MFR units during the 10-year period covering FY 2009/2010 – FY 2018/2019. After meeting the 15 percent target, program maintenance will continue at a level of high-bill complaints with a minimum of 0.75 percent per year for SFR accounts and 0.75 percent per year MFR units. WSS showerheads and faucet aerators may be provided to customers as needed.

Approach: In 1997 EMWD's Conservation staff began performing residential surveys on a limited basis; during FY 2007/2008 and a portion of FY 2008/2009 these surveys were outsourced to a third party. In early 2009, the number of Conservation staff members increased, and in April 2009 the function of performing residential surveys was resumed by internal staff. With a dramatic increase in field and office work in August 2013, the residential surveys were outsourced to a new vendor "Water-Wise Consulting" and to date the vendor continues to perform both residential and multi-family home surveys. More than

4,111 surveys have been completed since 1997. Components of the indoor water survey include checking the water meter leak detector and testing the water meter for accuracy; testing flow rates for kitchen faucet, bathroom faucet(s) and showerhead(s) to determine gallons per minute (gpm); verify toilet(s) gallons per flush and perform a leak detection dye test on each toilet; verify use of dishwasher, hot water heater setting and clothes washer type. Upon completion of each survey, the customer is provided with a report that includes survey results and water efficient recommendations, along with information on incentives for eligible water saving devices when available. Showerheads, aerators and toilet flappers are distributed with surveys as needed.

In addition to surveys EMWD provides leak detection assistance to customers through the distribution of conservation packets. On average, staff members also distribute more than 250 conservation packets to residential customers each month. These packets are available in both English and Spanish to accommodate the needs of a majority of EMWD's residential retail customers. Conservation packets provide the customer with information on how to read their water meter, leak detection dye tablets for toilets, and instructions on how to identify leaks in the home.

In January 2010, EMWD began to distribute Outdoor Water Use Efficiency Kits to residential customers. The Outdoor Water Use Efficiency Kit is designed to help residential customers create a custom irrigation schedule, repair a leaky hose and eliminate water running from an unattended hose. To date 1,068 outdoor kits have been distributed. Since 1990, EMWD has maintained a program to provide residential customers with water efficient showerheads and faucet aerators; over 65,000 devices have been distributed to SFR and MFR customers. These devices continue to be distributed when needed and are made available to customers at EMWD's office, as part of the residential survey program and at various outreach events.

EMWD has determined that the current number of SFR accounts for FY 2013/2014 amount to 129,811 and MFR units amount to 30,568.

This BMP will continue to be met through the Flex Track option using various methods listed above.

Landscape Water Survey (BMP 3.2)

Traditional coverage requirements: Determine the current number of SFR accounts in EMWD's service area. Perform site specific landscape water surveys to an average of 1.5 percent per year of current SFR accounts during the first 10 years. After completing the 15 percent target, program maintenance will continue at a level of high-bill complaints with a minimum of 0.75 percent per year for SFR accounts.

Approach: EMWD has determined that the current number of SFR accounts for FY 2013/2014 amount to 129,811. The landscape water survey requirement is being met through the implementation of tiered rates. A water budget for efficient landscape irrigation was developed for all residential customers. The water budget is enforced monthly through a tiered billing system. For those who exceed budget targets a residential survey may be performed to assist the customer in identifying where water can be saved. Staff members and/or the vendor perform on-site landscape surveys as part of the complete residential survey. Components of the outdoor water survey for SFR accounts include checking the water meter leak detector and testing the water meter for accuracy; checking irrigation timer programming; running a one minute test for each irrigation station to obtain gpm data and checking for system leaks; checking system pressure; obtaining plant and soil type(s) for reporting and measuring irrigated landscape area. Upon completion of each survey, the customer is provided with a report that includes survey results and a watering schedule, water efficient recommendations, and information on incentives for eligible water saving devices when available. EMWD has also developed a cost share program for the direct installation of residential smart irrigation controllers, high-efficiency precision nozzles, and on-site landscape surveys as a component of this program.

This BMP will be met through the Flex Track option as described above.

High Efficiency Clothes Washers (BMP 3.3)

Traditional coverage requirements: Provide financial incentives or institute an ordinance requiring the purchase of High Efficiency Clothes Washers (HECW) to meet an average water factor value of 5.0. Financial incentives shall be provided for the purchase of HECWs to 0.9 percent of current SFR accounts during the first reporting period and 1.0 percent per year for the remainder of the 10-year period. An alternative method is to demonstrate 1.4 percent per year of the market penetration during the first ten years.

Approach: EMWD has determined that the current number of SFR accounts for FY 2013/2014 amount to 129,811 and MFR units amount to 30,568. EMWD has provided incentives for HECWs since 2001 and to date an estimated 15,788 HECWs have received financial incentives, of which approximately 14,736 have an average water factor of 5.0 or less. In late 2010, EMWD established partnerships with USBR through grant funding, and Southern California Gas Company, for the direct installation of 1,700 HECWs with a water factor of 4.0 or less.

This BMP will be met through the Flex Track option with EMWD's incentive program and direct install program.

WaterSense Specification Toilets (BMP 3.4)

Traditional coverage requirements: Provide incentives or an ordinance requiring the replacement of toilets using 3.5 or more gallons per flush with toilets meeting WSS. Compliance will entail demonstrating a number of toilet replacements of 3.5 gallons per flush or greater toilets at or above the level achieved through a retrofit on resale ordinance until 2014, or a market saturation of 75 percent is demonstrated, whichever is sooner.

Approach: EMWD began offering incentives for toilet retrofits in 1992, beginning with Ultra Low-Flush Toilets (ULFT). Incentives included customer rebates and free distribution events. Incentives for High Efficiency Toilets (HET) were added in 2005. HET incentive programs included customer rebates, free distribution events and a direct installation program which began in 2008. Since the program's beginning in 1992, EMWD has provided incentives for approximately 17,371 ULFTs and approximately 25,414 HETs. To continue to encourage the installation of water saving devices, the Replace and Save Multi-Family Toilet Program was implemented in 2014 and was targeted towards multi-family customers to help reduce or eliminate the cost associated with replacing older inefficient toilets with new efficient toilets. The program was completed in 2015 and resulted in the direct installation of 1,269 toilets with a water factor of 1.0 or less.

This BMP will be met through the Flex Track option with EMWD's direct installation programs conducted during FY 2008/2009 through FY 2013/2014.

Commercial, Industrial, and Institutional (BMP 4)

CII water demands make up a large percentage of total demand for California. CII water use varies dramatically between business sectors as well as within a given water agency's territory. The goal of this BMP is to implement comprehensive yet flexible BMPs, allowing each water agency to tailor the implementation of each practice to fit local needs and opportunities. The end result is a practice that is successful and will produce the greatest amount of cost-effective water savings.

