
IV. ENVIRONMENTAL IMPACT ANALYSIS
P. UTILITIES AND SERVICE SYSTEMS
1. WASTEWATER

INTRODUCTION

The information and analysis in this subsection is based primarily on the following report, which is included in Appendix IV.P of this EIR:

- *Ramona Creek Water and Wastewater Plan of Service, RBF, May 21, 2013.*

ENVIRONMENTAL SETTING

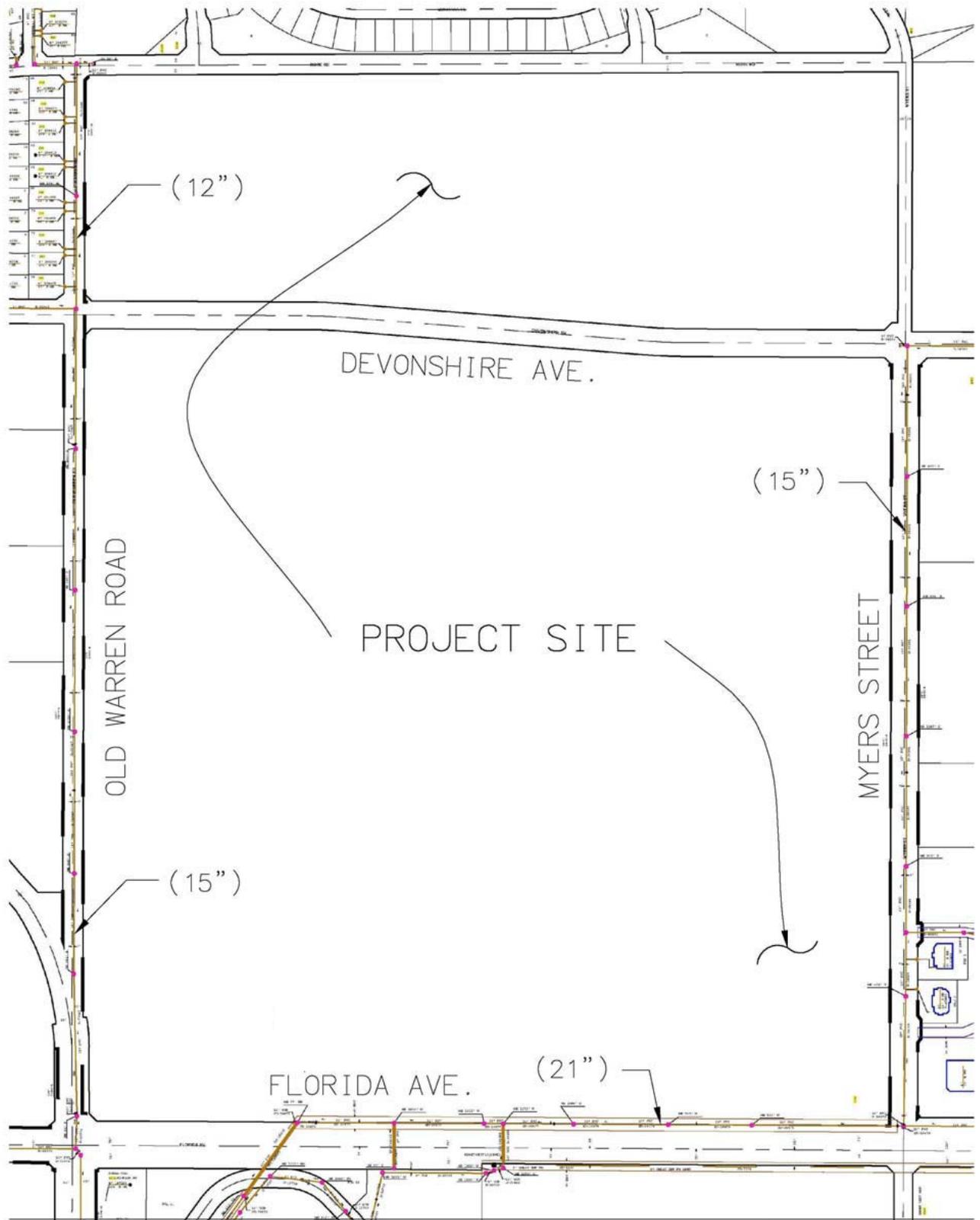
Wastewater Treatment

The City of Hemet (the “City”) Water Department, Lake Hemet Municipal Water District (LHMWD), and Eastern Municipal Water District (EMWD) all provide wastewater collection services within their respective service areas. The City’s Water Department and LHMWD, however, do not operate treatment facilities. Both agencies deliver wastewater to EMWD for treatment. Specifically, wastewater treatment services are provided to the Project area by EMWD at the San Jacinto Valley Regional Water Reclamation Facility (the “SJVRWRF”). The facility currently has a capacity of 12.4 million gallons per day (mgd), though current wastewater flows through the facility are approximately 7.8 mgd. Expansion of the facility’s treatment capacity is currently underway to expand the facility from 11 mgd to 27 mgd¹. The facility is located on Sanderson Avenue north of Cottonwood Avenue, approximately three miles north of the Project site.

Project Site Conditions

Existing sewer conveyance infrastructure in the vicinity of the Project site includes a 12-inch and 15-inch line in Old Warren Road, a 21-inch line in Florida Avenue, and a 15-inch line in Meyers Street (refer to Figure IV.P-1). The Project site is currently vacant, and no wastewater generation occurs at the site.

¹ *Eastern Municipal Water District – Hemet/San Jacinto Regional Water Reclamation Facility Insights: <http://www.emwd.org/index.aspx?page=180>*



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REGULATORY SETTING

EMWD's Water and Wastewater Management Project

EMWD has initiated a Water and Wastewater Salinity Management Project that provides for the disposal of non-recyclable waste brine from industry within its service area through the construction of pipelines that will connect to existing brine management facilities. One of the proposed pipelines will serve the Hemet area. The EMWD project has the following two main objectives:

- to protect existing groundwater supplies and lower the salinity of recycled water, which will reduce the need for imported water, and
- to provide an incentive to high-tech industries to locate in the EMWD service area for access to Hemet's process for disposing of industrial waste.

