# 4.14 PUBLIC UTILITIES AND ENERGY EFFICIENCY

This section contains a description and analysis of the potential impacts of the Draft General Plan on utilities, including water, wastewater and solid waste in the Hemet planning area. The section also provides a brief analysis of regulations and plans pertinent to the implementation of the Draft General Plan.

## 4.14.1 REGULATORY SETTING

The following programs, policies, and regulations direct the development and operation of utilities in the Planning Area.

### FEDERAL PLANS, POLICIES, REGULATIONS, AND LAWS

No federal plans, policies, regulations, or laws pertaining to public utilities are applicable to the proposed project.

### STATE PLANS, POLICIES, REGULATIONS, AND LAWS

#### Water Supply Services and Management

##### *Porter-Cologne Water Quality Control Act of 1969*

The 1969 Porter-Cologne Water Quality Control Act first established the SWRCB and the nine RWQCBs as the primary state agencies with regulatory authority over water quality. Under the act, the SWRCB has the ultimate authority over state water rights and water quality policy, and the RWQCBs are responsible for overseeing water quality on a day-to-day basis at the local/regional level.

##### *California Water Code*

The California Water Code outlines the general state authority and responsibilities over water in California. It establishes the Department of Water Resources (DWR) as the primary research, supply development, and management agency for water. The Water Code identifies the State Water Resources Control Board (SWRCB) as the decision making body for overall water quality policy development and for dealing with water rights issues. The nine RWQCBs are charged with regulation, enforcement, and protection of the beneficial uses of water.

##### *Surface Water Rights*

The SWRCB has jurisdiction over all water rights in California under the common-law public-trust doctrine. Section 1735 of the California Water Code provides the regulatory framework for long-term transfers, subject to the requirements of CEQA.

Appropriative water rights allow the diversion of surface water for beneficial use. Before 1914, appropriative water rights involved a simple posting to describe intent and scope of water use, diversion, or construction of diversion activities. Since 1914, the sole method for obtaining appropriative water rights has been to file an application with the SWRCB. Before it can issue a water rights permit, the SWRCB must demonstrate the availability of unappropriated water. Both pre- and post-1914 appropriative water rights may be lost if the water has gone unused for a period of 5 years.

Riparian water rights apply only to lands that are traversed by or border on a natural watercourse. Riparian owners have a right (correlative with the right of each other riparian owner) to share in the reasonable beneficial use of the natural flow of water that passes the owners land. No permit is required for such use. Riparian water must be used reasonably, beneficially, and solely on riparian (adjacent) land and cannot be stored for later use.

### *Groundwater Rights*

The state requires that counties enact regulations covering well design to protect groundwater quality from surface contamination, and to ensure proper well construction and development for domestic use. However, these regulations are not related to the quantity of water extracted. Counties can also enact an ordinance to ensure that wells developed on one property do not interfere with the use of adjacent wells. In some areas of overuse, and where there is a high dependence on groundwater, groundwater rights are determined judicially in what are termed "adjudicated groundwater basins."

### *Senate Bill 610*

Senate Bill (SB) 610 (Chapter 643, Statutes of 2001; Water Code Sections 10910–10915) made changes to the Urban Water Management Planning Act to require additional information in UWMPs if groundwater is identified as a source available to the supplier. The information required includes a copy of any groundwater management plan adopted by the supplier, a copy of the adjudication order or decree for adjudicated basins, and if nonadjudicated, whether the basin has been identified as being overdrafted or projected to be overdrafted in the most current DWR publication on that basin. If the basin is in overdraft, that plan must include current efforts to eliminate any long-term overdraft. A key provision in SB 610 requires that large development projects supplied with water from a public water system and subject to CEQA be provided a specified water supply assessment, except as specified in the law. Large development projects include those with 500 or more residential units, 500,000 square feet of retail commercial space, or 250,000 square feet of office commercial space. These assessments, prepared by "public water systems" responsible for service, address whether there are adequate existing or projected water supplies available to serve proposed projects, in addition to urban and agricultural demands and other anticipated development in the service area in which the project is located.

Where a WSA concludes that insufficient supplies are available, the WSA must lay out steps that would be required to obtain the necessary supply. The content requirements for the assessment include, but are not limited to, identification of the existing and future water suppliers and quantification of water demand and supply by source in 5-year increments over a 20-year projection. This information must be provided for average normal, single-dry, and multiple-dry years. The absence of an adequate current water supply does not preclude project approval, but does require a lead agency to address a water supply shortfall in its project approval findings.

### *Senate Bill 221*

SB 221 (Chapter 642, Statutes of 2001; Government Code Section 66473.7) prohibits approval of subdivisions consisting of more than 500 dwelling units unless there is verification of sufficient water supplies for the project from the applicable water supplier(s). This requirement also applies to approvals that would increase the number of service connections by 10% or more for public water systems with less than 500 service connections. The law defines criteria for determining "sufficient water supply" such as using normal, single-dry, and multiple-dry year hydrology and identifying the amount of water that the supplier can reasonably rely on to meet existing and future planned uses. Rights to extract additional groundwater, if used for the project, must be substantiated.

### *Groundwater Management Act*

The Groundwater Management Act, Assembly Bill 3030 (AB 3030), signed into law in 1992, provides a systematic procedure for local agencies to develop a groundwater management plan. This section of the code provides such an agency with the powers of a water replenishment district to raise revenue to pay for facilities to manage the basin (e.g., extraction, recharge, conveyance, quality). In some basins, groundwater is managed under other statutory or juridical authority.

### *Urban Water Management Act*

The California Urban Water Management Planning Act of 1983 requires that each urban water supplier prepare, update and adopt its urban water management plan at least once every five years on or before December 31, in years ending in five and zero. Urban water suppliers are those 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 per year (AFY).

## Wastewater Services and Stormwater Drainage

The SWRCB, in coordination with two of the nine RWQCBs, regulates water quality, including issuance of discharge permits. The RWQCBs issue waste discharge requirements for major point-source discharges, such as municipal wastewater treatment plants and industrial facilities. The RWQCBs also issue and monitor enforcement actions when water quality standards are violated, and oversee activities necessary to address those enforcement actions.

## Solid Waste

### *California Integrated Waste Management Act*

To minimize solid waste disposal, the State Legislature passed the California Integrated Waste Management Act (CIWMA) of 1989 (AB 939), effective January 1990. According to the CIWMA, all cities and counties were required to divert 25% of all solid waste from landfill facilities by January 1, 1995, and 50% by January 1, 2000. Each city is required to develop solid waste plans demonstrating integration of the CIWMA plan with the County plan. The plans must promote (in order of priority) source reduction, recycling and composting, and environmentally safe transformation and land disposal.

## Energy and Energy Efficiency

### *Title 24, California Code of Regulations, Energy Efficiency Standards*

Title 24 energy standards, the State's energy efficiency standards for residential and nonresidential buildings, were established in 1978 in response to a legislative mandate to reduce energy consumption. Title 24 standards are updated periodically to allow consideration and incorporation of new energy efficiency technologies and methods. The CEC has adopted changes to the Building Energy Efficiency Standards, to accomplish the following:

- to respond to California's energy crisis to reduce energy bills, increase energy delivery system reliability, and contribute to an improved economic condition for the state;
- to respond to the AB 970 (Statutes of 2000) urgency legislation to adopt and implement updated and cost-effective building energy efficiency standards;
- to respond to various statutes of 2001, which included urgency legislation to adopt energy efficiency building standards for outdoor lighting; and
- to emphasize energy efficiency measures that save energy at peak periods and seasons, improve the quality of installation of energy efficiency measures, incorporate recent publicly funded building science research, and collaborate with California utilities to incorporate results of appropriate market incentives programs for specific technologies.

In addition, the 2010 California Green Building Standards Code, or CALGreen Code (California Code of Regulations, Title 24, Part 11), requires buildings to reduce energy and water consumption by 15% and 20%,

respectively from the baseline levels defined in the Code. The code contains both mandatory measures which are applied in all jurisdictions and Tier I and Tier II "voluntary" performance standards which may be adopted by individual jurisdictions, but are required for all projects in those jurisdictions once they have been adopted. The CALGreen code outlines the requirements for site planning and design, energy efficiency, water efficiency and conservation, materials conservation, resource use efficiency, and environmental quality that apply within that jurisdiction.

### *Global Warming Solutions Act*

The California Global Warming Solutions Act of 2006 (Chapter 488, Statutes of 2006) enacted Sections 38500–38599 of the California Health and Safety Code. AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in greenhouse gas (GHG) emissions and a cap on statewide GHG emissions. Several AB 32 mechanisms for reducing GHG emissions rely on the generation and efficient use of energy. AB 32 requires reduction of statewide GHG emissions to 1990 levels by 2020. This reduction will be accomplished through an enforceable statewide cap on GHG emissions that will be phased in starting in 2012.

In 2008, the California Air Resources Board (ARB) adopted the *Climate Change Scoping Plan*, which is the State's plan to achieve GHG reductions in California required by AB 32. The Scoping Plan contains the main strategies California will implement to achieve GHG reductions consistent with AB 32 (at the time of this EIR's preparation, the State is enjoined from implementing the Scoping Plan due to a legal action). The largest proposed GHG reductions are recommended from improving emission standards for light-duty vehicles, implementation of the Low-Carbon Fuel Standard, energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems, and a renewable portfolio standard for electricity production.

### *Renewable Portfolio Standard*

California's Renewable Portfolio Standard (RPS), established in 2002 by Senate Bill (SB) 1078 (Chapter 516, Statutes of 2002), originally required retail electricity providers to procure at least 1% of their electricity supplies from renewable resources to achieve a 20% renewable mix by no later than 2017. The current Energy Action Plan update was adopted in 2008, and "examines the state's ongoing actions in the context of global climate change" (CEC 2009). Senate Bill X1-2 (2011) expands the state's Renewable Energy Standard to 33% renewable power by 2020.

## REGIONAL AND LOCAL PLANS, POLICIES, REGULATIONS, AND ORDINANCES

### Hemet/San Jacinto Water Management Plan

In June 2001, the Department of Water Resources (DWR) and local agencies developed and executed a Memorandum of Understanding (MOU) to formulate a groundwater management plan for the Hemet/San Jacinto area. A groundwater policy committee was formed with elected officials from the cities of Hemet and San Jacinto, Lake Hemet Municipal Water District, Eastern Municipal Water District, and representatives of private groundwater producers. DWR acts as an impartial mediator to the policy committee.

In September 2003, an agreement was made between the cities of Hemet and San Jacinto, EMWD, and LHMWD to develop a groundwater monitoring program. Under this agreement, monitoring began in 2004, and the first report was published in June 2005. EMWD, LHMWD, and the cities of Hemet and San Jacinto all participate in the funding and implementation of the monitoring program.

The cities of Hemet and San Jacinto, EMWD, and LHMWD also agreed on the Interim Principles of Groundwater Management in 2003 and then the Principles of Groundwater Management in February 2004. These principles establish the framework for the Hemet/San Jacinto Groundwater Management Area Water Management Plan (Groundwater Management Plan). Two additional MOUs were adopted in 2004. The first addressed the deteriorating situation in the sub-basins by providing interim stabilization through recharge and was executed in

April 2004. The second, executed in June 2004, describes the funding mechanism for developing the groundwater management plan.

The Groundwater Management Area Water Management Plan is a Stipulated Judgment that was approved in 2006. The plan is anticipated for adoption in 2011. The plan has two key objectives: offsetting the estimated 10,000 AFY overdraft from the basin, and also providing an additional 15,000 AFY to help meet projected demand increases among water users in the basin.

The plan identifies both management components and the components of a physical solution which would be implemented to achieve the objectives, including the San Jacinto Integrated Recharge and Recovery Project (IRRP). Actions that would be part of the physical solution include numerous water supply and conjunctive use projects, direct and in-lieu recharge, increased use of recycled water, increased conservation, and improved monitoring. The plan provides a framework to maintain a sustainable yield and implement continued recharge of the basin using imported water. The plan will allow extraction of groundwater to meet current and future needs, and will provide a funding mechanism for artificially recharging the basin. (WRIME 2007)

Management components of the program include:

- Reduction in native groundwater production;
- Enhancing groundwater recharge with local runoff, imported, and/or recycled water; and
- Water conservation programs.