Traditional coverage requirements: Implement measures to achieve the water savings goal for CII accounts of 10 percent of the 2008 baseline water use over a 10-year period. To remain on track to meet the annual water savings goal, estimated savings for the first two-year reporting period may be up to 0.5 percent followed by 2.4 percent by the end of year four; 4.3 percent by the end of year six; 6.4 percent by the end of year eight; and 9 percent by the end of year 10. EMWD uses FY data and reporting periods are as follows:

1) FY 2008/2009 – FY 2009/2010 (first two-year reporting period)

2) FY 2010/2011 – FY 2011/2012 (end of year four)
3) FY 2012/2013 – FY 2013/2014 (end of year six)
4) FY 2014/2015 – FY 2015/2016 (end of year eight)
5) FY 2016/2017 – FY 2017/2018 (end of year ten)

Compliance method for CII Programmatic BMP: Baseline water use for EMWD's CII customers in 2008 was a total of 7,763 AF. Credit for prior activities, as reported through the BMP database, will be given for up to 50 percent of the goal. EMWD is in compliance with the CII Programmatic BMP through an at-least-as-effective approach. Because of the savings potential and customer response to programs, EMWD has exceeded water conservation targets in the residential and landscape sectors. The sum of savings from BMP 3, 4 and 5 exceed the sum of the targets for BMP 3, 4 and 5. Therefore the additional saving in the residential and landscape sectors is at least as effective as implementing additional savings by CII customers. This is reflected in EMWD's 2013/2014 compliance report.

EMWD continues to encourage efficiency by CII customers. Financial incentives provided for by MWD for a variety of water efficient devices used in the CII sector are administered through the SoCal Water$mart regional rebate program. In 2008, EMWD implemented the Public School Retrofit program; providing surveys and direct installation of both indoor and outdoor devices for more than 40 school sites within EMWD's retail service area. In 2009, conservation staff developed a program to identify CII accounts with mixed use meters, accounts with the highest water use are contacted first and offered CII water use surveys; to date an estimated 4,406 accounts have been contacted and 365 surveys have been completed. Components of the CII water use survey include checking the water meter leak detector and testing the water meter for accuracy; checking irrigation timer programming; running a one minute test for each irrigation station obtain gpm data and check for system leaks; checking system pressure; obtaining plant and soil type(s) for reporting and measuring irrigated landscape area. Upon completion of each survey, the customer is provided with a report that includes survey results and a watering schedule, water efficient recommendations, and information on incentives for eligible water saving devices when available.

Landscape (BMP 5)

Irrigation accounts for a large portion of urban water use in California. Irrigation water use varies dramatically depending on water pricing and availability, plant choice, geographic locations, seasonal conditions, and the level of commitment to sound water efficiency practices. The goal of this BMP is that irrigators, with assistance from signatories, will achieve a higher level of water use efficiency consistent with the actual irrigation needs of the plant materials. Reaching this goal would reduce overall demands for water, reduce demands during the peak summer months, and still result in a healthy and vibrant landscape in California.

Agencies shall provide non-residential customers with support and incentives to improve their landscape water use efficiency. Credit will be given for documented water savings for prior activities through 2008.

Accounts with Dedicated Irrigation Meters

Traditional coverage requirements: (1) Identify accounts with dedicated irrigation meters and assign ETo-based water budgets equal to no more than an average of 70 percent of annual average local ETo per square foot of landscape area. (2) Provide notices each billing cycle showing the relationship between the budget and actual consumption. (3) Offer site-specific technical assistance to reduce water use to those accounts that are 20 percent over budget at a rate of nine percent per year with 90 percent over 10 years. (4) Implement and maintain a customer incentive program for irrigation equipment retrofits.

The MWELO currently requires 70 percent ETo; should this ordinance be revised to reduce water allowance, this BMP will be revised automatically to reflect that change.

Recreational areas (portions of parks, playgrounds, sports fields, golf courses, or school yards in public and private projects where turf provides a playing surface or serves other high-use recreational purposes) and areas permanently and solely dedicated to edible plants, such as orchards and vegetable gardens, may require water in addition to the water use budget. These designated areas may not exceed 100 percent ETo on an annual basis.

Approach: (1) Through the tiered rate process, EMWD has developed water budgets for 100 percent of dedicated landscape accounts; (2) Water bills for these accounts include data that reflect the relationship between the water budget 70 percent ETo and actual usage; (3) Each water bill for dedicated landscape meters provides a contact number with an offer for assistance. An audit program and technical assistance are made available to customers that make a request; and (4) EMWD has offered financial incentive programs for landscape since 1992, including large landscape audits, soil moisture sensors, weather-based irrigation controller (WBIC) rebates and distribution, large rotary nozzle rebates, and rotating nozzle and synthetic turf rebates. In 2006, EMWD implemented a program to supplement the cost of high efficiency nozzles, including labor for installation, for large landscape accounts. In 2008, EMWD also implemented a public school retrofit program that includes the direct installation of WBICs and high efficiency nozzles. In 2012, EMWD implemented the Large Landscape Assistance Program which provides large landscape customers with the option to have Toro precision nozzles directly installed or receive a voucher for high efficiency nozzles and smart controllers. To date, 41,347 nozzles and 102 smart controllers have been installed.

Commercial, Industrial, Institutional Accounts without Meters or with Mixed-Use Meters

Traditional coverage requirements: (1) Develop and implement a strategy, targeting and marketing large landscape water use surveys to CII accounts with mixed-use meters. (2) Complete irrigation water use surveys for not less than 15 percent of all CII accounts with mixed-use meters within 10 years at an average rate of 1.5 percent per year. (3) Implement and maintain a customer incentive program for irrigation equipment retrofits.

Approach: (1) EMWD's retail service area includes an estimated 4,500 CII accounts. (2) In July 2009, Conservation staff developed a program to identify CII accounts with mixed use meters and offer on-site surveys, to date 4,406 accounts have been contacted and 365 surveys have been completed. (3) EMWD has offered financial incentive programs for landscape since 1992, including large landscape audits, soil moisture sensors, WBIC rebate and distribution, large rotary nozzle rebates, rotating nozzle and synthetic turf rebates.

9.3 Wholesale Area Demand Management Measures

As a wholesale agency, EMWD is responsible for implementing a subset of the CUWCC BMPs as well as assisting its wholesale customers with their own BMP implementation. EMWD works closely with its wholesale customers to help fund, market, and implement a number of BMP programs.

9.3.1 Metering

All of EMWD's wholesale customers are fully metered and billed volumetrically each month.

9.3.2 Public Education and Outreach

As a wholesale agency, EMWD maintains extensive Public Information and School Education Programs for all of its wholesale customers.