City of Hemet General Plan

The following goal and policies from the City's General Plan are relevant to the Project:

- **Goal CSI-3:** Ensure the provision of a wastewater collection, treatment, and disposal system capable of meeting the daily and peak demands of Hemet residents and businesses in an efficient and environmentally sound manner.
 - **Policy 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.
 - **Policy 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.
 - **Policy CSI-3.3 Industrial Discharge:** Work with the water districts to encourage the provision of brine disposal pipelines and any other new technologies that benefit the expansion of the City's industrial job base.
 - **Policy CSI-3.4 Sanitary Sewers:** Promote the extension of sanitary sewers to serve all new and existing land uses and densities, as feasible, to protect groundwater quality. Require new development, and existing development where feasible, to connect to the sanitary sewer system. Exceptions may be considered for properties with a minimum lot size of ½ acre and that are located more than 600 feet from a sewer line.

ENVIRONMENTAL IMPACT ANALYSIS

Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines, a significant impact on wastewater would occur if a project would result in the following:

- a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- b) Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or
- c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

As discussed in Section IV.A (Impacts Found to be Less Than Significant), the Project would not result in any impacts related to issue "a." Thus, no further discussion of this issue is required.

Project Impacts

Impact IV.P-2 and Impact IV.P-3: The Project would not require the construction or expansion of new wastewater treatment facilities, nor would the Project cause the wastewater treatment provider to exceed its capacity, and impacts would be less than significant.

The wastewater system for the Project would flow entirely by gravity either to the easterly or westerly sewer systems. The Project's proposed sewer system is shown on Figure IV.P-2. Wastewater flows in the westerly portion of the Project site would be collected and conveyed to the existing 15-inch sewer line along Old Warren Road; and flows in the easterly portion of the Project site would be collected and conveyed to the existing 15-inch sewer line in Myers Street. Wastewater flows within the portions of the Project site proposed for development with commercial land uses would be collected and conveyed to the existing 21-inch sewer line in Florida Avenue. Wastewater flows from the Low-Medium Density Residential area proposed for development north of Devonshire Avenue would be collected via a proposed sewer line in Devonshire Avenue and conveyed to either the easterly or westerly sewer systems mentioned previously.

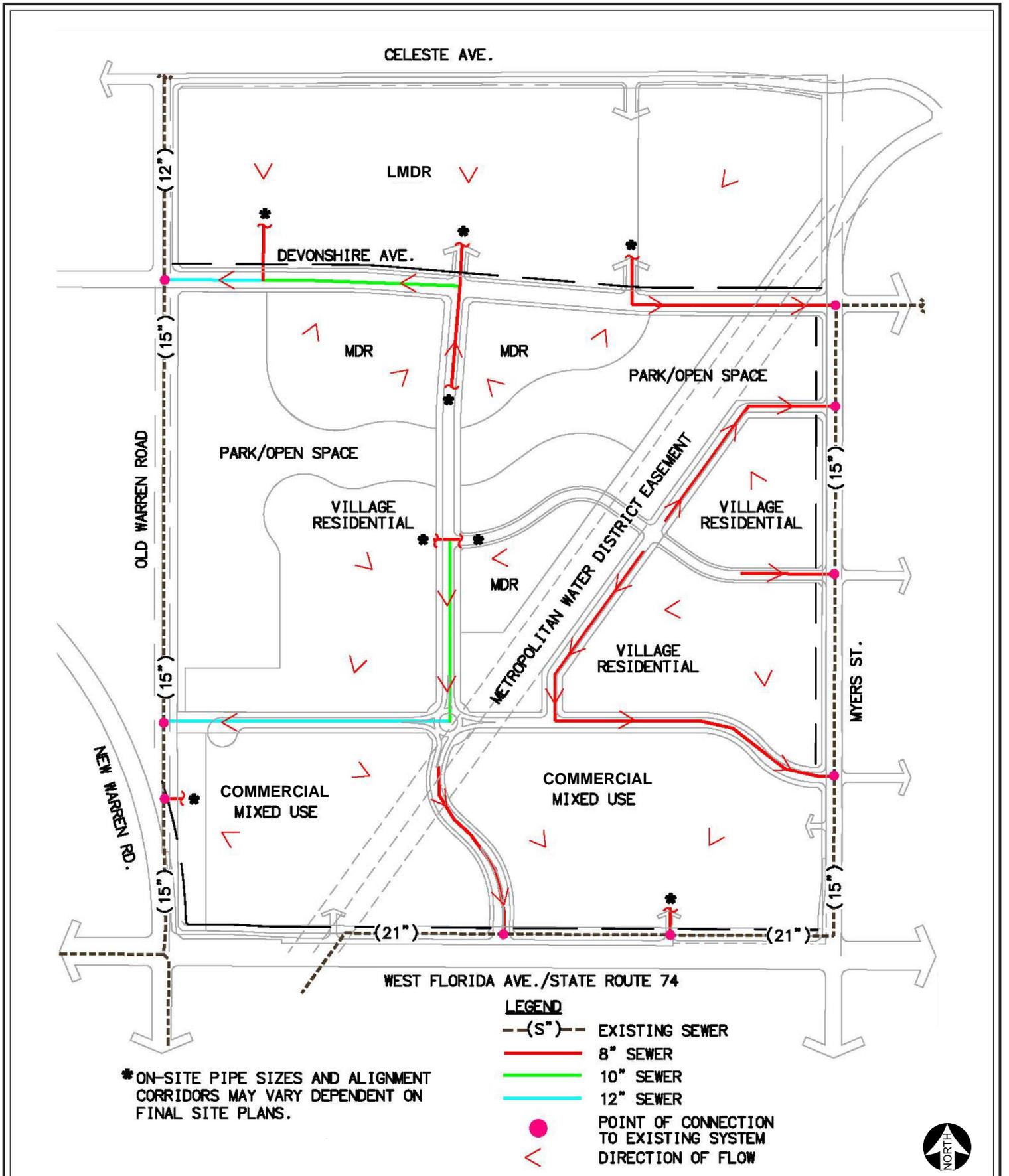
The 15-inch sewer within Myers Street was designed for a 100-lot residential subdivision for Tract 31970 as shown per EMWD plans D-34179. A lateral connection from the existing retail stores adjacent to Myers Street has also been made to this sewer system. The commercial development for Parcel Map 35350 east of Myers Street connects into this 15-inch system as well. Both the 15-inch and 21-inch sewer