Phase I of the physical solution includes several actions as part of the IRRP. The IRRP establishes up to 42 cubic feet per second (cfs) of recharge capacity, and allows groundwater recharge using imported water during the low-demand winter season, and recycled water. Improvements that are part of Phase I include:

- Modification of the Warren and Commonwealth Pump Stations;
- Construction of pipelines to convey raw imported water to the recharge basins;
- Design and construction of recharge basins;
- Drilling extraction wells;
- Installing pumps and chlorination equipment for extraction wells; and
- Design and drilling of three monitoring wells.

Future improvements will increase the amount of high-quality local runoff which recharges the aquifer rather than being conveyed out of the basin during storm events. Future improvements will also include conjunctive use projects that reduce groundwater use. These improvements include:

- Expansion of the IRRP to allow 110 cfs of recharge capacity through larger recharge basins, improved pipelines, and additional extraction wells;

- Direct recharge projects at the Buena Vista flood control basin, Cienega and Fairview sites (along the San Jacinto River), Bautista Creek along Florida Avenue, Salt Creek between Lyon Avenue and State Street, Little Valley, and the Bautista flood control ponds;

- In-lieu recharge projects (use of imported or recycled water to replace existing groundwater use); and

- Conjunctive use projects at the Skinner WTP and the Hemet Water Filtration Plant (excess water may be available during wet periods for wholesale customers).

### Santa Margarita River Watershed Management Plan

The demand for water resources in southern California has steadily increased each year, while water supply has stayed the same, or in some cases, declined. In response to increasing concerns over water quality and water

quantity, the County of San Diego is leading or actively participating in several efforts to gather information about the Santa Margarita Watershed. The County of San Diego and its contractors have developed an adaptive Watershed Management Plan for the region, which includes Diamond Valley Lake (Anchor 2005).

#### *Diamond Valley Management Area*

The Diamond Valley Management Area is the second smallest management area in the Santa Margarita Watershed. The management area is tightly defined as the sub-basin surrounding the Diamond Valley Reservoir, and virtually all of the land in this management area is undeveloped and controlled by the Metropolitan Water District of Southern California (Metropolitan) (Anchor 2005).

## 4.14.2 ENVIRONMENTAL SETTING

### WATER SUPPLY, QUALITY, AND DISTRIBUTION

Within the planning area, three public agencies supply retail water to users. Exhibit 4.14-1 identifies the service areas of each water district, relative to the planning area. The City of Hemet Water Department supplies potable water within a 5.25-square-mile service area, located mostly within the central part of the incorporated City. The Lake Hemet Municipal Water District (LHMWD) supplies potable water and irrigation water within a 26-square-mile service area, including certain areas within the city limits (east of the City Water Department's service area and north of Acacia Avenue). Much of unincorporated East Hemet and Valle Vista are also served by the LHMWD, as are rural areas outside of the sphere of influence. The Eastern Municipal Water District (EMWD) provides potable and agricultural water for a large 555-square-mile service area extending from Moreno Valley to Temecula, and including portions of the planning area that are not covered by the City or LHMWD.

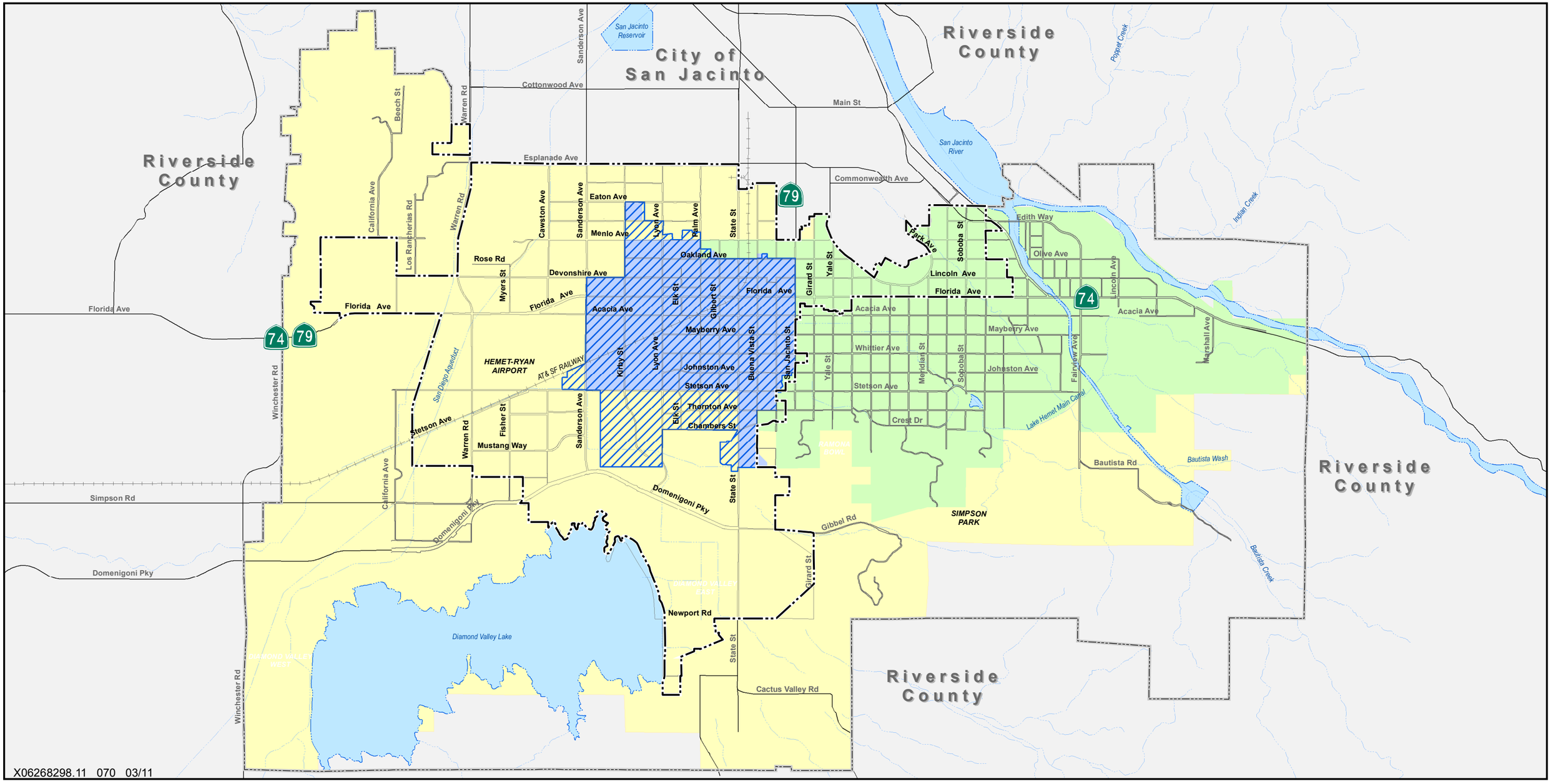
Metropolitan acts as a wholesaler to the City Water Department, LHMWD, and EMWD. EMWD, in turn, also acts as a wholesaler to LHMWD, and to the City of Hemet in emergency situations. The City Water Department service area and most of LHMWD are within the legal boundaries of the EMWD, but EMWD only acts as a water wholesaler, not a retailer, in those areas covered by the other agencies.

The following sections describe current and estimated water supply sources and reliability of supply for the three water providers operating within the planning area. This information comes from the water providers' 2005 Urban Water Management Plans (UWMP). However, the Groundwater Management Plan was not yet adopted at the time these UWMPs were prepared. Therefore, expected future groundwater pumping levels described in the UWMPs may differ from extraction limits contained within the Groundwater Management Plan. This could result in an increased reliance upon imported water from Metropolitan to make up for changes to groundwater supply or for groundwater recharge activities.

### City of Hemet Water District

The City Water Department is supplied by locally pumped groundwater. Groundwater is pumped from 11 deep wells in the San Jacinto Groundwater Basin. The City plans to continue the use of local groundwater as a supply source through 2030 and does not anticipate the need to purchase wholesale or imported water to supplement the groundwater supply (City of Hemet 2005: 9). The City also has a supplemental connection to the Eastern Municipal Water District system, which can be utilized for water exchanges in emergency situations. However, the City stopped receiving water from EMWD in February 2004 and does not plan to utilize water from EMWD in the future.

In 2004, the City pumped 5,684 AF of groundwater from the San Jacinto Groundwater Basin, which accounted for 99.5% of the City's municipal supply. The remaining 0.5% of water (26 AF) was purchased in January 2004 from EMWD. The City has four storage reservoirs with a maximum capacity of 5.1 million gallons (MG), and 120 miles of water mains ranging in size from four- to twenty-four inches in diameter. The City plans to continue

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Sources:
Census Tiger Line Data 2005
ESRI 2010

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## LEGEND

- City of Hemet Sewer

Water Districts

- Lake Hemet Municipal District
- City of Hemet Water District
- Eastern Municipal Water District

- Hemet City Boundary
- Planning Area
- Street
- Railroad
- Creek/Canal
- River/Lake

Exhibit 4.14-1

# WATER AND SEWER SERVICE AREAS

Hemet General Plan

to use local groundwater as a supply source through 2030 and does not anticipate the need to purchase wholesale or imported water to supplement the groundwater supply. Table 4.14-1 shows the amount of groundwater that the City of Hemet projects would be pumped through 2030.

**Table 4.14-1**
**Groundwater Projected to be Pumped – AFY**

| Year | 2010 | 2015 | 2020 | 2025 | 2030 |
|---|---|---|---|---|---|
| **AFY** | 6,061 | 6,370 | 6,370 | 6,370 | 6,370 |

Source: City of Hemet 2005 UWMP, Adapted by AECOM 2011

The future reliability of groundwater supplies depends upon a combination of basin recharge (through natural and artificial means) and implementation of the Groundwater Management Plan to maintain the safe-yield of each sub-basin. The groundwater basin is naturally recharged from local precipitation and runoff from the mountains flowing in the San Jacinto River and other local streams and creeks. Artificial recharge occurs at the City's 48 retention basins, which allow for some percolation of run-off and stormwater flows to recharge groundwater in the basin. The City is also working with the City of San Jacinto, EMWD, and LHMWD to address overdraft in the Hemet/San Jacinto area. In April 2004, an MOU for an Interim Water Supply Plan was executed by all four agencies, resulting in the purchase of 5,998 AF of imported water from the State Water Project that was recharged into the groundwater basin (City of Hemet 2005: 14).

### Lake Hemet Municipal Water District

LHMWD obtains water from groundwater extraction, surface diversions, and wholesale purchases from EMWD. According to LHMWD's 2005 UWMP, approximately 72% of its water comes from groundwater pumping, 19% comes from surface diversions, and the remaining 9% is purchased from EMWD. Table 4.14-2 shows LHMWD's planned water supplies through 2025. Table 4.14-3 shows the reliability of LHMWD's supply for a normal water year, a single dry water year, and multiple dry year conditions.