Public Information Programs

As a wholesale agency, EMWD takes the lead in an annual landscaping competition with customers from EMWD, Western Municipal Water District, Inland Empire Utilities Agency, and the respective sub agencies. EMWD provides support to other water agencies during Community Water Conservation Festivals and other related functions. EMWD has initiated a long-term campaign to encourage all

customers to use water wisely. EMWD sponsors workshops on California-friendly plants to promote landscaping using drought tolerant plants and the Water Waste Program to report/correct the wasteful use of water. The New Residential Development Campaign is targeted at new residential customers and consists of a welcome letter, a quarterly newsletter containing seasonal tips and ideas for water conservation, and a survey. EMWD enforces local and state landscape ordinances through the use of budget based tiered rates.

School Education Programs

As discussed in Section 9.2.4, EMWD implements an Education Program to foster understanding of water and wastewater issues and to promote wise water use among the future leaders of the community. EMWD supports an extensive education program designed to provide a useful academic experience at all grade levels (K-12). Any school within EMWDs sphere of influence and beyond is eligible to benefit from the program. EMWD offers resources such as lesson plans, curriculum packets, and student materials.

As a wholesale agency, EMWD has created the language arts program "Write Off" for middle school students, and is the lead agency in partnership with RCWD, a sub agency of EMWD. Multiple presentations, which include complete curriculum packets, have resulted from this program, and agencies throughout California and other states have either duplicated the program or have requested materials to add to their current education programs.

9.3.3 Water Conservation Program Coordination and Staffing Support

Conservation Coordinator

As mentioned in Section 9.2.6, EMWD maintains full-time Conservation staff including one conservation analyst, one conservation program manager, two conservation program specialists, and one conservation program assistant.

9.3.4 Other Demand Management Measures

EMWD's wholesale agencies' customers are eligible to participate in the region-wide rebate program offered through MWD. EMWD has also worked with wholesale customers to implement agency administered programs funded in part by MWD. EMWD provides support and information about water use efficiency to sub agencies, and offers training opportunities in landscape efficiency. EMWD also partners with wholesale customers on an annual water festival for customers that promote water use efficiency.

EMWD has a volume based rate structure for wholesale customers.

9.3.5 Asset Management

EMWD's wholesale distribution system asset management program is the same as its retail asset management program.

The mission of EMWD is to deliver value to customers and the communities within the EMWD's service area by providing safe, reliable, economical and environmentally sustainable water, wastewater and recycled water services. One of the ways this mission is carried out is through the EMWD's Asset Management program. This program was established to effectively manage assets throughout their lifecycle. The underpinnings of this program are rooted research of other water agencies that have implemented Asset Management Plans.

One of the key components of the program is EMWD's Computerized Maintenance Management System. This system is a transactional database system that is used to capture physical attributes as well as work activities performed on assets. Asset technicians manage the asset records during new construction, refurbishment and replacements. Two of the initial attributes captured for asset records are installation date and original purchase price. In addition, other important data is collected such as horsepower, rpm,

power requirements, etc. Asset grouping is employed to compare histories of like assets. Further analysis may provide insight on premature failures and lead to the procurement of better performing assets.

The lifecycles of assets are determined by a number of factors. Due to the nature of business at EMWD, assets may be found in office, potable water, wastewater and recycled water operating environments. Wastewater produces the harshest operating conditions and, therefore, decreases the life of an asset more than other EMWD environments. Another factor that impacts the life of an asset is its expected life. Empirical data is the best indicator for predicting an asset's expected life. This takes into account the operating conditions of the asset at a particular location using real-world parameters. However, this method takes time to build history from maintenance activities. An alternative method entails using industry standards from similar operations. Combining these factors allows for the remaining life of assets to be calculated.

An Asset Management model was produced to provide a framework for business decisions related to the replacement and refurbishment (R&R) of EMWD's assets. The inputs to the model include the physical location, remaining life expectancy, and the corrective maintenance costs. The health of an asset can be determined, in part, by the cost of maintenance relative to like assets. For example, if a potable pump historically costs more to maintain than another potable pump operating under similar conditions it should be further analyzed to understand the cause. Another input to the model includes EMWD's Capital Improvement Projects. By including Capital Improvement Project commitments into the model, assets that are likely candidates based on maintenance costs or end of life may be excluded from R&R consideration.

Output from the Asset Management model is provided to management for budget preparation. Assets may be grouped by site for a holistic review. Furthermore, the model allows for grouping of assets by maintenance responsibility whether electrical, mechanical or other maintenance group. Management can easily review assets nearing end of life or with higher than usual maintenance costs. Assets are earmarked for budget inclusion or deferred to a future budget cycle. These decisions are recorded in the Asset Management model for future reference.

9.3.6 Wholesale Supplier Assistance Program

Wholesale Agency Assistance Programs (BMP 1.1.3)

Coverage requirements: (a) Wholesale agency programs include financial investments and building partnerships, when mutually agreeable and beneficial to a wholesaler and its retail agencies, and cost effectiveness assessments, including avoided cost per AF, for each BMP the wholesale agency is potentially obligated to support. (b) When requested, the wholesale agency will provide technical support, incentives, staff or consultant support, and equivalent resources to retail members to assist or otherwise support the implementation of BMPs. (c) When mutually beneficial to a wholesaler and its retail agencies, a wholesaler may offer program management and BMP reporting assistance to its retailers. Wholesale agencies have limited control over retail agencies, thus wholesale agencies cannot be held responsible for levels of implementation by individual retailers in their wholesale service area. (d) Water shortage allocation plans or policies will encourage and reward investment in long-term conservation. (e) Wholesale water agencies will report on non-signatory BMP implementation, when possible. (f) Wholesale agencies will encourage CUWCC membership and offer recruitment assistance.

Compliance method: EMWD has met the coverage requirements in the following ways:

a) Financial incentives provided for by MWD for a variety of water efficient devices are administered through the SoCal Water$mart regional rebate program for residential and commercial customers. Both residential and commercial customers of EMWD's sub agencies are eligible to participate in the regional rebate programs.

b) EMWD has hosted and/or conducted workshops for landscape professionals, including personnel and customers of EMWD's sub agencies, providing certification opportunities for smart irrigation

controller technologies. EMWD's Board members hold Director Advisory Committee meetings with stakeholders throughout the year; and staff members attend/participate at local city councils and planning commissions. EMWD also provides assistance to sub agencies with various GIS mapping requests.

c) EMWD is the first water agency in Riverside County to offer the Qualified Water Efficient Landscaper (QWEL) professional certification program which provides landscape professionals with 24 hours of education on principles of proper plant selection for the local climate, irrigation system design and maintenance, and irrigation system programming and operation. In order to obtain the QWEL certification an individual must demonstrate their ability to perform an irrigation system audit as well as pass the QWEL exam.

d) Staff meets with sub agencies to discuss conservation related topics. Regional incentive programs are administered though vendors assigned by MWD and sub agencies are encouraged to participate in these programs. MWD hosts monthly water use efficiency meetings to discuss the implementation of conservation programs; EMWD's sub agencies are encouraged to participate.

e) Under the WSCP, supply to wholesale customers will be allocated using the formula and methodology based on MWD's WSAP as described in *Chapter 7 – Water Supply Reliability Assessment*. This plan takes into consideration: the impact on retail customers and the economy; population and growth; changes and/or loss of local supply; reclamation and recycling; conservation; and investment in local resources. EMWD will establish base period demands and then adjust them for growth and changes in local supply. Regional shortages will be phased in 10 stages. At each stage the wholesale customers will not experience shortages on the wholesale level that are greater than one-and-a-half times the percentage shortage of regional water supplies; nor will they face a retail shortage less than the regional shortage. Credits will be given for conservation and investment in local supplies.

f) EMWD will evaluate the feasibility to provide BMP reports for sub agencies that are non-signatories with CUWCC.