systems merge into a 33-inch sewer line farther south of the Project. Per the *Ramona Creek Water and Wastewater Plan of Service* study for the Project, the Operations Department would verify that additional capacity in the 33-inch line was available for the development. All onsite flows will discharge into the District’s existing system at multiple locations along Old Warren Road, Myers Street and Florida Ave.

As shown on Table IV.P-1, the Project would generate an approximate average flow of 224.4 gallons of wastewater per minute (or 322,560 gpd) and an approximate peak flow of 561.1 gallons of wastewater per minute (or 807,984 gpd). As stated previously, the SJVRWRF has an existing capacity of 12.4 mgd, with expansion to 14 mgd expected for completion by 2014; while existing wastewater flow through the facility is approximately 9.4 mgd. As a result, the SJVRWRF would have adequate wastewater treatment capacity to serve the Project. Therefore, implementation of the Project would not require construction of new wastewater treatment facilities or expansion of existing facilities, and impacts would be less than significant.

**Table IV.P-1
Project Wastewater Generation**

Land Use	Dwelling Unit Count	Acreage	Unit Flow Factor ¹	Average Flow (gpm)	Peak Flow (gpm) ³
Mixed Use (Commercial)	-	41.0	1,700 (gpd/acre)	48.4	121.0
Village Residential (High Density)	594	34.2	200 (gpd/du)	82.5	206.3
Medium Density Residential (High Density)	229	19.4	200 (gpd/du)	31.8	79.5
Low-Medium Residential (Medium Density)	254	42.5	350 (gpd/du)	61.7	154.3
Total				224.4	561.1
<p><i>gpd = gallons per day gpm = gallons per minute</i></p> <p>¹ From EMWD’s Planning and Design Criteria for Sewer Systems (see Table II in the Water and Wastewater Plan of Service in Appendix IV.P).</p> <p>² Peak-flow factor of 2.5.</p> <p>³ The Project as described in Section III (Project Description), includes development of 954 dwelling units. However, for the purpose of providing a conservative analysis, this calculation assumes development of 1,077 dwelling units. (See also Section III, Project Description.)</p> <p>Source: RBF, 2013.</p>					



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CUMULATIVE IMPACTS

The wastewater anticipated to be discharged by the related projects along with the Project would contribute to the cumulative generation of wastewater in the Project area. As discussed earlier, the SJVRWRF plant has more than sufficient treatment capacity to serve the Project, and each of the individual projects would be subject to the EMWD's determination of whether there is allotted sewer capacity available prior to the formal acceptance of plans and specifications by the City of Hemet. Consequently, cumulative impacts to the local and regional sewer system under the Project, in conjunction with the identified related projects in Section II (Environmental Setting) would be less than significant.

MITIGATION MEASURES

Because no significant impacts related to wastewater service were identified, no mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts related to wastewater services would be less than significant.

IV. ENVIRONMENTAL IMPACT ANALYSIS

P. UTILITIES AND SERVICE SYSTEMS

2. WATER

INTRODUCTION

The information in this section is summarized from the following documents, which are included in Appendix IV.P:

- *Water Supply Assessment for the Ramona Creek Specific Plan, Eastern Municipal Water District, March 20, 2013.*
- *Ramona Creek Water and Wastewater Plan of Service, RBF Consulting, May 21, 2013.*