**Table 4.14-2**
**Current and Planned Water Supplies – AFY**

| Water Supply Sources | 2005 | 2010 | 2015 | 2020 | 2025 |
|---|---|---|---|---|---|
| EMWD | 2,794 | 300 | 300 | 300 | 300 |
| Supplier Produced Groundwater | 10,346 | 10,558 | 9,759 | 10,013 | 9,515 |
| Supplier Surface Diversions | 1,325 | 3,500 | 3,500 | 3,500 | 3,500 |
| Recycled Water (from EMWD) | 0 | 800 | 2,000 | 2,500 | 3,000 |
| **Total** | 14,465 | 15,158 | 15,559 | 16,313 | 16,315 |

Source: LHMWD 2005 UWMP, Adapted by AECOM 2011

#### *Groundwater*

LHMWD extracts groundwater from both the San Jacinto and Hemet Groundwater Basins. LHMWD owns and operates six wells that provide water to the domestic water system, and six wells that supply water to the irrigation system. LHMWD also leases private wells located in the Upper Pressure Subbasin to supplement its domestic and irrigation water needs during high demand periods (LHMWD 2005: 6).

| Table 4.14-3<br>Supply Reliability – AFY | | | | | | |
|---|---|---|---|---|---|---|
| | Normal Water Year | Single Dry Water Year | Multiple Dry Years | | | |
| | | | Year 1 | Year 2 | Year 3 | Year 4 |
| Ground Water | 12,375 | 13,350 | 13,375 | 13,525 | 13,250 | 12,300 |
| Surface Water | 1,500 | 250 | 500 | 500 | 500 | 500 |
| Lake Hemet Reservoir | 1,500 | 2,000 | 1,500 | 1,500 | 1,500 | 2,000 |
| Purchased Water | 0 | 600 | 0 | 0 | 500 | 1,200 |
| **Total** | 15,375 | 16,200 | 15,375 | 15,525 | 15,750 | 16,000 |
| Source: LHMWD 2005 UWMP, Adapted by AECOM 2011 | | | | | | |

### *Surface Water*

LHMWD owns and operates Lake Hemet Reservoir, a 12,000 acre-foot lake located in the San Jacinto Mountains. LHMWD releases water from the reservoir into the South Fork of the San Jacinto River, from which it diverts the water for agricultural use. LHMWD has pre-1914 appropriative rights to the water captured, stored, and released from Lake Hemet Reservoir, diversions from the Strawberry and North Fork Creeks, and from several historic and current locations on the San Jacinto River (LHMWD 2005: 8-9). Since the Eggen Water Treatment Plant (EWTP) was decertified by the State Department of Health Services, surface water diversions are currently only used for agricultural purposes. Due to constraints in the ability to capture, store, and treat surface water supplies, the district is unable to fully take advantage of local runoff when it is available. The ability to maximize its use of local surface water will require modification to the EWTP by using the existing pressure filters as pretreatment and providing final treatment with a microfiltration membrane plant (LHMWD 2005: 27). From 1985 to 1998, the EWTP treated on average about 1,500 AFY. Due to process constraints, the raw water feeding the plant had to be low in turbidity and color, limiting the operation of the plant to periods of nonturbulent stream flow. During periods of rainfall when raw water turbidity was high, the district was unable to exercise its diversion rights due to the limitations of the EWTP and a lack of demand for irrigation water. A more efficient treatment plant will allow the district to capture a portion of these flows resulting in an increased treated water production of 500 to 1,000 AFY (LHMWD 2005: 27).

### *Purchased Water*

LHMWD is entitled to a maximum of 336 AFY of EMWD's Fruitvale System water at a special water rate and can purchase additional groundwater as needed. Since 1985, purchases from EMWD for domestic and agricultural use have averaged about 2,000 AFY. In the early 1990s, purchases from EMWD were higher than average due to drought conditions. LHMWD anticipates that future purchases from EMWD will be approximately 300 AFY or less during normal hydrologic periods (LHMWD 2005: 9).

### *Recycled Water*

When LHMWD's 2005 UWMP was prepared, recycled water sources were not yet available. With the completion of EMWD's San Jacinto Valley Regional Water Reclamation Facility, a new source of water for agricultural operations became available. According to the 2005 UWMP, deliveries were expected to begin at about 300 AFY and increase to as much as 3,000 AFY or more as farmers buy into the program.

## Eastern Municipal Water District

The portions of the planning area served by the Eastern Municipal Water District lie within the District's East Valley Service Area. EMWD's water sources within the East Valley Service Area include water from the State Water Project for areas west of State Street, and water from a system of deep wells in the area east of State Street (EMWD 2009: 5). These wells produce, in total, almost 20,000 acre-feet of water every year.

EMWD has three sources of water supply: local groundwater production, imported water from Metropolitan, and recycled water. Groundwater is the major source of water in the Hemet/San Jacinto area portion of EMWD's service area. However, according to EMWD's 2005 UWMP, approximately 79% of total potable water was imported from Metropolitan and 21% came from groundwater production (EMWD 2005: 10). Recycled water for non-potable uses accounts for approximately 18% of EMWD's total water supply. Table 4.14-4 shows EMWD's current (2005) and estimated water supply sources. Table 4.14-5 shows the reliability of EMWD's supply for a normal water year, a single dry water year, and multiple dry year conditions.

The following description of EMWD's water sources comes from the EMWD 2005 UWMP, except where otherwise noted.

### *Ground Water*

In an effort to reduce dependency on imported water supplied by Metropolitan, EMWD has developed several programs designed to take advantage of local resources. High-quality groundwater has long been a source of water supply for local customers. Protecting and developing local groundwater resources to reduce dependency on imported water is an important objective in EMWD's Strategic Plan.

EMWD's service area encompasses all or part of two different watersheds. The southern portion of the District is tributary to the Santa Margarita River Watershed. Currently, EMWD does not produce any groundwater in the Santa Margarita Watershed and there are no plans to do so in the future. The northern part of EMWD's service area covers the San Jacinto Watershed. To the west, the West San Jacinto Groundwater Management Plan was adopted in 1995 under the auspices of AB 3030 and is now codified in the California Water Code. Annual reports on the status of groundwater and water resources efforts in the area have been published since 1996. To the east, the Groundwater Management Plan is in process. EMWD is working with other agencies, cities, and private groundwater producers in the area to develop and implement a management plan that should be complete and adopted in 2011 (per the EMWD 2005 UWMP). The first annual report for the Groundwater Management Plan area was published in June 2005. The groundwater EMWD produces is pumped from the San Jacinto Watershed.

### *Imported Water*

EMWD relies on Metropolitan for about 79% of its potable water supply. Treated water ready for potable use is supplied from two sources through Metropolitan water treatment facilities. Water is provided from the State Water Project (SWP) and the Colorado River, and is treated at the Mills and Skinner facilities.

The SWP is California's primary water and power development and conveyance system. It includes pumping and power plants; reservoirs, lakes, and storage tanks; and canals, tunnels, and pipelines that capture, store, and convey water from northern California to southern California. Water from the Colorado River is delivered into

Metropolitan's service area via the Colorado River Aqueduct. The water treated at the Mills facility is SWP water, and the water treated at the Skinner facility is a blend of Colorado River water and SWP water.

In addition to treated water, EMWD utilizes non-potable water imported from Metropolitan. This water requires purification and further treatment before it is available for potable use. This raw water is imported by Metropolitan through the SWP pipeline running through EMWD's service area. EMWD treats raw water at a single microfiltration plant in Perris, with a second plant under construction in Hemet to add a supply source in

| Table 4.14-4<br>EMWD Water Supply Sources | | | | | | |
|---|---|---|---|---|---|---|
| | 2005 | 2010 | 2015 | 2020 | 2025 | 2030 |
| **Potable Water Supply Source (AFY)** | | | | | | |
| **EMWD Groundwater Production in the San Jacinto Basin** | | | | | | |
| West San Jacinto Area | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 | 6,000 |
| Hemet/San Jacinto Basin Area - Native Groundwater | 12,000 | 7,200 | 7,200 | 7,200 | 7,200 | 7,200 |
| Hemet/San Jacinto Recovery of Recharged Groundwater | - | 5,600 | 6,600 | 6,400 | 6,200 | 6,200 |
| **EMWD Groundwater Desalination Program in the San Jacinto Basin** | | | | | | |
| Menifee | 1,600 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 |
| Perris | 2,000 | 4,500 | 4,500 | 4,500 | 4,500 | 4,500 |
| Perris II | - | - | 4,500 | 4,500 | 4,500 | 4,500 |
| **EMWD Micro-Filtration Plants (Metropolitan Full Service Untreated EM 4 & 14)** | | | | | | |
| Perris FP | 8,000 | 10,900 | 16,000 | 16,000 | 16,000 | 16,000 |
| Hemet FP | - | 5,400 | 8,000 | 8,000 | 8,000 | 8,000 |
| **Metropolitan Full Service Treated Water Deliveries (EM 12 & 17)** | | | | | | |
| Mills | 55,900 | 58,600 | 62,200 | 76,700 | 86,800 | 94,800 |
| Skinner | 18,000 | 14,000 | 16,000 | 18,000 | 20,000 | 22,000 |
| **Sub-total** | **103,500** | **115,200** | **134,000** | **150,300** | **162,200** | **172,000** |
| **Non-Potable Water Supply Source (AFY)** | | | | | | |
| **Groundwater Recharge (Metropolitan Untreated EM 14)** | | | | | | |
| Recharge Water into the San Jacinto Basin | 8,000 | 20,000 | 22,200 | 22,600 | 22,600 | 22,500 |
| **Metropolitan Untreated Agricultural Water Deliveries (EM 14)** | | | | | | |
| MWD Untreated Ag | 2,500 | 1,200 | 2,100 | 2,600 | 3,100 | 3,500 |
| **Recycled Water** | | | | | | |
| Recycled M&I Use | 3,500 | 7,700 | 10,950 | 13,300 | 15,750 | 17,500 |
| Industrial Enterprise & Aesthetic Improvement | - | 7,000 | 8,250 | 9,500 | 10,750 | 12,000 |
| Recycled Water - Agricultural Use/Wildlife Habitat | 21,500 | 17,700 | 17,500 | 17,500 | 17,500 | 17,500 |
| **Sub-total** | **35,500** | **53,600** | **61,000** | **65,500** | **69,700** | **73,000** |
| **Total Water Supply** | **139,000** | **168,800** | **195,000** | **215,800** | **231,900** | **245,200** |

Source: EMWD 2005 UWMP, Adapted by AECOM 2011

| Table 4.14-5<br>Reliability of Supply | | | | | | |
|---|---|---|---|---|---|---|
| | 2005 | 2010 | 2015 | 2020 | 2025 | 2030 |
| **Supply Reliability Average Year – AFY** | | | | | | |
| **Total** | 139,000 | 168,800 | 195,000 | 215,800 | 213,900 | 245,200 |
| **Supply Reliability Single Dry Year – AFY** | | | | | | |
| **Total** | 141,100 | 171,900 | 198,400 | 219,400 | 235,800 | 249,200 |
| **Supply Reliability Multiple Dry Years – AFY** | | | | | | |
| **Total** | 139,800 | 171,900 | 198,400 | 219,400 | 235,800 | 249,200 |
| Source: EMWD 2005 UWMP, Adapted by AECOM 2011 | | | | | | |

that portion of the EMWD service area. These small micro filtration plants allow EMWD to meet the needs of local customers when Metropolitan's treated water resource may be stretched to its limit, especially during peak summer months. Raw water from Metropolitan is also used by agricultural customers and for recharging groundwater basins EMWD and others rely on.

### *Recycled Water*

EMWD operates and maintains five regional water reclamation facilities. These facilities treat water collected in EMWD's wastewater system for use as recycled water. As the service area population grows, the supply of recycled water continues and as land becomes less available for agriculture, there is a greater supply of recycled water available for municipal and industrial purposes. EMWD's recycled water supply is not dependent on weather patterns and may actually increase slightly in dry years. Wet years, at times, will pose a greater operational challenge as storage facilities fill and customer demand decreases.

### Metropolitan Water District

Metropolitan is the largest water wholesaler for domestic and municipal uses in California. Metropolitan owns and operates the Colorado River Aqueduct (CRA) and is a contractor for water from the SWP. EMWD and LHMWD purchase water from Metropolitan to supplement their supplies from local groundwater, surface water, and recycled water. EMWD is one of 26 Metropolitan member public agencies.

Metropolitan's basic apportionment of Colorado River water is 503,000 AFY. Metropolitan is the largest contractor for water from the SWP, holding a contract for 2.01 million AFY of the project's 4.23 million AFY ultimate delivery capacity. Variable hydrology and environmental issues in the San Francisco Bay/Sacramento-San Joaquin River Delta (Bay-Delta) can reduce the quantity of water that the SWP delivers to Metropolitan. As the Delta ecosystem has declined, new regulations have placed stringent restrictions on pumping water to protect certain fish species. This problem is, at times, compounded by years of low rainfall (Metropolitan 2011).