EMWD has encouraged sub agencies to become signatories of the CUWCC.

9.4 EMWD Implementation Plan for Water Use Reduction

EMWD estimates water saving have occurred due to ordinances in place, the implementation of tiered rates and active conservation. As discussed in Section 9.5 below, EMWD will continue to improve water efficiency through a budget based tiered rate, requirements for water efficiency in new construction and an active conservation program. Water use reduction will be focused on outdoor demand reduction by all customer types. Even after surpassing its water efficiency target, EMWD estimates that there is the potential for additional conservation savings through 2040.

EMWD will continue to reduce potable water demand to meet the goals of SBx7-7 in two ways: using recycled water to offset potable water demand and reducing demand for water through conservation. In December 2015, EMWD completed a Water Use Efficiency Master Plan which articulates the goals, strategies, and tactics required to deliver long-term solutions for secure and reliable water supplies. The Water Use Efficiency Master Plan helped to identify and update the targets for saving water through active conservation and provided a portfolio of projects and actions that can meet or exceed the requirements of SBx7-7.

Chapter 10 Plan Adoption, Submittal, and Implementation

10.1 Notice of Public Hearing

EMWD encouraged public participation during the development of the 2015 UWMP and provided opportunities for public review and comment. First, EMWD sent out notices to cities within its retail and wholesale service area and the County of Riverside to inform these stakeholders that the UWMP was being reviewed, modified, and prepared in advance of the 60-day period leading up to the public hearing. Additional notices went out to these agencies announcing when the draft UWMP would be available for public review and announcing the time and date of the public hearing, as documented in Table 10-1 and Table 10-2.

Notices of the public hearing were also published in the local newspaper and placed at the EMWD office. The notice included the time and date of the hearing and stated that the draft UWMP would be available for public review May X, 2016 through June 15, 2016 at the EMWD office. A copy of the public notice is provided in Appendix K.

EMWD conducted the public hearing on June 15, 2016 at the EMWD office to hear and discuss public comments on the draft 2015 UWMP prior to EMWD Board adoption.

Table 10-1: Retail Notification to Cities and Counties

DWR Table 10-1 Retail: Notification to Cities and Counties		
City Name	**60 Day Notice**	**Notice of Public Hearing**
City of Beaumont	☑	☑
City of Menifee	☑	☑
City of Moreno Valley	☑	☑
City of Murrieta	☑	☑
City of Riverside	☑	☑
City of Temecula	☑	☑
County Name	**60 Day Notice**	**Notice of Public Hearing**
Riverside County	☑	☑

Table 10-2: Wholesale Notification to Cities and Counties

DWR Table 10-1 Wholesale: Notification to Cities and Counties		
☑	Supplier has notified 10 or fewer cities or counties. **Complete the table below.**	
City Name	**60 Day Notice**	**Notice of Public Hearing**
City of Perris	☑	☑
City of Hemet	☑	☑
City of San Jacinto	☑	☑
Lake Hemet Municipal Water District	☑	☑
Nuevo Water Company	☑	☑
Rancho California Water District	☑	☑
Western Municipal Water District	☑	☑
Elsinore Valley Municipal Water District	☑	☑
Metropolitan Water District of Southern California	☑	☑
County Name	**60 Day Notice**	**Notice of Public Hearing**
Riverside County	☑	☑

10.2 Plan Adoption and Submittal

The 2015 UWMP was adopted by the EMWD Board of Directors on June 15, 2016 by Resolution No. XXX after receiving all public comments. A copy of the resolution is provided in Appendix L.

The 2015 UWMP will be submitted to DWR electronically prior to the CWC's deadline of July 1, 2016. No later than 30 days after adoption, EMWD will also submit a copy of the 2015 UWMP to the California State Library and to Riverside County and the cities EMWD provides water to. A hard copy of the 2015 UWMP will be made publically available at the EMWD office and an electronic copy of the 2015 UWMP will be available for public viewing on the EMWD website.

10.3 Plan Implementation

EMWD plans to implement the adopted UWMP in accordance with the schedule described in the plan. The 2015 UWMP will be implemented to meet the 2020 urban water use target for retail demand. Daily per capita water use will be reduced through offsetting potable water demands using the methods described in this plan, including increasing the use of recycled water and implementing demand management measures. Any amendments made to this UWMP will require completion of the same series of notification, public hearing, adoption, and submittals as required in submittal of this original 2015 UWMP.

Prepared by:

RMC
water and environment

2400 Broadway, Suite 300
Santa Monica, CA 90404
310.566.6460

Appendix Q

Public Notification of Opportunity to Comment on the UWMP Draft

NOTICE OF PUBLIC INSPECTION AND
PUBLIC HEARING

**TO CONSIDER APPROVAL OF THE
CITY OF HEMET
2015 URBAN WATER MANAGEMENT PLAN**

Pursuant to California Water Code 10642, the City of Hemet will hold a public hearing to solicit comments on the 2015 Urban Water Management Plan (UWMP) Draft.

The purpose of the public inspection and public hearing is to provide the public with an opportunity to comment on the document. Comments may be made in person at the public hearing or in written correspondence delivered to the City at, or prior to, the public hearing. Comments on or questions about the UWMP may also be directed to:

City of Hemet Public Works Department
Ron Proze, Water/Wastewater Superintendent
3777 Industrial Avenue
Hemet, CA 92545
951-765-3712
RProze@cityofhemet.org

California State law requires the City to update its UWMP every five years. For the current cycle, the UWMP must be updated and submitted to the State by July 1, 2016. The UWMP is required to contain a detailed evaluation of the City's water supply and its reliability to meet water demand over at least a 20-year period under both normal year and dry year conditions. Additional background information is available at the California Dept. of Water Resources website: http://www.water.ca.gov/urbanwatermanagement/

NOTICE IS HEREBY GIVEN of the availability of the UWMP Draft for public inspection on the City's website at http://www.cityofhemet.org/. A hard copy will also be available during normal business hours at City Hall located at 445 E. Florida Ave., Hemet, CA 92543.

NOTICE IS HEREBY GIVEN of the time and place of the public hearing.

Place: Hemet City Hall
City Council Chambers
445 E. Florida Ave.
Hemet, CA 92543.