ENVIRONMENTAL SETTING

Water Supplies

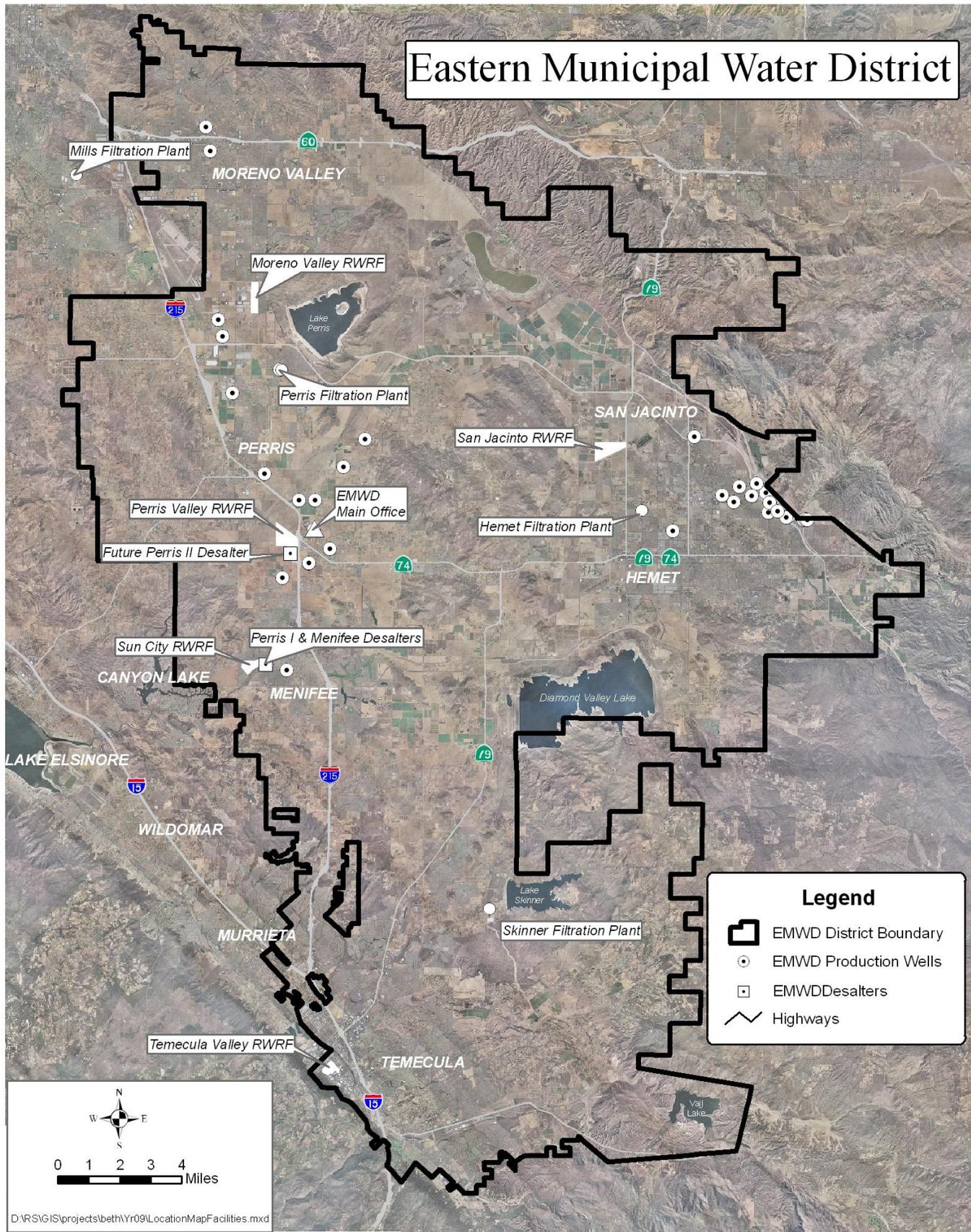
Overview of Water Supplies

The Eastern Municipal Water District (EMWD) provides water service to the City of Hemet (the “City”), including the Project site and serves much of western Riverside County (the “County”), from Temecula on the south to Beaumont on the north, and from the Perris Valley on the west to parts of the San Jacinto Valley on the east.

EMWD has four sources of water supply: imported water purchased from the Metropolitan Water District (MWD); local potable groundwater; local desalted groundwater; and recycled water. Imported water accounts for approximately 67 percent, local potable groundwater is approximately 12 percent, desalted groundwater is 3 percent, and recycled water is 19 percent of supply. Table IV.P-2 includes a list of the past supply quantities by source, based on information taken from the EMWD 2010 Urban Water Management Plan (the “2010 UWMP”). Figure IV.P-3 shows the different EMWD water supplies.

It is anticipated that the majority of the water demands within EMWD’s jurisdiction caused by future development will be met through additional water imports from MWD. Imported sources will be supplemented by an increase in desalination of brackish groundwater, recycled water use and water use efficiency. In the 2010 Regional Urban Water Management Plan (the “2010 RUWMP”) (described in more detail below), MWD analyzed the reliability of water delivery through the State Water Project (the “SWP”) and the Colorado River Aqueduct the “CRA”) and concluded that with the storage and transfer programs developed by MWD, MWD will have a reliable source of water to serve its member agencies’ needs through 2030 during normal, historic single-dry and historic multiple-dry years within a 20-year projection. Unprecedented shortage will be addressed through the principles of the Water Surplus and Drought Management Plan as described in the 2010 RUWMP.

Eastern Municipal Water District



**Table IV.P-2
Water Supply – Acre Feet per Year (AFY) 2007-2010**

Type	Source	2007	2008	2009	2010
Imported	Metropolitan Water District	109,900	94,400	84,200	75,000
Imported – Locally Treated	Metropolitan Water District	17,300	16,600	17,000	16,600
Groundwater	West San Jacinto Management Area	19,500	20,000	18,100	15,800
Desalination	West San Jacinto Management Area	4,800	3,000	4,800	5,800
Recycled Water	EMWD Regional Water Reclamation Facilities	38,600	35,100	39,200	41,500
Total		190,100	169,100	163,300	154,700
<i>Source: Water Supply Assessment Report for the Ramona Creek Specific Plan, EMWD, 2013 (refer to Appendix IV.P).</i>					

To supplement existing water supplies, EMWD has identified several projects that would supplement imported supplies, retrofit of potable water landscape customers, indirect potable recharge and additional water use efficiency. These projects will offset the demand of existing water and free up resources for new development. Table IV.P-3 provides a summary of additional potential local supplies.

**Table IV.P-3
Potential Water Supply – Acre Feet per Year (AFY) 2015-2035**

	2015	2020	2025	2030	2035
Additional Recycled Water	6,100	13,500	16,400	22,200	28,200
Desalination	4,500	4,500	4,500	4,500	4,500
Planned Additional Conservation	0	0	1,300	4,300	6,400
Water Transfers/Exchanges	0	0	0	0	0
Total	10,600	18,000	22,200	31,000	39,100
<i>Source: Water Supply Assessment Report for the Ramona Creek Specific Plan, EMWD, 2013 (refer to Appendix IV.P).</i>					

These projects are in the planning stage of development and costs and implementation timelines are subject to change. New development will be required to help fund new water supply sources. The extent of additional funding will be determined by the EMWD and may take the form of a new component of connection fees or a separate charge.

Imported and Local Water

EMWD relies on MWD to provide the majority of its potable water supply and a small percent of its non-potable water supply. The majority of EMWD's potable water is supplied in the northern part of EMWD by the Mills MWD Water Treatment Facility and in the southeastern portion of EMWD by the MWD

Lake Skinner Water Treatment Facility. Untreated water from MWD is treated at EMWD's Perris and Hemet Microfiltration Plants for use as a potable source of water.