Metropolitan's goal is to receive a minimum of 650,000 AF during dry years from the SWP. Metropolitan's policy objective includes receiving, on average, 1.5 million AFY of supply, exclusive of transfers and storage programs along the SWP. Additional transfer and storage programs that are current or under development are projected to yield up to an additional 445,000 AFY into Metropolitan's service territory.

## WASTEWATER

The City Water Department, LHMWD, and EMWD also provide wastewater collection services within their water service areas. The City Water Department and LHMWD, however, do not have treatment facilities. Both

districts deliver wastewater to the EMWD for treatment. In the planning area, most sewer lines are located within streets, although some are located within easements in rear yards. All three sewer districts generally use their grid of interconnected lines as their collection network, rather than providing specific trunk lines with smaller lines feeding into the trunk lines. Thus, the size of the individual lines relates to localized capacities rather than how the network functions.

EMWD's wastewater collection and treatment facilities include 1,534 miles of gravity sewer, 53 sewage lift stations, and 5 regional water reclamation facilities (EMWD 2005: 70). Inter-connections between the local collection systems serving each treatment plant provide operational flexibility, improved reliability, and expanded deliveries of recycled water.

### Wastewater Treatment and Disposal Facilities

For wastewater treatment in the planning area, the EMWD uses its Hemet/San Jacinto Regional Water Reclamation Facility. This 255-acre facility, located in western San Jacinto, conducts primary, secondary, and tertiary treatment of wastewater, removing bacteria, viruses, and virtually all suspended solids. A typical daily flow is 7.8 million gallons per day (mgd). The facility's current capacity is 11 mgd, with a planned expansion to 27 mgd (EMWD 2001).

Reclaimed wastewater that has undergone tertiary treatment can be used for almost any purpose short of direct human consumption. In addition to dairy and other agricultural customers, reclaimed wastewater from the San Jacinto Regional Water Reclamation Facility is used by the 4,700-acre San Jacinto Wildlife Area, adjacent to Lake Perris. The facility also has used secondary treated wastewater to create a 60-acre demonstration wetland that processes 2.5 million gallons a day. This wetland is used as a wildlife habitat and is also expected to act as a high-quality natural wastewater treatment site once the ecosystem matures (EMWD 2001).

## STORMWATER

Stormwater drainage infrastructure within the Hemet area consists of a network of natural and improved streams, storm channels, storm drains, and catch basins intended to manage stormwater that flows into one of three drainage systems that traverse the planning area: Salt Creek; San Jacinto River, and Santa Margarita River. The majority of the stormwater collected in the planning area drains to the south and is ultimately discharged into Salt Creek. Salt Creek is an earthen channel approximately 660 feet wide that carries approximately 11,000 cubic feet of water per second. A small portion of the planning area drains northeast into the San Jacinto River. Of the major stormwater drainage facilities in the planning area, Hemet Channel and Stetson Channel are owned and maintained by the Riverside County Flood Control and Water Conservation District; the City owns and maintains Salt Creek.

Historically, curbs and gutters of streets were used as the primary flood control devices in Hemet; however, since most of the planning area is flat, this method resulted in flooding in some areas. Subsequently, developments relied on a system of large, single-use detention basins and concrete channels that effectively channeled stormwater, but failed to allow rainwater to soak into the ground, which is necessary to recharge groundwater. Although some storm drains have been installed, the flat topography found of the planning area does not readily accommodate a system that achieves the proper degree of slope or fall. All non-masterplanned stormwater facilities smaller than 36 inches in diameter are maintained by the City of Hemet. The City encourages the incorporation of low impact development (LID) strategies in development proposals to manage stormwater runoff. The City is encouraging the use of new technology and BMPs to address key design issues. BMPs include incorporating retention basins into landscape designs as an attractive on-site amenity as well as a stormwater management mechanism, and incorporating drainage systems that recognize that the planning area is too flat to support underground drains that rely on the proper degree of slope to reach larger storm drainage channels.

## SOLID WASTE

Solid waste generated within city limits is collected by the City and delivered to the Lamb Canyon Landfill. Solid waste generated outside of city limits, but within the planning area, is collected by Waste Management, Inc. Waste Management has the option of bringing solid waste to any of the three available landfills or available transfer stations in western Riverside County. All three landfills are Class III, municipal solid waste landfills. A description of each landfill is provided below. (RCWMD 2010)

### El Sobrante Landfill

The El Sobrante Landfill is located east of Interstate 15, south of Corona at 10910 Dawson Canyon Road. The landfill is owned and operated by USA Waste of California, a subsidiary of Waste Management, Inc. The landfill encompasses 1,322 acres, of which 645 acres are permitted for landfill operation. According to Solid Waste Facility Permit (SWFP) No. AA-33-0217 (September 9, 2009), the El Sobrante Landfill has a total disposal capacity of approximately 209.91 million cubic yards and can receive up to 70,000 tons per week (tpw) of refuse. USA Waste must allot at least 28,000 tpw for County refuse. The SWFP allows a maximum of 16,054 tons per day (tpd) of waste to be accepted into the landfill. If needed, 5,000 tpd must be reserved for County waste, leaving the maximum commitment of non-County waste at 11,054 tpd. As of January 1, 2010, the landfill had a remaining in-County disposal capacity of approximately 39.2 million tons. During the last six months of 2009, the El Sobrante Landfill accepted a total of approximately 0.919 million tons of waste. The daily average for in-County waste was 2,337 tons during the 6-month period. The landfill is expected to reach capacity in approximately 2045 (RCWMD 2010).

### Lamb Canyon Landfill

The Lamb Canyon Landfill is located between Beaumont and San Jacinto at 16411 Lamb Canyon Road (SR 79), south of Interstate 10 and north of SR 74. The landfill is owned and operated by Riverside County. The landfill property encompasses approximately 1,189 acres, of which 353.4 acres encompass the current landfill permit area. Within the landfill permit area, approximately 144.6 acres are permitted for waste disposal. The landfill is currently permitted to receive 3,000 tons of refuse per day and had an estimated total disposal capacity of approximately 15.461 million tons, as of June 30, 2008. As of January 1, 2009, the landfill had a total remaining capacity of approximately 9.541 million tons. The current landfill remaining disposal capacity is estimated to last until at least 2021. During the last six months of 2008, the Lamb Canyon Landfill accepted a daily average volume of 1,888 tons and a period total of approximately 303,946 tons. Landfill expansion potential exists at the Lamb Canyon Landfill site (RCWMD 2010).

### Badlands Landfill

The Badlands Landfill is located northeast of Moreno Valley at 31125 Ironwood Avenue, accessed from SR 60. The landfill is owned and operated by Riverside County. The existing landfill encompasses 1,168.3 acres, of which 150 acres are permitted for refuse disposal and another 96 acres are designated for existing and planned ancillary facilities and activities. The landfill is currently permitted to receive 4,000 tpd and had an estimated total capacity of approximately 15.237 million tons, as of June 30, 2008. As of January 1, 2009, the landfill had a total remaining disposal capacity of approximately 7.556 million tons. The Badlands Landfill is projected to reach capacity, at the earliest time, in 2016. During the last six months of 2008, the Badlands Landfill accepted a daily average volume of 1,407 tons and a period total of approximately 216,684 tons. Further landfill expansion potential exists at the Badlands Landfill site (RCWMD 2010).

### Closed/Inactive Landfills

There are two inactive/closed landfills within the planning area. The Hemet Landfill is owned by the City of Hemet and located within city limits northwest of Warren Road and Esplanade Avenue. The Hemet Landfill is a

Class 3 landfill, and only accepted inert types of debris such as concrete, asphalt, sand, and other types of construction waste. The Valle Vista Landfill is owned by LHMWD and is located outside the city limits.

### NATURAL GAS

Southern California Gas Company (SoCalGas), a division of Sempra Energy, supplies natural gas to both businesses and residences in the planning area. The City does not have any natural gas storage facilities. Natural gas is provided through a network of gas transmission pipelines and distributed through existing mains, which can be extended to serve new projects. A major natural gas distribution trunk line (less than 12 inches in diameter) extends south into the planning area from San Jacinto in Valle Vista (Toppozada et al 1993).

### ELECTRICITY

Electricity is provided to the planning area by Southern California Edison. The City requires that new projects install underground electricity connections and underground existing power and telephone poles in commercial and residential areas when practical based on the size of the lines.

### COMMUNICATIONS SERVICE (TELEPHONE, INTERNET)

Currently, telecommunication services are provided by utilities that operate independently of the City and include landline and wireless services for telephone, radio, television, and internet devices.

## 4.14.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

### THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the State CEQA Guidelines, an impact on public utilities is considered significant if the proposed project would:

- exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- exceed water supplies available to serve the project from existing entitlements and resources and require new or expanded entitlements;
- result in a determination by the wastewater treatment provider which serves or may serve the project that it exceeds available capacity to serve the project's projected demand, in addition to the provider's existing commitments;
- be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs; or
- fail to comply with federal, state, and local statutes and regulations related to solid waste.

Based on Appendix F of the State CEQA Guidelines, an impact on energy conservation is considered significant if the proposed project would:

- result in wasteful, inefficient, and unnecessary consumption of energy during construction, operation, and maintenance of the project;
- result in the siting, orientation, and design that does not provide an opportunity to minimize energy consumption, including transportation energy;
- include features that would increase peak energy demand;
- not provide for alternative fuels (particularly renewable ones) or energy systems; or
- not provide for recycling of non-renewable resources.

## ANALYSIS APPROACH

The analysis of impacts is based on the likely consequences of adoption and implementation of the Draft General Plan, including future land uses consistent with the Land Use Diagram, and supporting roadways, infrastructure, and public services; along with implementation of Draft General Plan policies and programs.

For impacts on utilities and energy efficiency, compliance with existing regulations presented in Section 4.14.1, "Regulatory Framework," and/or implementation of Draft General Plan policies and programs listed below results in a less-than-significant impact, with the exception of a significant unavoidable water supply impact. Policies that reduce impacts on utilities include:

### Policies

- **CSI-1.2: Infrastructure Adequacy** Ensure that new development and redevelopment provides infrastructure for water, sewer, and stormwater that adequately serves the proposed uses and that has been coordinated with affected infrastructure providers.
- **CSI-1.3: Provider Notification** Provide development information to local water districts, Riverside County Flood Control and Water Conservation District, and energy utilities to assist in their planning efforts to ensure adequate infrastructure is available for anticipated development.
- **CSI-1.4: Fee Structures.** Ensure that fee structures are sufficient for new development and redevelopment to pay their fair share of the cost of infrastructure improvements and public facilities.
- **CSI-2.2: Water Supply Assessments**. Require evidence of adequate water supply, or a water supply assessment when appropriate pursuant to state law, to support proposed development.
- **CSI-2.3: Performance Standards**. Developments shall be required to install water facilities sufficient to meet performance standards established by the water agency serving the project. All facilities must be operational prior to issuance of building permits.
- **CSI-2.6: Common Area Recycled Water**. **Water** Require the installation of recycled water lines for all appropriate streetscapes and common areas when within one-half mile of either an existing and/or master planned tertiary water trunk line, as shown on any water district's master plan, as feasible. The facilities shall meet performance standards established by the supplier of reclaimed water to the site.
- **CSI-2.7 Ground Water Recharge.** Ensure that adequate aquifer water recharge areas are preserved and protected through a comprehensive water management strategy.

- **CSI-2.8 Best Management Practice Features/Equipment**. Require installation of best management practice features for water for all new development and for applicable rehabilitation.

- **CSI-3.1: Performance Standards**. New development shall install sufficient sewer facilities needed to meet performance standards established by the site's wastewater collection agency.

- **CSI-3.2: Location of Sewer and Gray Water Lines**. Require that all future sewer and gray water lines be located within street or alley rights-of-way.

- **CSI-4.1: Sufficient Service.** Ensure sufficient levels of storm drainage service are provided to protect the community from flood hazards and minimize the discharge of materials into the storm drain system that are toxic or that would obstruct flows.

- **CSI-4.2: 100-Year Storm Flows.** Provide public storm drainage facilities to adequately accommodate expected 100-year flood flows. Ensure that roadways remain passable for at least one lane in each direction.