Date & Time: Tuesday, June 14, 2016 at 7:00 PM

5/29, 6/5

http://www.cityofhemet.org/index.aspx?NID=784
Accessed June 21, 2016

Urban Water Management Plans

Urban Water Management Plan 2015 Draft Now Available

DOWNLOAD THE DRAFT PLAN:
Draft Hemet 2015 UWMP Volume 1
Draft Hemet 2015 UWMP Appendices Volume 2

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NOTICE OF PUBLIC INSPECTION AND PUBLIC HEARING

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RProze@cityofhemet.org

California State law requires the City to update its UWMP every five years. For the current cycle, the UWMP must be updated and submitted to the State by July 1, 2016. The UWMP is required to contain a detailed evaluation of the City's water supply and its reliability to meet water demand over at least a 20-year period under both normal year and dry year conditions. Additional background information is available at the California Dept. of Water Resources website: http://www.water.ca.gov/urbanwatermanagement/

NOTICE IS HEREBY GIVEN of the availability of the UWMP Draft for public inspection on the City's website: Draft Hemet 2015 UWMP Volume 1 | Draft Hemet 2015 UWMP Appendices Volume 2. A hard copy will also be available during normal business hours at City Hall located at 445 E. Florida Ave., Hemet, CA 92543.

NOTICE IS HEREBY GIVEN of the time and place of the public hearing.

Place: **Hemet City Council Chambers**
450 E. Latham Avenue
Hemet, CA 92543

Date & Time: **Tuesday, June 14, 2016 at 7:00 PM**

What is an Urban Water Management Plan?

Urban Water Management Plans (UWMPs) are prepared by California's urban water suppliers to support their long-term resource planning, and ensure adequate water supplies are available to meet existing and future water demands.

Every urban water supplier that either provides over 3,000 acre-feet of water annually, or serves more than 3,000 urban connections is required to assess the reliability of its water sources over a 20-year planning horizon, and report its progress on 20% reduction in per-capita urban water consumption by the year 2020, as required in the Water Conservation Bill of 2009 SBX7-7.

The plans must be prepared every 5 years and submitted to the Department of Water Resources (DWR). DWR staff then reviews the submitted plans to make sure they have completed the requirements identified in the Water Code, Sections §10608– 10656, then submits a report to the Legislature summarizing the status of the plans.

Appendix R

Resolution of Adoption

CITY OF HEMET
Hemet, California
RESOLUTION NO. 4683

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HEMET, CALIFORNIA, ADOPTING THE CITY OF HEMET 2015 URBAN WATER MANAGEMENT PLAN PURSUANT TO REQUIREMENTS OF THE URBAN WATER MANAGEMENT PLANNING ACT AND THE WATER CONSERVATION ACT OF 2009

WHEREAS, the Urban Water Management Planning Act (California Water Code § 10610 et seq.) requires urban water suppliers to report, describe and evaluate water deliveries and uses, water supply sources, efficient water uses, and demand management measures in an Urban Water Management Plan (UWMP); and

WHEREAS, the Water Conservation Act of 2009 requires urban water suppliers to calculate baseline water use and a target for a 20-percent reduction in per capita water use by 2020; and

WHEREAS, an urban water supplier provides water for municipal purposes either directly or indirectly to more than 3,000 customers or supplies more than 3,000 acre-feet of water annually; and

WHEREAS, the City is an urban water supplier serving a population of 31,873; and

WHEREAS, each urban water supplier must update its UWMP at least once every five years; and

WHEREAS prior to adopting an UWMP, the urban water supplier shall make the Plan available for public inspection and shall hold a public hearing thereon, and the Plan shall be adopted as prepared or as modified after the hearing; and

WHEREAS the City has therefore prepared and made available for public review the draft 2015 Urban Water Management Plan, and a properly noticed public hearing regarding said Plan was held by the City Council on June 14, 2016; and

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Hemet that

1. The 2015 UWMP on file with the City Clerk and incorporated herein by this reference, is hereby adopted.

2. The City Manager, the Water Superintendent or a designated representative is hereby authorized and directed to implement the UWMP adopted pursuant to the UMWP Act in accordance with the schedule set forth in the plan; and

3. The Water Superintendent, or a designated representative, is hereby authorized and directed to submit the adopted 2015 UWMP to:
   a. California Department of Resources by July 1, 2016;
   b. California State Library and any city or county within which the City supplies water within 30 days after adoption; and

4. The Water Superintendent, or a designated representative, is hereby authorized to make the adopted UWMP available for public review during normal business hours no later than 30 days after filing the 2015 UWMP with California Department of Resources.

PASSED, APPROVED, AND ADOPTED this 14th day of June, 2016.

Bonnie Wright, Mayor

ATTEST:

Sarah McComas, City Clerk

APPROVED AS TO FORM:

Eric S. Vail, City Attorney

State of California)
County of Riverside)
City of Hemet)

I, Sarah McComas, City Clerk of the City of Hemet, do hereby certify that the foregoing Resolution is the actual Resolution adopted by the City Council of the City of Hemet and was passed at a regular meeting of the City Council on the 14th day of May, 2016 by the following vote:

AYES: **Council Members Krupa, Milne and Youssef, Mayor Pro Tem Raver and Mayor Wright**
NOES:
ABSTAIN:
ABSENT:

Sarah McComas

Sarah McComas, City Clerk

AGENDA # _____

Staff Report

TO: Honorable Mayor and Members of the Hemet City Council

FROM: Alexander P. Meyerhoff, City Manager;
Kristen Jensen, Public Works Director

DATE: June 14, 2016

RE: Adoption of Resolution Bill No. 16-041 Adopting the City of Hemet 2015 Urban Water Management Plan

RECOMMENDED ACTION:

It is respectfully recommended that the City Council:

1) Conduct a Public Hearing to consider public input on the 2015 Urban Water Management Plan Draft;
2) Direct staff to modify plan if necessary based on public input received;
3) Adopt Target Method 1, establishing 142 gallons per capita per day, as the Year 2020 target pursuant to SBX7-7 (Water Code Section 10608) as the method for establishing the City's water usage target; and
4) Adopt Resolution Bill No. 16-041 titled:

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF HEMET, CALIFORNIA, ADOPTING THE CITY OF HEMET 2015 URBAN WATER MANAGEMENT PLAN PURSUANT TO REQUIREMENTS OF THE URBAN WATER MANAGEMENT PLANNING ACT AND THE WATER CONSERVATION ACT OF 2009

BACKGROUND:

On March 8, 2016, the City entered into an agreement for services with The K.W.C. Companies, Inc., dba KWC Engineers, to prepare the City's 2015 Urban Water Management Plan in order to comply with the Urban Water Management Planning Act and the Water Conservation Act of 2009.