In an effort to reduce dependency on imported water from MWD, EMWD has developed several programs designed to take advantage of local resources. High-quality groundwater is a source of water for local customers in the Hemet/San Jacinto Area. In the West San Jacinto Basin, groundwater is blended with imported water for use in the western portion of EMWD. EMWD has also constructed two desalination facilities to recover poor quality groundwater with high total dissolved solids (TDS) levels in the West San Jacinto groundwater basin areas. The product water from the desalters enters EMWD's potable distribution system. A third desalter is now in the final stages of design.

Groundwater

Information about groundwater is included in the Water Supply Assessment (the "WSA") prepared for the Project for the purposes of assisting the City in determining the adequacy of EMWD's total supply and ability to serve the Project. However, water supply needed for new development (including the Project) will be provided via imported water: 1) treated imported water directly from MWD; 2) untreated imported water from MWD, subsequently treated by EMWD; or 3) untreated imported water by EMWD and recharged into the basin for later withdrawal.

Recycled Water

Recycled water is extensively used in EMWD's service area in place of potable water. To offset municipal demand, recycled water is used to irrigate landscape and for industrial purposes. The majority of EMWD's agricultural customers also use recycled water. In some cases, recycled water is used by agricultural customers in lieu of groundwater production, increasing the amount of groundwater available for municipal use without increased recharge.

The supply of recycled water will continue to grow with EMWD's population growth. The four regional water reclamation facilities that EMWD is currently operating are all either in the process of expansion or have an expansion planned in the near future. Recycled water is currently used for both municipal and agricultural purposes. Municipal customers use recycled water for landscape irrigation and industrial process water. Agricultural customers use recycled water for irrigation of crops. A portion of agricultural demand of recycled water is in lieu of using groundwater. Currently, the use of recycled water is limited by the amount available to serve during peak demands and with livestream discharge occurring in off peak periods. EMWD has developed plans to eliminate discharge and use all of the recycled water available within the District, and to offset demand of existing potable customers, including retrofit of potable water landscape customers and indirect potable recharge.

Water Treatment

EMWD constructed the Hemet Water Filtration Plant (HWFP) in 2006, located on a 4.5-acre parcel at the intersection of Kirby Street and Commonwealth Avenue in Hemet. According to the Hemet/San Jacinto Groundwater Management Area Water Management Plan 2012 Annual Report (HSJWMP), the plant with a capacity of 12 million gallons per day (MGD), or 13,400 acre feet per year, meets the current demand as described in EMWD's Master Plan. Due to increasingly large projected demands for the area, the plant was constructed with the capability of being expanded to 44,800 AFY. During 2012, the plant treated and delivered 5,995 AF of water for the Management Plan area (which includes the City of Hemet).² Additionally, water treatment services are provided to the Project area by EMWD at the San Jacinto Valley Regional Water Reclamation Facility (the "SJVRWRF"). Expansion of the facility's treatment capacity is currently underway to expand the facility from 11 mgd to 27 mgd³. Thus, with both treatment plants available for use by the Project Site, total water treatment capacity would be approximately 23 MGD.