- **CSI-4.4: Groundwater Recharge.** Require development projects to minimize stormwater runoff and provide on-site opportunities for groundwater recharge that are integrated into the project design and amenities.

- **CSI-5.4: Solar Energy** Encourage new buildings to maximize solar access to promote passive solar energy use, natural ventilation, effective use of daylight, an on-site solar generation.

- **CSI-5.4: Energy Efficient Design.** Encourage the efficient use of energy resources by residential, commercial, and industrial users by requiring project proposals to incorporate energy efficient products and techniques into their designs in accordance with adopted California Green Building Standards Code standards and other adopted development standards.

- **CSI-5.6: Building Retrofits** Encourage the retrofitting of existing buildings to use low maintenance, durable building materials, and high-efficiency energy systems and appliances.

- **CSI-5.10: Conservation and Clean Energy Programs** Explore the use of grant funds and programs with SCE and non-profit agencies to establish programs for energy conservation (e.g., home weatherization, Energy Star applicants) and transition to the use of clean and renewable energy (e.g., photovoltaic retrofits, solar hot water heaters and pumps).

- **CSI-6.2: Recycling** Achieve maximum diversion of materials from disposal through the reduction, reuse, and recycling of wastes to the highest and best use.

- **CSI-6.3: Waste Handling Strategy.** Update the City's waste handling strategy, as needed, to address issues of landfill capacity and new state regulations.

- **CSI-8.4: Green Building** Through incentives such as expedited review of development projects, promote nonrequired alternative energy practices and Leadership in Energy and Environmental Design (LEED®) certifications.

- **CSI-10.7: Green Leadership** Encourage service providers to provide "green" leadership by incorporating alternative energy products in their facilities and conservation practices in their operations.

- **CD-2.26: Landscaping**. Encourage the use of California Friendly landscape materials and other drought tolerant techniques.

- **LU-2.9: Sustainable Design** Require that new development be designed to minimize consumption of water, energy and other resources and provide long-term sustainable site and building design features.

- **LU-2.12: Use of Recycled Water Systems** Require connections and use of recycled water facilities where possible to irrigate public landscapes and create water elements that will add to community value.

- **LU-9.11: Sustainable Infrastructure and Development** Require new infrastructure systems and site development to incorporate sustainable design and best practices including the use of recycled water, alternative and energy conserving techniques, and naturalized "conjunctive use" drainage basins to accommodate drainage, recharge the aquifer, promote water quality, and add aesthetic value as a neighborhood amenity.

- **LU-11.5: Sustainable Industries** Recruit "green technology" entrepreneurs and encourage existing businesses to incorporate sustainable business practices in their daily operations.

- **OS-6.2 City Incentives** Through incentives such as expedited review of development projects, promote non-required alternative energy practices and Leadership in Energy and Environmental Design (LEED) certifications.

- **OS-6.3: Federal, State, Utility Company Incentives** Encourage homeowners, business owners, and other energy users to use incentives offered by federal, state, and utility companies; to identify voluntary retrofit opportunities and funding options that increase building energy performance; and to reduce energy consumption.

- **OS-6.4: Public Sector Development and Practices** Require Redevelopment Agency–funded projects, public sector projects, and publicly owned institutions and facilities to use systems, methods, and practices that promote energy conservation.

- **OS-6.5:Clean Energy** Support the use and production of clean energy resources through green technology and programs that promote wind, solar, renewable, biomass, and cogenerating energy resources, where compatible with adjacent land uses.

- **OS-8.1:Comprehensive Approach** Coordinate policies and implementation measures of the various elements of the General Plan to ensure a comprehensive approach to reducing greenhouse gas emissions and to establish the basis for a sustainability plan.

### Programs

- **CSI-P-1: Groundwater Management Plan.** Adopt the multi-agency Groundwater Management Plan to protect and enhance groundwater resources.

- **CSI-P-2: Water Supply Assessment.** Ensure that projects proposing 500 dwelling units or more comply with California Water Code Section 10910 (Senate Bill 221), requiring the preparation of a water supply assessment indicating that a long-term water supply (for a 20-year time frame) is available. Written acknowledgement that water will be provided by a community or public water system with an adopted urban water management plan that includes consideration of the project's water consumption and supply shall constitute compliance with this requirement.

- **CSI-P-3: Reclaimed Water Facilities.** During project review of discretionary projects, require that provision be made for reclaimed water lines and hardware. For tentative tract maps, plans should include provision for reclaimed water lines connecting and serving the overall project. Require the use of recycled water to irrigate public landscape areas, where available, and to create public water elements or lakes to add community design value. In coordination with EMWD, implement a "fair share contribution" mechanism for all discretionary projects so that a reclaimed water network can be achieved Citywide in the future and so that a funding mechanism will be in place to incrementally extend reclaimed water trunk lines to serve new projects.

- **CSI-P-4: Project Review for Storm Drainage.** Require project applicants to decrease stormwater runoff and increase groundwater recharge by reducing pavement in development areas and using design practices such as permeable parking bays and parking lots with bermed storage areas for rainwater detention, or using other best management practices, as appropriate.

- **CSI-P-5: Master Flood Control and Drainage Plan**. Update the City's master flood control and drainage plan. As part of this plan, identify storm drains that need to be upgraded and establish a consistent maintenance schedule for storm drains. The plan should incorporate an assessment of drainage facilities and identify 5-year facility needs and best management practices. The plan should also incorporate features to both accommodate development and support vernal pool areas in the west Hemet area.

- **CSI-P-8: Energy Standards**. Create standards within the municipal code that encourage green building orientation, design, construction, and operation techniques to be used during the construction and lifespan of developments. During the preliminary process to evaluate the subdivision design and development review of residential and nonresidential project proposals, review projects to ensure that proposed plans incorporate energy-efficient design, building, and materials.

- **CSI-P-16: Waste Handling Strategy.** Update the City's waste handling strategy or contract with a private entity to ensure continued capability to provide waste collection and disposal for the City as landfill options change. This strategy shall describe the City's collection method, and identify a disposal site for the City's solid waste. The strategy must identify how the City will procure long-haul trucks and transfer facilities, contract with a private entity for solid waste collection and disposal, or identify additional solid waste collection and disposal solutions prior to the closure of the Lamb Canyon Landfill.

- **OS-P-20: Energy Conservation Practices.** In response to the California Green Building Standards Code, encourage Tier 1 standards for new and remodeled construction that achieve the equivalent of Leadership in Energy and Environmental Design (LEED) Silver certification.

- **OS-P-21: Techniques to Reduce Energy Use.** Train City staff to assist project applicants in designing energy-efficient projects through site planning techniques, building orientation, building design, and building materials to reduce energy use and promote the use of renewable and alternative energy generation such as fuel cells, solar energy, and other sources.

- **OS-P-22: Energy Regulation.** Update zoning and building codes to require new development to comply with the California State Energy Regulation requirements. Enforce all current residential and commercial California Energy Commission energy conservation standards during project review. Permit and encourage the use of passive solar devices and other state-of-the-art energy resources at appropriate locations and subject to development standards. Apply as appropriate the State Solar Shade Control Act, which promotes all feasible means of energy conservation and all feasible uses of alternative energy supply sources.

- **OS-P-24: Energy Conservation in Public Facilities.** Promote Silver LEED certification and encourage Gold LEED certification or a similar level of green building achievement for all new public facilities, Redevelopment Agency projects, and Housing Division projects, where feasible. Promote the use of high-efficiency heating and cooling systems, advanced lighting systems, and passive solar systems in public institutions to reduce energy use. Specify energy-efficient materials and systems, including shade design technologies, for government buildings.

- **OS-P-25: New Energy Sources.** Support the development of new energy sources in cooperation with other organizations. Consider the environmental, cultural, aesthetic, archaeological, and social effects of new energy sources. Promote the use of clean air technologies such as fuel cell technologies, renewable energy sources, UV coatings, and alternative, nonfossil fuels. Coordinate with Southern California Edison and the Southern California Gas Company to jointly determine what new energy options are appropriate as development proceeds.

- **OS-P-26: Minimize Water Demand.** Work with the water districts to promote water conservation and ultimately reduce demand for peak-hour water supply and wastewater capacity. Continue current conservation efforts and actively pursue water storage and source alternatives, including dry-year water transfer options and use and production of reclaimed water.

- **OS-P-27**: **Water Conservation.** Continue to review and update the City's adopted zoning and building codes and require the use of water conservation measures to reduce water consumption. Such measures may include the use of plumbing fixtures that reduce water use. low-flow toilets. drip irrigation systems. and xeriscape landscaping that maximizes use of drought-tolerant plant species. Continue to implement a recycled water ordinance in accordance with the Water Recycling in Landscaping Act. Where feasible, incorporate reclaimed water systems into landscape irrigation plans. Convert existing City of Hemet nondomestic water uses to recycled water use in accordance with Sections 13550-13556 of the State Water Code when feasible. Use reclaimed water for the irrigation of parks, golf courses, public landscaped areas, and other feasible applications as service becomes available from the Hemet Water Department, Lake Hemet Municipal Water District, and Eastern Municipal Water District. Encourage the installation of water-conserving systems such as dry wells and graywater systems, where feasible and environmentally sound. The installation of cisterns or infiltrators shall also be encouraged to capture rainwater from roofs for irrigation in the dry season and flood control during heavy storms.

- **OS-P-28**: **Groundwater Resources.** Protect groundwater resources from depletion and sources of pollution. Participate in the development, implementation, and maintenance of a Groundwater Management Plan program to recharge the aquifers underlying the Planning Area. The program shall make use of flood and other waters to offset existing and future groundwater pumping, except where groundwater quality would be reduced, where available groundwater aquifers are full, or where rising water tables threaten the stability of existing structures. Work with appropriate agencies to encourage groundwater recharge facilities along flood control channels and creeks.

- **OS-P-29: Water Resource Management.** Participate in water resource management planning to facilitate the long-term availability of water resources for Western Riverside County. Create additional water storage where needed, in cooperation with federal, state, and local water authorities. Additionally, support and/or engage in water banking in conjunction with these agencies where appropriate, as needed. Implement, where appropriate, Water Resource Management Guidelines drafted by the subcommittees comprised of Eastern Municipal Water District and other local jurisdictions.

- **OS-P-30: Water Conservation Education.** Educate the public about water conservation methods, new technologies, and drought-resistant landscapes. Participate in regional or other agency outreach programs, when available.

## IMPACT ANALYSIS

IMPACT 4.14-1 New or Expanded Wastewater Treatment and Conveyance Facilities. *Future land uses consistent with the Draft General Plan would increase demand for wastewater collection, conveyance, and treatment facilities. This impact would be less than significant.*

Implementation of the Draft General Plan would result in future residential, commercial, and industrial land uses in the planning area, resulting in additional population. The additional population would generate additional wastewater and, therefore, additional demand wastewater collection, conveyance, and treatment services over current levels.

The City of Hemet Water Department, LHMWD, and EMWD all provide wastewater collection services within the planning area, and deliver wastewater to EMWD for treatment at the Hemet/San Jacinto RWRF. A typical

daily flow is 7.8 million gallons per day (mgd), or approximately 71% of the facility's current capacity of 11.0 mgd. The facility has an ultimate planned expansion capacity of 27 mgd.

As shown on Table 4.14-6, an estimation of wastewater generation from land uses consistent with the Draft General Plan (assuming no reduction in per-capita water use and including both existing uses as of 2010 and future uses consistent with the Draft General Plan, as shown in Table 3-1) would be 26.644 mgd. Although this is within the planned capacity of the Hemet/San Jacinto RWRF, that facility also serves areas beyond the planning area, and projected capacity would not be sufficient to serve estimated regional demand. Additional wastewater collection facilities would also be needed to serve increased demand. In addition to the Hemet/San Jacinto RWRF, EMWD has four additional RWRFs. Inter-connections between the local collection systems serving each treatment plant allow for operational flexibility, improved reliability, and expanded deliveries of recycled water.