The Urban Water Management Planning Act requires urban water suppliers to prepare an Urban Water Management Plan (UWMP) to report, describe and evaluate water deliveries and use, water supply sources, efficient water uses, demand management measures, and water shortage contingency planning. The Water Conservation Act of 2009, also known as SB X7-7, requires retail water agencies to set water use targets and track progress toward decreasing daily per capita water use in their service area to assist the State of California in meeting its 20 percent water use reduction goal by 2020.

Urban water suppliers are required to update their UWMPs once every five (5) years. Updated plans must be made available for public inspection and adopted after a properly noticed public hearing. California Water Code §10621(d) requires that updated 2015 UWMPs be submitted to the Department of Water Resources (DWR) by July 1, 2016.

ANALYSIS:

The following changes to the California Water Code (CWC) related to the UWMP have been addressed in the City of Hemet 2015 UWMP as described below:

1) Demand Management Measures: [CWC section §10631(f)(1) and (2)] This section was significantly modified to simplify, clarify, and update the demand management measure reporting requirements from 2010. Retail agency requirements for 2015 reporting were reduced from 14 specific measures to six (6) more general requirements. The City of Hemet 2015 UWMP includes seven (7) Demand Management Measures, including an "Other" category. (2015 UWMP Vol. 1, Chapter 9)

2) Standardized Forms: [CWC section §10644 (a)(2)] Standardized tables for the reporting and submittal of UWMP data must be included in 2015 UWMPs to allow for more efficient data management, expedited review, and easier compilation of data for regional and statewide planning. Use of similar tables was optional for the 2010 UWMP. The City of Hemet 2015 UWMP includes all required data tables. (2015 UWMP Vol. 2, Appendix A)

3) Water Loss: [CWC section §10631(e)(1) and (J)(3)(A) and (B)] A new requirement for 2015 requires water suppliers to quantify distribution system losses using the American Water Works Association Method and submit a copy of the audit to DWR. A copy of this water loss audit is included in the City of Hemet 2015 UWMP Vol. 2, Appendix M.

4) Defining Water Features: [CWC §10632 (b) Assembly Bill 2409] A new requirement for water suppliers to analyze and define water features that are artificially supplied with water, including ponds, lakes, and fountains, separately from swimming pools and spas. There is just one artificially supplied water feature in the City's water service area: A lake located at the Echo Hills Golf Course. (2015 UWMP Vol. 1, Chapter 8)

5) Water Conservation Act of 2009 (SB X7-7): This legislation requires each water supplier to determine baseline water use and also target water use for the years 2015 and 2020. Due to significant discrepancies between the California Department of Finance projected populations for 2010 (used to calculate baseline per capita water use in the 2010 UWMPs) and the actual population for 2010 (based on the 2010 U.S. Census data), CWC § 10608.20(g) allows a water supplier to update its 2020 urban use water target in its 2015 UMWP. As a result, the City recalculated the 2020 water use target using Method 1 from *DWR Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use, DWR 2011* to update baseline water use, the 2015 interim water use target and the 2020 water use target. (2015 UWMP Vol. 1, Chapter 5)

The baseline water use, 2015 interim water use and 2020 water use targets from both the 2010 UWMP and the 2015 UWMP Draft are compared in the Table 1 below:

TABLE 1
Comparison of 2010 UWMP & 2015 UWMP
Baseline Water Use, 2015 Interim Water Use Target & 2020 Water Use Target

Water Use	2010 UWMP GPCD*	2015 UWMP Draft GPCD*
Baseline	176	178
2015 Interim Target	166	160
2020 Target	141	142
*GPCD: Gallons Per Capita Per Day		

The City's actual per capita water use in 2015 was **105 GPCD**. The City has achieved its interim water use target by a wide margin.

COORDINATION & REVIEW:

When a water supplier relies upon a wholesale agency for a water supply, the CWC requires both suppliers to provide each other with information regarding projected water supply and demand. The City and Eastern Municipal Water District have exchanged appropriate information to assure supply and demand projections and other details are consistent in both agency plans.

FISCAL IMPACT:

No General Fund Impact. Future costs associated with programs or projects related to water supply sources, water supply reliability, or water shortage contingency planning would be authorized by the City Council through approval of specific projects and funding sources. Urban retail water suppliers must comply with water conservation requirements established by the Water Conservation Act of 2009 in order to be eligible for State water grants or loans.

Respectfully submitted,	Approved as to form:	Fiscal Review
Linda Nixon Environmental Services Manager	Eric S. Vail City Attorney	Jessica A. Hurst Deputy City Manager

Attachments: Resolution Bill No. 16-041
Accessing the City of Hemet 2015 Urban Water Management Plan Draft

ACCESSING THE CITY OF HEMET
2015 URBAN WATER MANAGEMENT PLAN DRAFT

The 2015 City of Hemet 2015 Urban Water Management Plan is available on the City of Hemet Website:

http://www.cityofhemet.org/index.aspx?NID=784

The Draft Hemet 2015 UWMP is provided in two volumes:

Draft Hemet 2015 UWMP - Volume 1
Draft Hemet 2015 UWMP Appendices – Volume 2

Appendix S

DWR UWMP Checklist for Completeness

2015 City of Hemet
UWMP Checklist
Arranged by Subject

CWC Section	UWMP Requirement	Subject	Guidebook Location	UWMP Location
~~**10620(b)**~~	~~Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.~~	~~Plan Preparation~~	~~Section 2.2~~	
10620(d)(2)	Coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.	Plan Preparation	Section 2.6.2	§1.4.1
10642	Provide supporting documentation that the water supplier has encouraged active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan.	Plan Preparation	Section 2.6.2	§1.4.2 and Appendix Q
10631(a)	Describe the water supplier service area.	System Description	Section 3.2	§3.2
10631(a)	Describe the climate of the service area of the supplier.	System Description	Section 3.3	§3.3
10631(a)	Provide population projections for 2020, 2025, 2030, and 2035.	System Description	Section 3.4	§3.4
10631(a)	Describe other demographic factors affecting the supplier's water management planning.	System Description	Section 3.5	§3.5
10631(a)	Indicate the current population of the service area.	System Description and Baselines and Targets	Section 3.4 and Section 5.4.3	§3.4 & §5.4.2
10631(e)(1)	Quantify past, current, and projected water use, identifying the uses among water use sectors.	System Water Use	Section 4.4	§4.4
10631(e)(3)(A)	Report the distribution system water loss for the most recent 12-month period available.	System Water Use	Section 4.5	§4.5 and Appendix M
10631.1(a)	Include projected water use needed for lower income housing projected in the service area of the supplier.	System Water Use	Section 4.7	§4.7
10608.20(b)	Retail suppliers shall adopt a 2020 water use target using one of four methods.	Baselines and Targets	Section 5.7 and App E	§5.6.5