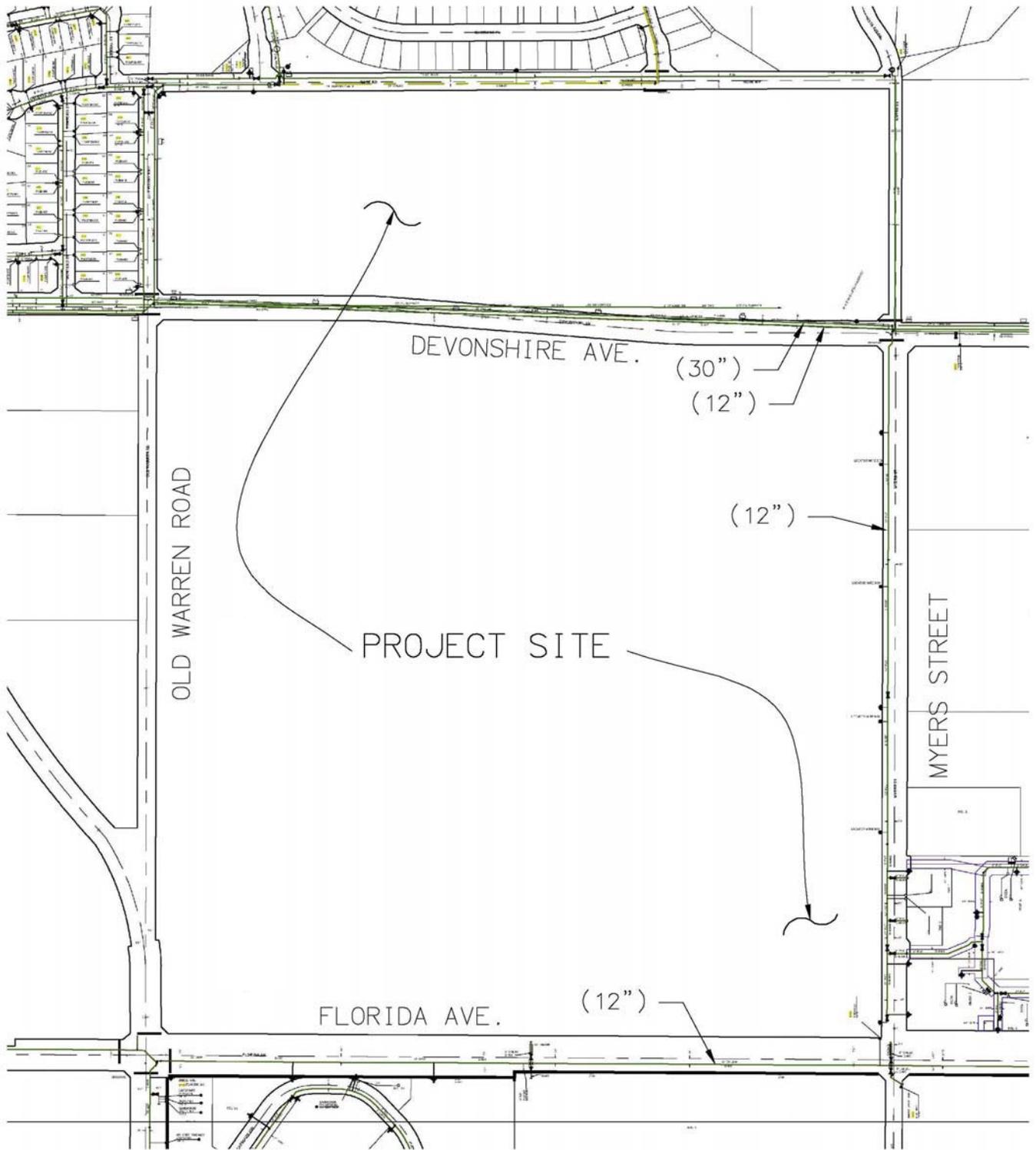
Project Site Conditions

The Project site is currently undeveloped and contains highly disturbed ruderal land. Historically, the majority of the site primarily has been used for growing field crops. There are no structures within the confines of the Project site. Specifically, the Project is within EMWD's 1719 Zone of service. Existing water lines in the vicinity of the Project site include the following (refer to Figures IV.P-4 and IV.P-5):

- 30-inch transmission and 12-inch distribution water lines in Devonshire Avenue
- 12-inch domestic water line along Florida Avenue and Myers Street between Florida Avenue and Devonshire Avenue
- 8-inch domestic waterline located along Old Warren Road between Devonshire Avenue and Celeste Avenue
- 24-inch recycled water line within Devonshire Avenue

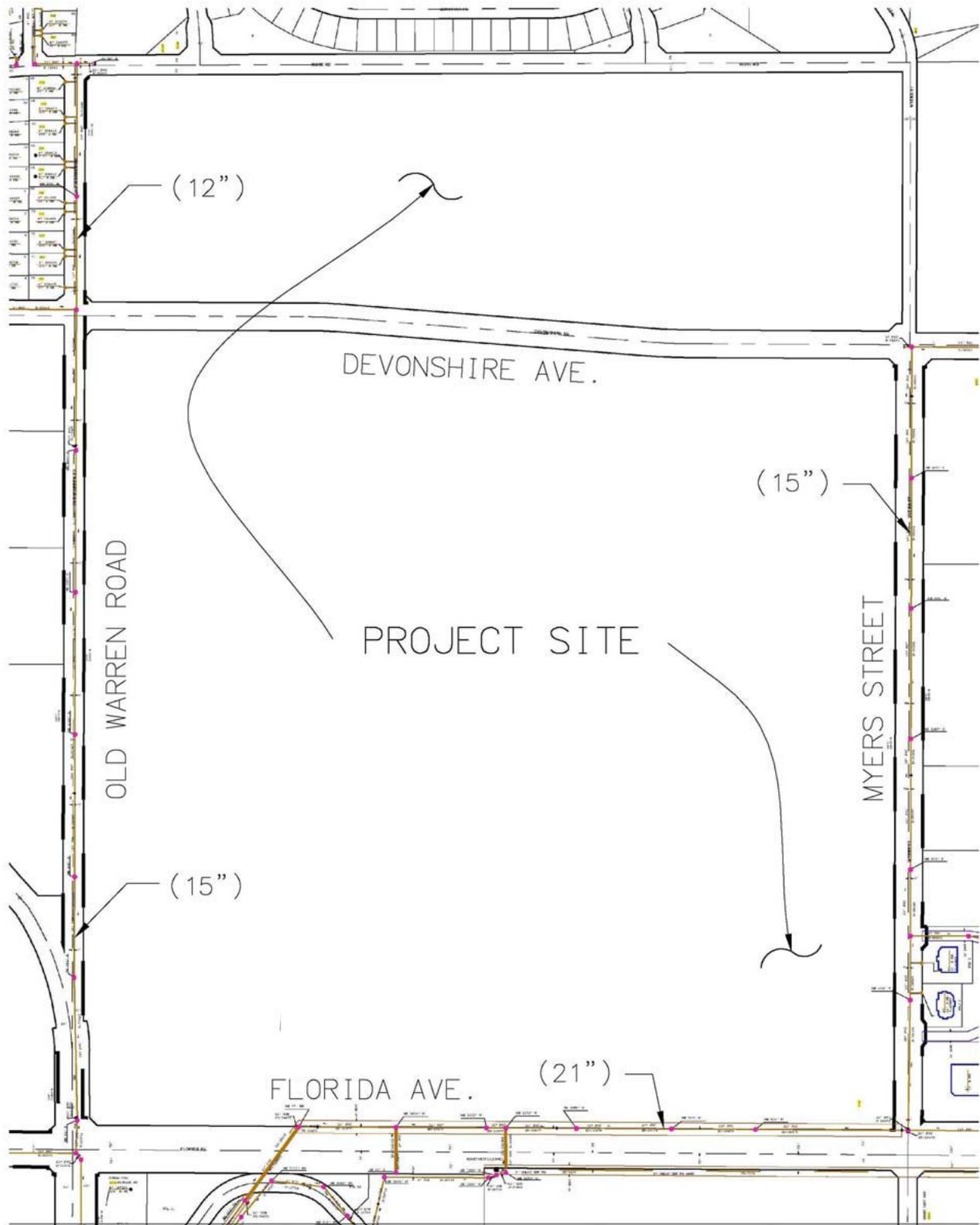
² Hemet/San Jacinto Groundwater Management Area Water Management Plan 2012 Annual Report. Page 11-12.