**Table 4.14-6**
**Estimated Wastewater Generation**

| Land Use | Units | Generation Factor | Millions of Gallons per Day (mgd) |
|---|---|---|---|
| Residential | 163,748 people | 100 gallons per person per day | 16.375 |
| Non-Residential | 3,423 acres | 3,000 gallons per acre per day | 10.269 |
| **Total** | | | **26.644** |

Note: The wastewater generation factor is based on EMWD (1993). Non-residential uses include commercial, and industrial designations, along with a percentage of the acreage for each mixed-use area based on the text of the Draft General Plan's Land Use Element. The commercial and industrial acreage is 35% of the total acreage in MU-1, 75% in MU-2, 80% in MU-3, 50% in MU-4, 70% in MU-5, and 55% in MU-6.
Source: AECOM 2011

Future land uses consistent with the Draft General Plan would result in additional sources of wastewater within the planning area. However, Draft General Plan policies are designed to reduce impacts on wastewater quality standards and wastewater facilities. Policy CSI-3.1 requires new development to install sufficient sewer facilities to meet wastewater collection agency performance standards. Policies CSI-1.2 and CSI-1.3 require that new development demonstrate adequate utility capacity and provide necessary facilities prior to approval. Policy CSI-1.5 requires fee structures that allow new development to pay its fair share for infrastructure improvements, including wastewater improvements. Policy CSI-3.1 requires new development to install sewer facilities that meet the performance standards set by the applicable wastewater collection agency to ensure proper conveyance of collected wastewater. Policy CSI-3.2 requires all future sewer and graywater lines be constructed within rights-of-way to allow access for future maintenance activities.

Both current regulations and implementation of Draft General Plan policies require compliance with water quality standards and preclude development lacking adequate utility capacity, including wastewater treatment capacity. Individual developments would be reviewed by the City and the applicable wastewater providers to determine that sufficient sewer capacity exists to serve the specific development. The City must continue to coordinate with the water districts to make sure that new development does not exceed the capacity of wastewater conveyance and treatment facilities, and that new development pays its fair share to increase capacity of those facilities. Implementation of these policies would ensure that new wastewater facilities are constructed to meet performance standards and allow for future maintenance to occur.

EMWD plans wastewater collection system and treatment system expansions and upgrades to meet future demand. EMWD's collection system Capital Improvement Program (CIP) includes improvement priorities through 2012, 2020, and improvements needed for buildout. Following adoption of the Draft General Plan, future updates to the CIP for collection systems and planning for wastewater treatment plant expansion will consider future land uses anticipated by the Draft General Plan. Future uses consistent with the Draft General Plan will

contribute to the need for (and the environmental impacts of) these improvements, as well as improvements and expansions to the RWRF, or construction of new wastewater treatment facilities. To the extent that these improvements occur within the planning area, they are addressed at a program-level in this EIR.

Although the wastewater conveyance and treatment facilities needed to serve the Draft General Plan are not yet constructed, the policies of the Draft General Plan, including Policies CSI-1.2, CSI-1.3, CSI-1.5, and CSI-3.1, require that future projects implementing the Draft General Plan provide and/or fund wastewater facilities. Implementing these policies would prevent development from moving forward in the absence of adequate wastewater collection and treatment capacity. Implementation of these policies would prevent the construction of new residential units or non-residential uses which could not be provided with adequate wastewater conveyance and treatment. Implementation of the Draft General Plan would result in a **less than significant** impact. No mitigation measures are required.

IMPACT 4.14-2 New Water Facilities. *Implementation of the Draft General Plan would result in population growth that would increase potable water demand, requiring construction of new water supply and distribution facilities. Construction of these facilities could potentially result in adverse impacts on the physical environment. However, Draft General Plan policies and programs are designed to reduce impacts associated with construction of new water facilities, which would occur within the development footprint envisioned within the Draft General Plan. This impact would be less than significant.*

Implementation of the Draft General Plan would result in future residential, commercial, and industrial land uses in the planning area, resulting in additional population within the planning area. The additional population would generate additional water demand (See Impact 4.14-4 for a discussion of water supply; at buildout, the Draft General Plan land uses would require about 40,000 acre feet of water per year) and, therefore, require construction of additional water facilities, including supply and distribution facilities. A variety of improvements will be needed to serve demand accommodated by the Draft General Plan, including new groundwater wells and replacement wells, water storage tanks, water mains, and new pipelines. These improvements will be directed by the Water Master Plans of the three water providers operating with the planning area. Improvements will be designed to provide reliable water supply to meet short-term peaks and maximum day demand conditions (i.e., highest expected demand over a 24-hour period). Water infrastructure improvement phasing will relate to the pace of urban development.

Draft General Plan policies and programs designed to reduce impacts associated with the construction of new water facilities include Policy 2.3, which requires new developments to install water facilities that meet performance standards set by the applicable water provider. Policy 2.6 requires new developments to install recycled water lines, depending on their proximity to a tertiary water trunk line, according to the water provider's performance standards. Program CSI-P.3 requires that new developments provide for reclaimed water lines, with implementation of a fair share contribution mechanism to provide funding for the incremental extension of reclaimed water trunk lines. Implementation of these policies and programs would ensure that new water facilities are constructed to meet water providers' performance standards and would establish impact fees to fund future extensions of reclaimed water lines.

Constructing new water infrastructure could have adverse effects on the physical environment. However, required improvements would occur within rights-of-way and other already disturbed areas within the development footprint envisioned within the Draft General Plan. Thus, direct and indirect construction and operational impacts of these facilities are considered in the program-level analysis in this EIR. Therefore, this impact is considered **less than significant**. No mitigation is required.

IMPACT 4.14-3 Require the Construction of New or Expanded Stormwater Drainage Facilities. *The City would need to provide new and expanded stormwater drainage facilities to accommodate future land uses consistent with the Draft General Plan. Construction of such facilities could result in significant adverse environmental affects. However, Draft General Plan policies and programs would minimize the physical environmental impacts that*

*could result from construction of stormwater drainage improvements, which would occur within the development footprint envisioned within the Draft General Plan. This impact would be less than significant.*

Stormwater drainage infrastructure within the planning area consists of a network of natural and improved streams, storm channels, storm drains, and catch basins. Implementation of the Draft General Plan would result in future land uses that would generate increased stormwater volumes in portions of the planning area. Increased flows would in turn create a need for new infrastructure in growth areas, such as West Hemet, to convey stormwater to detention basins or out of the planning area to prevent flooding.

The Draft General Plan acknowledges that the City's 1984 master flood control and drainage plan needs to be updated to reflect the current built environment and to incorporate recently completed drainage systems and to provide drainage solutions for West Hemet, including hydration of vernal pools. Retaining surface runoff to recharge the Hemet/San Jacinto groundwater basin is also a priority of the Hemet/San Jacinto Groundwater Management Area Water Management Plan.

Implementation of Draft General Plan policies and programs would minimize the physical environmental impacts that could result from construction of the stormwater drainage improvements. Policy CSI-1.5 requires funding structures to ensure new development pays its fair share of infrastructure improvements, including stormwater infrastructure. Policies CSI-4.1 and CSI-4.2 require provision of stormwater infrastructure sufficient to protect existing and new development from flood hazards. Policy CSI-4.4 requires that stormwater plans for new projects incorporate on-site opportunities for groundwater recharge. Program CSI-P.4 requires project applicants to decrease stormwater runoff and increase groundwater recharge by using best management practices, as appropriate. Program CSI-P.5 directs the City to update its master flood control and drainage plan to identify storm drains that need to be upgraded, establish a consistent maintenance schedule for storm drains, and identify features to both accommodate development and support vernal pool areas in West Hemet.

Constructing new stormwater infrastructure could have adverse effects on the physical environment. However, required improvements would occur within rights-of-way and other already disturbed areas within the development footprint envisioned within the Draft General Plan. Thus, direct and indirect construction and operational impacts of these facilities are considered in the program-level analysis in this EIR. Therefore, this impact is considered **less than significant**. No mitigation is required.

IMPACT 4.14-4 Sufficient Available Water Supply. *Additional water supplies would be needed to meet demand that would be created by future land uses consistent with the Draft General Plan. Implementation of Draft General Plan policies would result in water conservation and a requirement for new development to provide proof of adequate water supply. Furthermore, the City is taking action to improve groundwater recharge and supply. Nevertheless, uncertainty surrounds future water supply to the planning area and southern California as a whole. This impact would be significant.*

Future land uses consistent with the Draft General Plan would result in a net increase of approximately 21,152 dwelling units, 47.9 million square feet of nonresidential building floor area, and 68,364 persons over existing conditions by 2030. This would result in an increase in demand for additional water, which could strain available water supplies. The following analysis estimates 2030 water demand for the planning area with implementation of the Draft General Plan, and describes available water supply sources for each of the three water providers, the reliability of those water supplies, and potential alternative water sources.

Water in the planning area is provided by the City of Hemet, LHMWD, and EMWD. Future water demand is estimated using per capita water demand assumptions from the LHMWD 2005 UWMP. LHMWD's water use per service connection in 2004 was 210 gallons per capita per day (gpcd) (LHMWD 2005: 12). Although LHWMD has set a goal of reducing water consumption to 165 gpcd by 2020, this analysis employs the baseline demand of 210 gpcd. Based on a total 2030 estimated population of 163,748 (including both existing and new development), the planning area would require approximately 40,000 acre feet of water per year by 2030 to accommodate development pursuant to the Draft General Plan.

The City of Hemet's 2005 UWMP and EMWD's 2005 UWMP demand forecasts are based on sources that include a database of future projects, regional projections, socioeconomic studies, and population projections provided by SCAG (The LHMWD 2005 UWMP does not provide a source for its population projections). SCAG's 2004 forecast estimated that the City of Hemet's population will be 169,636 in 2030. As shown in Table 3-1, the estimated 2030 buildout of the Draft General Plan would be 163,748.

These UWMPs demonstrate that the water providers serving the planning area plan to provide sufficient water to serve regional growth, and buildout of the Draft General Plan would result in lower growth than was projected at the time the UWMPs were prepared. The following sections describe specific current and future water sources for each provider, and evaluate the reliability and certainty of these sources.

### City of Hemet

The City of Hemet draws most of its water from groundwater pumped from the Hemet/San Jacinto Groundwater Basin. The City has a supplemental connection to the EMWD system, which can be used for water exchanges in emergency situations, but has not imported water since January 2004. According to the City's 2005 UWMP, the City plans to continue to use local groundwater as a source through 2030 and does not anticipate the need to purchase wholesale or imported water to supplement groundwater supply. Table 4.14-1 in the environmental setting shows the amount of water that the City of Hemet projects it will pump through 2030.

The adoption of the Groundwater Management Plan places extraction limitations on the groundwater basin, changing what was previously an unregulated water source in order to protect the basin from overdraft. This plan sets a goal for an increase of 15,000 AFY of public supply to meet future growth needs, which would include an increase over current allocations to the City. The plan also outlines a series of actions (described above in Section 4.14.1) that the participants will take to improve groundwater recharge and conservation in the basin and to ensure a reliable, sustainable, and adequate future water supply for all groundwater users. However, estimates of future water supply for the City must also consider the lower annual production rights which could occur under a worst-case scenario.

The City's 2005 UWMP describes a future supply of 6,370 AFY, while the City's base production right established in the Groundwater Management Plan is 6,320 AFY, which represents 19.6% of the total base production rights for the basin. Depending on the annual levels of recharge or overdraft identified in the basin, these base production rights may be reduced. Reductions would be cumulative, and could be up to 10% below the previous year's adjusted production right, Based on available data, the Principles of Water Management in the Groundwater Management Plan estimate that the total reduction from the base production rights would be approximately 35%, resulting in an annual production right of approximately 4,108 AFY for the City Water Department. In 2005, the City pumped 5,684 AF of water from the groundwater basin.

This potential for reduced groundwater supply could require the City to import water from EMWD to satisfy future demand. EMWD gets approximately 80% of its water from Metropolitan, which is in turn supplied by the SWP and the Colorado River. Reliability and certainty of those future supplies therefore also need to be considered when determining the reliability of the City of Hemet's future water supplies. EMWD's water supplies are discussed below.