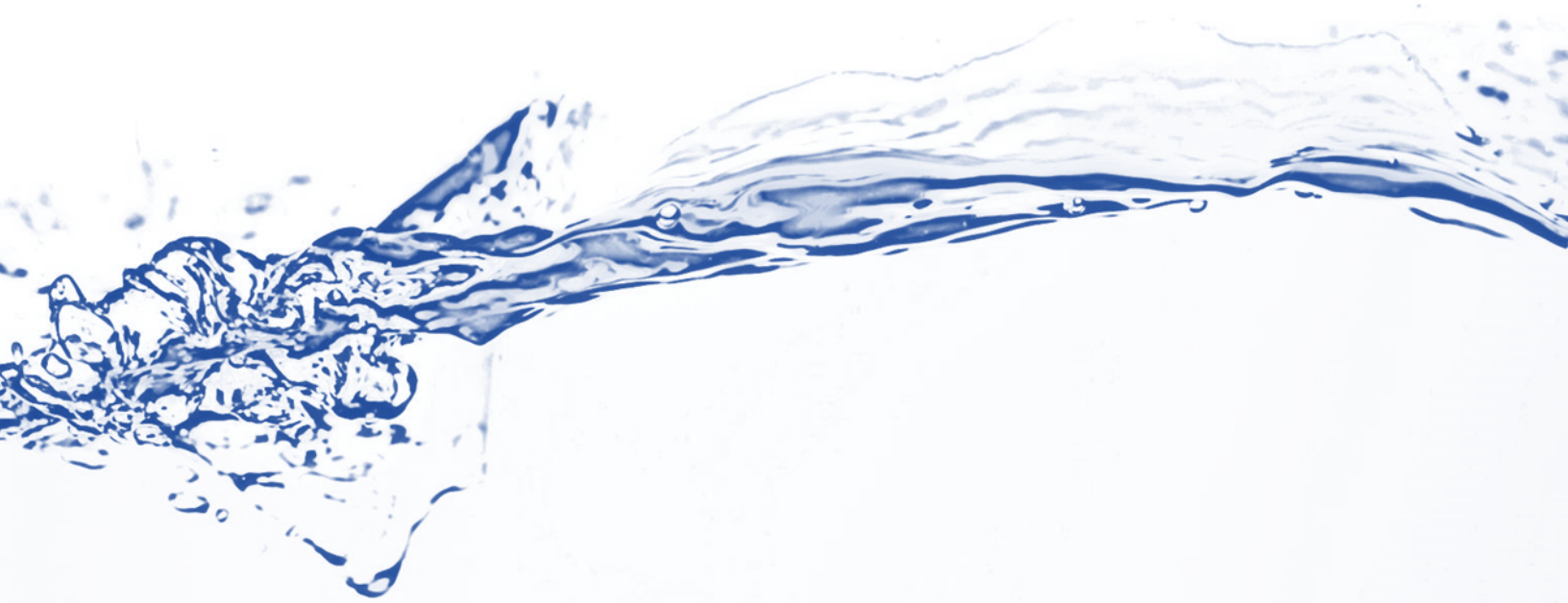
CWC Section	UWMP Requirement	Subject	Guidebook Location	UWMP Location
10608.20(e)	Retail suppliers shall provide baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data.	Baselines and Targets	Chapter 5 and App E	§5.7
10608.22	Retail suppliers' per capita daily water use reduction shall be no less than 5 percent of base daily per capita water use of the 5 year baseline. This does not apply is the suppliers base GPCD is at or below 100.	Baselines and Targets	Section 5.7.1	§5.7.1
10608.24(a)	Retail suppliers shall meet their interim target by December 31, 2015.	Baselines and Targets	Section 5.8 and App E	§5.8
~~**1608.24(d)(2)**~~	~~If the retail supplier adjusts its compliance GPCD using weather normalization, economic adjustment, or extraordinary events, it shall provide the basis for, and data supporting the adjustment.~~	~~Baselines and Targets~~	~~Section 5.8.1~~	
~~**10608.36**~~	~~Wholesale suppliers shall include an assessment of present and proposed future measures, programs, and policies to help their retail water suppliers achieve targeted water use reductions.~~	~~Baselines and Targets~~	~~Section 5.1~~	
10608.40	Retail suppliers shall report on their progress in meeting their water use targets. The data shall be reported using a standardized form.	Baselines and Targets	Section 5.8 and App E	Appendix A: Table 5-2
10631(b)	Identify and quantify the existing and planned sources of water available for 2015, 2020, 2025, 2030, and 2035.	System Supplies	Chapter 6	§6.10.5
10631(b)	Indicate whether groundwater is an existing or planned source of water available to the supplier.	System Supplies	Section 6.3	§6.3
10631(b)(1)	Indicate whether a groundwater management plan has been adopted by the water supplier or if there is any other specific authorization for groundwater management. Include a copy of the plan or authorization.	System Supplies	Section 6.3.2	§6.3.2
10631(b)(2)	Describe the groundwater basin.	System Supplies	Section 6.3.1	6.3.1
10631(b)(2)	Indicate if the basin has been adjudicated and include a copy of the court order or decree and a description of the amount of water the supplier has the legal right to pump.	System Supplies	Section 6.3.2	§6.3 and Appendix J
~~**10631(b)(2)**~~	~~For unadjudicated basins, indicate whether or not the department has identified the basin as overdrafted, or projected to become overdrafted. Describe efforts by the supplier to eliminate the long-term overdraft condition.~~	~~System Supplies~~	~~Section 6.3.3~~	

CWC Section	UWMP Requirement	Subject	Guidebook Location	UWMP Location
10631(b)(3)	Provide a detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years	System Supplies	Section 6.3.4	§6.3.4
10631(b)(4)	Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped.	System Supplies	Section 6.3.2	§6.10.5
10631(d)	Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.	System Supplies	Section 6.8	§6.8
10631(g)	Describe the expected future water supply projects and programs that may be undertaken by the water supplier to address water supply reliability in average, single-dry, and multiple-dry years.	System Supplies	Section 6.9	§6.9
10631(1)	Describe desalinated water project opportunities for long-term supply.	System Supplies	Section 6.7	§6.7
106310)	Retail suppliers will include documentation that they have provided their wholesale supplier(s) - if any - with water use projections from that source.	System Supplies	Section 2.5.1	§6.10.5
~~**10631(f)**~~	~~Wholesale suppliers will include documentation that they have provided their urban water suppliers with identification and quantification of the existing and planned sources of water available from the wholesale to the urban supplier during various water year types.~~	~~System Supplies~~	~~Section 2.5.1~~	
10633	For wastewater and recycled water, coordinate with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area.	System Supplies (Recycled Water)	Section 6.6.1	§1.4.1 & §6.6.1
10633(a)	Describe the wastewater collection and treatment systems in the supplier's service area. Include quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.	System Supplies (Recycled Water)	Section 6.6.2	§6.6.2
10633(b)	Describe the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.	System Supplies (Recycled Water)	Section 6.6.2	§6.6.2
10633(c)	Describe the recycled water currently being used in the supplier's service area.	System Supplies (Recycled Water)	Section 6.6.3 and Section 6.6.4	§6.6.3
10633(d)	Describe and quantify the potential uses of recycled water and provide a determination of the technical and economic feasibility of those uses.	System Supplies (Recycled Water)	Section 6.6.4	§6.6.4