³ Eastern Municipal Water District – Hemet/San Jacinto Regional Water Reclamation Facility Insights: <http://www.emwd.org/index.aspx?page=180>



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REGULATORY SETTING

State

State of California Senate Bills (SB) 610 and 221 became effective January 1, 2002, amending sections 10910-10915 of the State Water Code, and requiring that counties and cities consider the availability of adequate water supplies for certain new large development projects. These statutes require that cities and counties obtain from the local water supplier written verification of sufficient water supply to serve proposed large development projects in their jurisdiction. Pursuant to SB 610, projects that are required to obtain water supply assessments include the following:

- a proposed residential development of more than 500 dwelling units;
- a proposed shopping center or business establishment of more than 500,000 square feet of floor space or employing more than 1,000 persons;
- a proposed commercial office building of more than 250,000 square feet of floor space or employing more than 1,000 persons;
- a proposed hotel or motel of more than 500 rooms;
- a proposed industrial, manufacturing, or processing plant or industrial park of more than 40 acres of land, more than 650,000 square feet of floor area, or employing more than 1,000 persons;
- a mixed-use project that falls in one or more of the above identified categories; or
- a project not falling in one of the above-identified categories, but that would demand water equal or greater to a 500 dwelling unit project.

Regional

The Urban Water Management Planning Act (California Water Code Sections 10610–10656), passed in 1983, requires each urban water supplier that provides water to 3,000 or more customers or that provides over 3,000 acre-feet of water annually to make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years. The act describes the contents of an Urban Water Management Plan (UWMP) as well as how urban water suppliers should adopt and implement the plans. The EMWD, LHMWD, and MWD have approved UWMPs, and the 2010 EMWD UWMP is consistent with the MWD UWMP.

Specifically, in June of 2011, the EMWD Board of Directors adopted the 2010 UWMP. This plan details EMWD's demand projections and provides information regarding EMWD's supply. The majority of EMWD's existing and future planned demand is met through imported water delivered by MWD. EMWD's 2010 UWMP relies heavily on information and assurances included in the 2010 RUWMP when determining supply reliability. Demand for EMWD included in the 2010 UWMP is calculated across the District and is not project-specific.

EMWD prepared its UWMP to be consistent with the Santa Ana Watershed Project Authority (the “SAWPA”) Integrated Watershed Plan (IWP). Water planning in the Santa Ana Watershed, in which the Project Site is located, is overseen by the SAWPA. The SAWPA is a joint powers authority and consists of EMWD, Inland Empire Utilities Agency, Orange County Water District, San Bernardino Valley Municipal Water District, and Western Municipal Water District. As stated above, the City is in the jurisdiction of the EMWD.

Local

City of Hemet General Plan Resource Management Element

The Hemet General Plan includes policies aimed at providing adequate utilities and service systems in the City. The following are policies contained within the City’s General Plan that are relevant to the Project:

- Strategy 1 (page II-E-38): As part of the development review process, incorporate the water resource management concepts presented in the General Plan to ensure that contemporary feasible water-saving technologies are provided and/or retrofitted into development projects.
- Strategy 2 (page II-E-38): Ensure that General Plan concepts are used to encourage the use of primarily drought-tolerant plants and planting methods in a new retrofitted landscape applications.
- Strategy 4 (page II-E-39): Where reclaimed water is or can be made available to a development project site within five years of water system construction, require the installation of a reclaimed water system for irrigation.
- Strategy 10 (page II-E-39): As a condition of approval, require that individual developments install sufficient on-site and off-site water facilities as are necessary to provide adequate water service, including fire flow, to meet the performance standards of the site’s water agency.
- Strategy 11 (page II-E-39): Where reclaimed water is available to a development project, or will be available within a fire year time frame, require that individual developments install a dual water system to utilize both reclaimed and domestic supplies.
- Strategy 13 (page II-E-39): Prior to the issuance of commercial or industrial building permits, or the recordation of residential tract maps, ensure the availability of required fire flows through field testing of pressure in area fire hydrants where feasible. In the absence of adequate fire flows, require either the construction of such off-site improvements as are necessary to achieve adequate fire flows or the installation of adequate on-site fire protection devices.
- Strategy 2 (page II-E-58): Encourage source separation in residential and commercial sectors by providing space internally and/or externally for the purpose of storage and collection.

ENVIRONMENTAL IMPACT ANALYSIS

Threshold of Significance

In accordance with Appendix G of the CEQA Guidelines, a project could have a significant environmental impact if the project would result in the following:

- a) 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; or
- b) Have insufficient water supplies available to serve the project from existing entitlements and resource, or are new or expanded entitlements needed.

Project Impacts

Impact IV.P-4: The Project would not require the construction of new water treatment facilities or the expansion of existing facilities, and impacts would be less than significant.

EMWD has two water filtration plants, one in Hemet and one in Perris, with a total existing capacity of 23 MGD or about 25,780 acre-feet per year. Additionally, the four regional water reclamation facilities that EMWD is currently operating are all either in the process of expansion or have an expansion planned in the near future. As described below, the Project’s water demand would be approximately 560.7 acre-feet per year (or roughly 500,625 gpd), which falls within the existing and projected water supplies of EMWD. Thus, the water treatment plants would have adequate capacity to treat any water associated with the Project. As such, no new or expanded water treatment facilities would be necessary to construct. Therefore, Project impacts related to water treatment would be less than significant.

**Table IV.P-4
Project Water Demand – Acre Feet per Year (AFY)**

Description	Quantity	Units	Demand per Unit	Demand (AFY)
Medium Density Residential	182	Dwelling Units	0.56 AFY	101.9
High Density Residential	823	Dwelling Units	0.27 AFY	222.2
Parks	35.1	Acres	3.34 AFY	122.9
Mixed Use	43.0	Acres	1.79 AFY	73.4
Elementary School	750	Students	8 gpd/student	6.7
Total				527.1
AFY = acre-feet per year				
Source: Water Supply Assessment Report for the Ramona Creek Specific Plan, EMWD, 2013 (refer to Appendix IV.P).				