### Lake Hemet Municipal Water District

According to LHMWD's 2005 UWMP, approximately 72% of its water comes from groundwater pumping, 19% comes from surface diversions, and the remaining 9% is purchased from EMWD. Table 4.14-3 in the environmental setting shows the reliability of LHMWD's water supply under normal, single dry, and multiple dry year scenarios. In 2005, LHMWD pumped 10,346 AF of water from the groundwater basin. LHMWD plans to increase groundwater extraction, diversions from Lake Hemet Reservoir, and purchases from EMWD during dry years. As with the City of Hemet, adoption of the Hemet/San Jacinto Water Management Plan places extraction limitations on what was previously an unregulated water source for LHMWD. For LHMWD, the base production

rights would be 11,063 AFY, and a 35% reduction from this base level would be about 7,191 AFY. Although the Groundwater Management Plan sets a goal for an increase of 15,000 AFY of public supply to meet the needs of future growth, which would include additional supplies above current allocations for LHMWD, estimates of future water supply must also consider the possibility of lower future annual production rights. Future groundwater pumping limitations could result in a need for LHMWD to increase diversions from the Lake Hemet Reservoir or similar to the City of Hemet, to purchase additional water from EMWD. EMWD's water supplies are discussed below.

### Eastern Municipal Water District

The planning area lies within EMWD's East Valley Service Area. EMWD's water sources within the East Valley Service Area include water from the SWP for areas west of State Street, and water from a system of deep wells in the area east of State Street (EMWD 2009: 5). The Groundwater Management Plan includes a 10,869 AFY base production right to EMWD. As described above, this base production right is subject to reductions of up to 10% per year, with a total estimated reduction up to 35%, which would result in a supply of about 7,065 AFY. Although the Hemet/San Jacinto Water Management Plan sets a goal for an increase of 15,000 AFY of public supply to meet the needs of future growth (which would include additional supplies above current allocations for EMWD), estimates of future water supply must also consider the possibility of lower future annual production rights.

According to EMWD's 2005 UWMP, approximately 79% of its overall supply of potable water was imported from Metropolitan and 21% came from groundwater production. MWD provides imported water to EMWD. Treated water ready for potable use is supplied from two sources through separate Metropolitan water treatment facilities. Water is provided from the SWP and the Colorado River, and is treated at the Mills and Skinner facilities. In addition to treated water, EMWD utilizes non-potable water imported from Metropolitan. This water needs purification and further treatment before it is available for potable use. EMWD treats raw water at a single microfiltration plant in Perris, with a second plant under construction in Hemet to add a supply source in that portion of EMWD's service area. These small micro filtration plants allow EMWD to meet the needs of local customers when Metropolitan's treated water resource may be stretched to their limit, especially during peak summer months. Table 4.14-5 in the environmental setting shows the reliability of EMWD's water supply under normal, single dry, and multiple dry year scenarios.

Metropolitan has implemented a variety of projects and programs designed to reduce its dependency on imported water during droughts. These have included (1) providing financial incentives for local projects and conservation; (2) increased surface storage via Diamond Valley Lake and use of the SWP terminus reservoirs; (3) groundwater storage programs in the Central Valley, Imperial Valley, and Coachella Valley; (4) short- and long-term water transfers; and (5) local groundwater storage programs with participating member agencies. Metropolitan's integrated resource plan (IRP) calls for further expanding all of these alternative supplies. Metropolitan is also planning for the development of a 500,000-AF buffer supply to mitigate for any shortfall in future supply. Implementation of Metropolitan's IRP would provide sufficient water to its member agencies even during critically dry events from now until at least 2025 (Metropolitan 2005).

However, uncertainty exists for the long-term water supply for all of California. Since the 2005 EMWD UWMP was adopted, considerable research, planning, and analysis have addressed the impacts of climate change on California resources, including water supply. Although the potential effects of climate change within the Hemet planning area are evaluated in this EIR, the 2005 UWMP did not address the potential climate change effects on water supply and reliability. Variable hydrology could also reduce the quantity of water that the SWP delivers to Metropolitan, and in turn to EMWD. Restrictions on Bay-Delta pumping related to the listing of endangered species, hydrology constraints, and several years of drought also contribute to long-term uncertainty in water supply. Operational constraints with the SWP will likely continue until a long-term solution to environmental effects in the Bay-Delta is achieved.

Draft General Plan water conservation, aquifer recharge, recycled water use, and proof of water supply policies and programs would reduce impacts on available water supply. Policy CSI-2.2 requires evidence of adequate water supply in support of proposed development. Policy CSI-2.6 requires new developments to install recycled water lines, depending on their proximity to a tertiary water trunk line, according to the water provider's performance standards and would contribute to water conservation. Policy CSI-2.7 directs the City to prepare a comprehensive water management strategy to preserve and protect aquifer water recharge areas. Policy CSI-2.8 requires the installation of best management practice features for water conservation in new development and applicable rehabilitation projects. Program CSI-P.1 directs the City to adopt the Groundwater Management Plan to protect and enhance groundwater resources. Program CSI-P.2 requires the preparation of a water supply assessment for projects of 500 dwelling units or more to indicate the availability of long-term water supply from a water provider. Program CSI-P.3 requires that new development provide for reclaimed water lines, with implementation of a "fair share contribution" mechanism to provide funding for the incremental extension of reclaimed water trunk lines. Program CSI-P.4 requires project applicants to use best management practices in order to reduce stormwater runoff and increase opportunities for groundwater recharge.

### Conclusion

The long-term supply of water to the planning area from EMWD, LHMWD, and the City of Hemet is uncertain. Although all three agencies indicate adequate water supplies based on their UWMPs, EMWD and LHMWD rely on water from Metropolitan for a portion of their supply. Potential climate change effects, variable hydrology, environmental impacts in the Bay-Delta, and other factors underlie uncertainty regarding Metropolitan's water supply, which has increased since each water agency prepared its UWMP in 2005. Metropolitan is taking actions (including conservation programs, increasing local storage and groundwater storage, and water transfers) to ensure an adequate supply, and the successful implementation of these long-range actions would reduce the uncertainty surrounding Metropolitan's supply.

Future groundwater pumping activities in the San Jacinto Groundwater Basin may also be constrained compared to assumptions made within the water agencies' 2005 UWMPs. The Groundwater Management Plan has a goal to increase public water supply from the basin by 15,000 AFY, and identifies management actions and physical improvements to reach that goal (described in Section 4.14.1). The City is taking actions which would help to sustain a groundwater yield that meets increased water needs in the San Jacinto Valley, including infrastructure improvements, groundwater recharge, water conservation, and increased use of graywater. However, in the short- and medium-term, implementation of the Hemet/San Jacinto Water Management Plan could potentially require reductions of up to 10% per year, with a total reduction that could reach 35% of the base production rights for each provider serving the planning area.

Although implementation of Draft General Plan policies would result in water conservation and the requirement for new developments to provide proof of adequate water supply, and the City is taking action to improve groundwater recharge and supply, uncertainty surrounding future water supply to the planning area and southern California as a whole results in a **significant** water supply impact,

Actions described in the Draft General Plan, Metropolitan's IRP, and the Hemet/San Jacinto Water Management Plan present a range of activities being undertaken by multiple agencies to ensure reliable water supplies that meet the future needs of the planning area. Furthermore, Policy CSI-2.2 and Program CSI-P.2 would preclude the approval of development in the future which could not be supplied with an adequate amount of water. No additional mitigation measures beyond these actions would be feasible. Thus, the water supply impact is considered **significant and unavoidable**.

### Alternative Water Source Options

Because long-term water supply is considered uncertain, the California Supreme Court's decision in *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (the *Vineyard* Case) requires an explanation of

how long-term demand for adequate water supplies is likely to be met with other water source options. The following section describes other water source options, potential environmental impacts of exploiting those options, and how such impacts would be mitigated. Other water source options that may be available to offset potential uncertainty of long-term water supply to the southern California region are described. Potential impacts of other water source options identified in the following discussion and the mitigation for those potential impacts do not represent direct impacts of, or necessary mitigation for, the Draft General Plan. Rather, they are provided in accordance with guidance under the California Supreme Court decision in the *Vineyard* Case.

### *Recycled Water*

All wastewater flows (not including storm water) collected within the planning area by the three water districts are delivered to EMWD for treatment at the Hemet/San Jacinto RWRF, which provides water for agricultural operations. According to the EMWD 2005 UWMP, deliveries were expected to begin at about 300 AFY and increase to as much as 3,000 AFY or more as farmers buy into the program. It is estimated that EMWD will have upwards of 5,000 AFY of tertiary treated recycled water available to sell to willing buyers in the Hemet/San Jacinto basin (LHMWD 2005: 28).

### *Desalinated Water*

Seawater desalination describes the process of removing salts and other impurities from seawater to produce potable water. With increasing demand for water and limited new supply options, the future value of seawater desalination as a part of California's water supply portfolio has become apparent. While the potential use of desalination represents less than 5% of the region's total water supplies, it is considered by water planners as an important part of the region's water supply portfolio.

The planning area is not located adjacent to the ocean and none of the water service agencies has a future plan for a local or regional desalination facility. The agencies could participate in a regional desalination facility that supplied treated water to Metropolitan's distribution system, but Metropolitan also does not currently have a plan for such a facility.

EMWD's Water Supply Desalination Infrastructure could produce potable water from otherwise unusable groundwater. According to EMWD's 2005 UWMP, its Groundwater Desalination Program would result in construction of three desalters, providing up to 12,000 AFY of low salinity potable water. The first two desalters are on line, and the third desalter is in the preliminary design stage (EMWD 2010).

The greatest impediment to expanding EMWD's desalination plant is the high cost of brine disposal. EMWD groundwater management plans call for up to 20,000 AFY of groundwater recharge using imported SWP water purchased from Metropolitan. This imported water could be replaced (up to 10,000 AFY) by desalted recycled water, improving overall supply reliability and reducing EMWD's dependence on imported water (EMWD 2005: 56).

### *Beneficial Reuse of Urban Runoff*

Urban runoff is a relatively untapped alternative water supply for the planning area. By managing runoff and beneficially reusing it, consumers can essentially reduce dependence on imported water. Both dry and wet weather runoff can be beneficially used. Dry weather runoff describes runoff that occurs in the absence of rainfall, while wet weather runoff describes runoff that occurs as a direct result of rainfall. Wet weather runoff represents a larger volume of water than dry weather runoff.

The beneficial use option for dry weather runoff consists of capturing runoff, treating it, and then reusing it. The level of treatment required for the runoff would be determined by the ultimate end use of the water. For dry weather flow, most runoff could be diverted to beneficial use, particularly during summer months when demands

for nonpotable irrigation water are high. Additionally, a portion of recycled water demand could be supplied by treated runoff.

Wet weather beneficial reuse consists of the use of cisterns, treatment and beneficial reuse, neighborhood recharge, and regional recharge. Cisterns are water conservation devices that store diverted runoff from roof areas and other impervious surfaces. This stored runoff can provide a source of chemically untreated water for gardens and compost free of most sediment and dissolved salts. Because residential irrigation can account for up to 40% of domestic water consumption, water conservation measures can reduce demands, especially during summer months.

Treatment and beneficial reuse of wet weather runoff depends greatly on seasonal storage capacity. Wet weather runoff would require regional or local storage until demand exists. A regional approach to seasonal storage could include the use of out-of-service reservoirs. A local approach would consist of constructing distributed underground storage facilities in open spaces, parks, and schools. According to the LHMWD 2005 UWMP, there are currently constraints in the ability to capture, store and treat surface water supplies, thus the district is unable to take advantage of local runoff when it is available. Maximizing use of local surface water would require modification of the existing Eggen Water Treatment Plant to use existing pressure filters for pretreatment and to provide final treatment using a microfiltration membrane plant. A more efficient treatment plant would allow the district to capture a greater portion of stream flows, resulting in increased treated water production of 500 to 1,000 AFY (LHMWD 2005: 27).

### *Graywater*

Graywater describes untreated household waste water that has not come into contact with toilet waste. It includes used water from bathtubs, showers, bathroom wash basins, and water from clothes washing machines and laundry tubs. Graywater may be reused for other purposes, particularly landscape irrigation.