CWC Section	UWMP Requirement	Subject	Guidebook Location	UWMP Location
10633(e)	Describe the projected use of recycled water within the supplier's service area at the end of 5,10,15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected.	System Supplies (Recycled Water)	Section 6.6.6	§6.6.6
10633(f)	Describe the actions which may be taken to encourage the use of recycled water and the projected results of these actions in terms of acre-feet of recycled water used per year.	System Supplies (Recycled Water)	Section 6.6.6	§6.6.6
10633(g)	Provide a plan for optimizing the use of recycled water in the supplier's service area.	System Supplies (Recycled Water)	Section 6.6.6	§6.6.6
10620(f)	Describe water management tools and options to maximize resources and minimize the need to import water from other regions.	Water Supply Reliability Assessment	Section 7.5	§9.3
10631(c)(1)	Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage.	Water Supply Reliability Assessment	Section 7.3	§7.4
10631(c)(1)	Provide data for an average water year, a single dry water year, and multiple dry water years	Water Supply Reliability Assessment	Section 7.3	§7.4
10631(c)(2)	For any water source that may not be available at a consistent level of use, describe plans to supplement or replace that source.	Water Supply Reliability Assessment	Section 7.2	§7.3
10634	Provide information on the quality of existing sources of water available to the supplier and the manner in which water quality affects water management strategies and supply reliability	Water Supply Reliability Assessment	Section 7.2	§7.2.1 and Appendix E
10635(a)	Assess the water supply reliability during normal, dry, and multiple dry water years by comparing the total water supply sources available to the water supplier with the total projected water use over the next 20 years.	Water Supply Reliability Assessment	Section 7.4	§7.4
10632(a) and 10632(a)(1)	Provide an urban water shortage contingency analysis that specifies stages of action and an outline of specific water supply conditions at each stage.	Water Shortage Contingency Planning	Section 8.2	§8.2
10632(a)(2)	Provide an estimate of the minimum water supply available during each of the next three water years based on the driest three-year historic sequence for the agency.	Water Shortage Contingency Planning	Section 8.10	§8.10
10632(a)(3)	Identify actions to be undertaken by the urban water supplier in case of a catastrophic interruption of water supplies.	Water Shortage Contingency Planning	Section 8.9	§8.9

CWC Section	UWMP Requirement	Subject	Guidebook Location	UWMP Location
10632(a)(4)	Identify mandatory prohibitions against specific water use practices during water shortages.	Water Shortage Contingency Planning	Section 8.3	§8.3
10632(a)(5)	Specify consumption reduction methods in the most restrictive stages.	Water Shortage Contingency Planning	Section 8.5	§8.5
10632(a)(6)	Indicated penalties or charges for excessive use, where applicable.	Water Shortage Contingency Planning	Section 8.4	§8.4
10632(a)(7)	Provide an analysis of the impacts of each of the actions and conditions in the water shortage contingency analysis on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts.	Water Shortage Contingency Planning	Section 8.7	§8.7
~~**10632(a)(8)**~~	~~Provide a draft water shortage contingency resolution or ordinance.~~	~~Water Shortage Contingency Planning~~	~~Section 8.8~~	
10632(a)(9)	Indicate a mechanism for determining actual reductions in water use pursuant to the water shortage contingency analysis.	Water Shortage Contingency Planning	Section 8.6	§8.6
10631(f)(1)	Retail suppliers shall provide a description of the nature and extent of each demand management measure implemented over the past five years. The description will address specific measures listed in code.	Demand Management Measures	Section 9.3 and Section 9.4	§9.3 & §9.4
~~**10631(f)(2)**~~	~~Wholesale suppliers shall describe specific demand management measures listed in code, their distribution system asset management program, and supplier assistance program.~~	~~Demand Management~~	~~Section 9.2~~	
10631(j)	~~CUWCC members may submit their 2013-2014 CUWCC BMP annual reports in lieu of, or in addition to, describing the DMM implementation in their UWMPs. This option is only allowable if the supplier has been found to be in full compliance with the CUWCC MOU.~~	~~Demand Management Measures~~	~~Section 9.6~~	
10608.26(a)	Retail suppliers shall conduct a public hearing to discuss adoption, implementation, and economic impact of water use targets.	Plan Adoption, Submittal, and Implementation	Section 10.3	§10.4 and Appendix Q
10621(b)	Notify, at least 60 days prior to the public hearing, any city or county within which the supplier provides water that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan.	Plan Adoption, Submittal, and Implementation	Section 10.2.1	§10.3.1 and Appendix D

CWC Section	UWMP Requirement	Subject	Guidebook Location	UWMP Location
10621(d)	Each urban water supplier shall update and submit its 2015 plan to the department by July 1,2016.	Plan Adoption, Submittal, and Implementation	Sections 10.4 and Section 10.5	§10.6
10635(b)	Provide supporting documentation that Water Shortage Contingency Plan has been, or will be, provided to any city or county within which it provides water, no later than 60 days after the submission of the plan to DWR.	Plan Adoption, Submittal, and Implementation	Section 10.4.4	§10.6
10642	Provide supporting documentation that the urban water supplier made the plan available for public inspection, published notice of the public hearing, and held a public hearing about the plan.	Plan Adoption, Submittal, and Implementation	Section 10.3.2,10.4 & Section 10.6	§10.3.2 and Appendix Q
10642	The water supplier is to provide the time and place of the hearing to any city or county within which the supplier provides water.	Plan Adoption, Submittal, and Implementation	Sections 10.3.1	§10.3 and Appendix D
10642	Provide supporting documentation that the plan has been adopted as prepared or modified.	Plan Adoption, Submittal, and Implementation	Section 10.4.1	§10.5 and Appendix R
10644(a)	Provide supporting documentation that the urban water supplier has submitted this UWMP to the California State Library.	Plan Adoption, Submittal, and Implementation	Section 10.5	§10.6
10644(a)(1)	Provide supporting documentation that the urban water supplier has submitted this UWMP to any city or county within which the supplier provides water no later than 30 days after adoption.	Plan Adoption, Submittal, and Implementation	Section 10.5	§10.7
10644(a)(2)	The plan, or amendments to the plan, submitted to the department shall be submitted electronically.	Plan Adoption, Submittal, and Implementation	Section 10.5.1 and Section 10.5.2	§10.6
10645	Provide supporting documentation that, not later than 30 days after filing a copy of its plan with the department, the supplier has or will make the plan available for public review during normal business hours.	Plan Adoption, Submittal, and Implementation	Section 10.6	§10.7



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