The Graywater Systems for Single-Family Residences Act of 1992 legally incorporated the use of graywater as part of the California Plumbing Code. In September 1994, the City of Los Angeles approved an ordinance that permitted the installation of graywater systems in residential homes. Unlike recycled water, graywater does not need to comply with regulatory health standards. The potentially high cost of installation and maintenance and lack of widespread public interest has historically limited implementation of graywater systems, but these systems could reduce outdoor water demand in the planning area.

### *Metropolitan Water District Actions*

As discussed above, EMWD and LHMWD rely on imported water from Metropolitan, which has implemented a variety of projects and programs designed to reduce its dependency on imported water during droughts. Implementation of Metropolitan's IRP will provide sufficient water to its member agencies (which include EMWD and LHMWD) even during critically dry events from now until at least 2025 (Metropolitan 2005). Metropolitan has implemented a variety of projects and programs designed to reduce its dependency on imported water during droughts, which would be considered alternative supply sources. Potential environmental impacts and mitigation measures of these alternative water sources are summarized within the discussion below.

### *Potential Environmental Impacts of Alternative Supplies*

Both construction and operation impacts associated with alternative water sources would be determined by future environmental analysis on a project-by-project basis. Appropriate mitigation measures would be identified as needed to reduce potentially significant environmental impacts at the time each project is proposed. However, in an effort to supply a general overview of the potential environmental impacts associated with the construction and operation of such projects, comparable projects in southern California can provide indications of anticipated environmental impacts and typical mitigation. Such comparable projects include:

- City of Huntington Beach – Final EIR for the Seawater Desalination Project at Huntington Beach (April 5, 2005);
- Irvine Ranch Water District – Final EIR for the Michelson Water Reclamation Plant Phase 2 and 3 Capacity Expansion Project (February 2006);
- Aliso Creek Urban Runoff Recovery, Reuse and Conservation Project – Mitigated Negative Declaration (2008)

These projects provide reasonable examples of the types of potential environmental impacts and mitigation measures for similar projects in southern California. Environmental issues associated with these projects are similar and are therefore summarized in Table 4.14-6. The information included in Table 4.14-7 has been gathered from the documents mentioned above, is meant to be general in nature, and does not directly apply to any other specific desalination project, reclaimed water expansion project, reuse of urban runoff, or the Draft General Plan.

IMPACT 4.14-5 **Increased Demand for Landfill Capacity to Accommodate Solid Waste Disposal Needs and Compliance with Solid Waste Regulations.** *Implementation of the Draft General Plan would allow for future land uses which would result in an increase in the amount of solid waste sent to landfills. However, compliance with Draft General Plan policies and programs would result in a less than significant impact.*

Solid waste generated within the City of Hemet is transported to and disposed of at the Lamb Canyon Landfill by the Hemet Integrated Waste Management Division. Waste generated outside of the City, but within the planning area is transported to and disposed at one of three landfills by Waste Management of the Inland Empire: Lamb Canyon, El Sobrante, or Badlands.

The Lamb Canyon landfill had a total remaining capacity of approximately 9.54 million tons as of January 1, 2009, or approximately 62% of its total permitted capacity. Annually, about 72,000 tons of the City of Hemet's solid waste is landfilled here, accounting for approximately 0.7% of total remaining capacity. The Lamb Canyon Landfill is expected to remain open until approximately 2021; expansion capacity exists at this landfill. The El Sobrante Landfill had a total remaining in-County disposal capacity of 39.2 million tons, as of January 1, 2010. During the last six months of 2009, the daily average for in-County waste was 2,337 tons. This is equal to approximately 853,000 tons per year (i.e., 2,337 x 365 = 853,005), which accounts for approximately 2.2% of the total remaining in-County disposal capacity. The El Sobrante Landfill is expected to reach capacity in 2045. The Badlands Landfill had a total remaining capacity of approximately 7.6 million tons as of January 1, 2009, or approximately 50% of its total permitted capacity. This remaining capacity is expected to last until 2016; expansion capacity exists at the Badlands Landfill.

Future land uses consistent with the Draft General Plan would result in additional businesses, houses, schools, and industries, which would contribute to increased solid waste generation within the planning area. Draft General Plan policies are designed to reduce impacts to solid waste facilities. Policy CSI-6.2 directs the City to maximize the diversion of solid waste materials that can be reused or recycled to minimize the amount of waste sent to landfills. Policy CSI-6.3 directs the City to update its waste handling strategy to address issues of landfill capacity.

As mentioned above, the Lamb Canyon Landfill is expected to close in 2021. However, the City has not yet made plans for solid waste disposal beyond the expected landfill close date. The City could transport solid waste to either the El Sobrante or Badlands landfills. However, the Hemet Integrated Waste Management Division currently lacks long-haul trucks and a transfer station, which would enable them to transport waste to either of those landfills. Implementation of policies and programs in the Draft General Plan, including Policy CSI-6.3 which directs the City to update its waste handling strategy, would allow the City to continue providing solid waste collection and disposal services after closure of the Lamb Canyon Landfill. Specifically, Program CSI-P-16

**Table 4.14-7**
**Potential Environmental Impacts Associated with Alternative Water Supply Projects**

| Environmental Issue Area | Potential Impact | Possible Mitigation |
|---|---|---|
| Aesthetic Resources | Construction may alter scenic views. Addition of new visual features may block views and cause additional sources of light and glare. | Project applicant shall implement short-term construction equipment staging areas with appropriate screening; provide a vegetative buffer around facility; install fencing that is complementary with surrounding environment; and shield exterior light sources away from adjoining uses. |
| Air Quality | Temporary construction air quality impacts, emission of toxic air contaminants, and conflicts with local Air Quality Management Plan may occur. | Project applicant shall comply with applicable federal, state, and local air quality guidelines. |
| Biological Resources | Construction and operation activities may affect terrestrial and marine biological resources. | Project applicant shall comply with applicable federal, state, and local regulatory agencies to ensure proper safeguards are in place protecting all sensitive biological resources before, during, and after construction. |
| Cultural Resources | Construction and operation activities may disturb undiscovered archaeological and paleontological resources. | Project applicant shall perform preconstruction surveys; require a professional archaeologist and/or paleontologist on-site during construction; flag and monitor Areas of Potential Effects (APE). |
| Geology and Soils | Seismic hazards including earthquakes, geologic hazards including landslides and liquefaction, soil and topsoil erosion, and water and wind erosion may occur. | Project applicant shall comply with standards set forth in the UBC (most current edition) to assume seismic safety. A detailed site-specific geotechnical study must be prepared. Compliance with the recommendations set forth in site-specific geologic and/or geotechnical studies will be made a condition of the site development permit for subsequent projects. |
| Greenhouse Gas Emissions | Project may increase the emission of greenhouse gases. | Project shall implement and comply with all state and local initiatives to reduce the emission of greenhouse gases. |
| Hazards and Hazardous Materials | Project may create hazards due to the storage, transportation, and/or handling of hazardous materials, thereby increasing the risk of exposure to hazards and hazardous materials. | All hazardous materials shall be handled, and stored, transported, and disposed in accordance with all applicable federal, state, and local codes and regulations. |
| Hydrology and Water Quality | Storm water runoff and flooding may occur. | Project applicant shall have a Water Quality Management Plan specifically identifying best management practices. The project applicant shall demonstrate compliance with all applicable regulations established by the U.S. Environmental Protection Agency as set forth in the National Pollutant Discharge Elimination System permit requirements for urban runoff and storm water discharge and any regulations adopted by the jurisdiction within which construction will take place; appropriate hydrology and hydraulic analysis shall be performed for the project prior to grading or building permits; and appropriate on-site drainage systems shall be installed. |
| Noise | Construction and operation may affect nearby sensitive receptors. | Project applicant shall prepare acoustical analysis reports and appropriate construction plans, and all stationary equipment shall be designed to comply with the appropriate noise standards set by the jurisdiction in which the project is located. |

**Table 4.14-7**
**Potential Environmental Impacts Associated with Alternative Water Supply Projects**

| Environmental Issue Area | Potential Impact | Possible Mitigation |
|---|---|---|
| Public Services and Utilities | Increased solid waste production may occur. | Project must comply with the appropriate waste reduction and recycling regulations; project must comply with AB 939. |
| Traffic and Circulation | Project construction and operation could potentially affect transportation system performance. | Prior to improvement plan approval, a traffic control plan will be prepared for approval by each jurisdiction within which the project is proposed to be located; the traffic control plan will show all signage and striping, and delineate detours, flagging operations, and any other devices that will be used during construction to guide motorists safely through the construction zone and allow for adequate access and circulation, to the satisfaction of the jurisdiction or agency. |

Source: AECOM 2011

directs the City to procure long-haul trucks and transfer facilities, contract with a private entity for solid waste collection and disposal, or identify additional solid waste collection and disposal solutions prior to the closure of the Lamb Canyon Landfill. With implementation of these policies and program, this would be a **less-than-significant** impact. No mitigation measures are required.

IMPACT 4.14-6 Increased Demand for Other Utility Services. *Implementation of the Draft General Plan would increase local demand for electricity, natural gas, and telecommunication services. The extension of these utilities to currently unserved portions of the planning area could result in the need for new or expanded facilities. Construction of new or expanded facilities could result in adverse impacts on the physical environment. However, required improvements would occur within existing rights-of-way and already disturbed areas within the development footprint envisioned within the Draft General Plan. This impact would be less than significant.*

The Draft General Plan would provide for future land uses throughout the planning area. New residences and businesses would result in increases in demand for utilities that are not provided by a government entity. In Hemet, this includes the provision of electricity, natural gas, and telecommunications (phone and internet) services. Electricity and natural gas are provided to residents by Southern California Edison and Southern California Gas Company, respectively.

To provide these services to residents and businesses, additional utility infrastructure would likely need to be built to accommodate increased demand. However, at this time, the extent, location, or timing of these new facilities cannot be determined. To the extent that these improvements would be constructed within the planning area, associated environmental effects are considered at a program level in this EIR. Such improvements would occur within already disturbed areas within the development footprint envisioned within the Draft General Plan. Thus, direct and indirect construction and operational impacts of this expansion are considered in the program-level analysis throughout this EIR. Therefore, the impact is considered **less than significant**. No mitigation measures are required.

IMPACT 4.14-7 Increase Demand for and Consumption of Energy. *Future land uses consistent with the Draft General Plan would increase the demand and consumption of energy. However, Draft General Plan policies and programs would promote efficient use of energy. This impact would be less than significant.*

Future land uses consistent with the Draft General Plan would increase energy consumption in the planning area, requiring that additional energy resources be delivered to residents and businesses by SCE and SoCalGas. SCE will need to consider the future generation of electricity and SoCalGas will need to consider the future generation

of natural gas with careful consideration of the anticipated peak usage within their service areas. Future projects proposed consistent with the Draft General Plan would be required complete an environmental review process which would assess whether SCE and SoCalGas can accommodate the energy needs of that project. In addition, future development would be required to comply with the current energy performance standards found in Title 24 as well as Draft General Plan energy conservation policies and actions.

Appendix A in the Draft General Plan provides a "crosswalk" listing policies and programs supporting the City's sustainability goals, including those associated with reduction of energy use. Program IS.P-8 also requires implementation of energy efficiency standards, including the CalGreen building standards. Policy CD-2.26 supports the use of water-efficient, climate-appropriate landscaping. Other policies in the Community Infrastructure and Services element encourage maximizing solar access for energy use, daylight, and on-site generation of energy; require energy efficient site and building design, support retrofits of existing buildings to reduce energy use, promote use of grant funds and programs for energy conservation; and require the City to propose ordinances requiring energy audits, solar access, insulation, solar retrofit, and solar water heating.

Future land uses consistent with the Draft General Plan would increase the population and employment in the planning area, with corresponding increase to the demand for energy resources above current consumption demands. However, despite the overall increase in demand for energy, the Draft General Plan emphasizes energy efficient design of future land uses and energy efficiency, which would minimize wasteful, inefficient energy consumption while promoting use of renewable energy resources (e.g., solar) and recycled non-renewable resources. With implementation of the Draft General Plan, this would be a **less-than-significant** impact. No mitigation measures are required.