Impact IV.P-5: There would be sufficient water supplies to serve the Project, and as such, impacts would be less than significant.

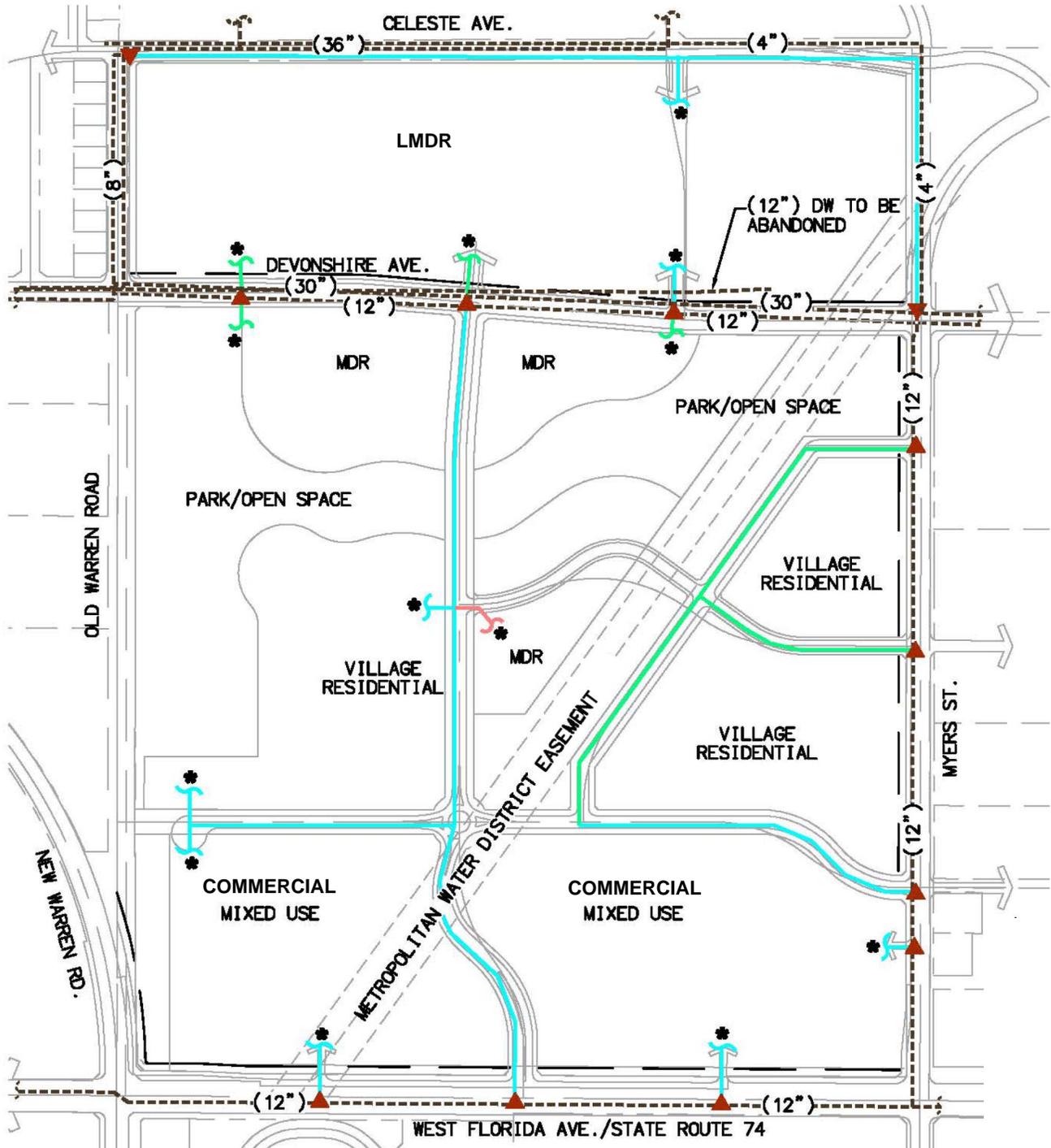
The Project's water supply needs would be provided by EMWD via existing pumps, reservoirs, and piping to the main points of connection. The Project would use a public system of domestic and recycled water and would connect to the existing water lines in the vicinity of the Project site (refer to Figures IV.P-6 and IV.P-7).

EMWD prepared a WSA for the Development Project (refer to Appendix IV.P) in conformance with California law to ensure that the water usage of the Project would be consistent with EMWD's long-term water supply availability. As shown on Table IV.P-4, the estimated water demand for the Project is 560.7 acre-feet annually. EMWD concluded that the Project's demand for water could be accommodated by EMWD's existing and projected supplies. Thus, the Project would not require the expansion or acquisition of new water supplies. Therefore, Project impacts related to water supply would be less than significant.

CUMULATIVE IMPACTS

Generally, a "cumulative impact" refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental effects. An environmental impact report must discuss the cumulative impacts of a project when the project's incremental impacts are cumulatively considerable. An impact is considered "cumulatively considerable" when the incremental impacts of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. When the lead agency is examining a project with an incremental effect that is not "cumulatively considerable," the lead agency need not consider that effect significant, but must briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.

The analysis below is based on a list approach to determine the Project's contributing effect on potential cumulative impacts to water. As discussed above, the EMWD infrastructure and supplies would serve the Project's water needs. The EMWD serves residents and businesses located within the City (and in particular, the Project site). Implementation of the Project in combination with the related projects is predicted to generate a cumulative demand for approximately 4,499.75 acre-feet of water per year, (refer to Table IV.P-5. However, the EMWD anticipates that its projected water supplies available during normal, single-dry, and multi-dry water years through the year 2035 and within the projection contained in the 2010 UWMP, would meet the projected water demand associated with the Project as well as existing and planned future developments in the EWMD's system.



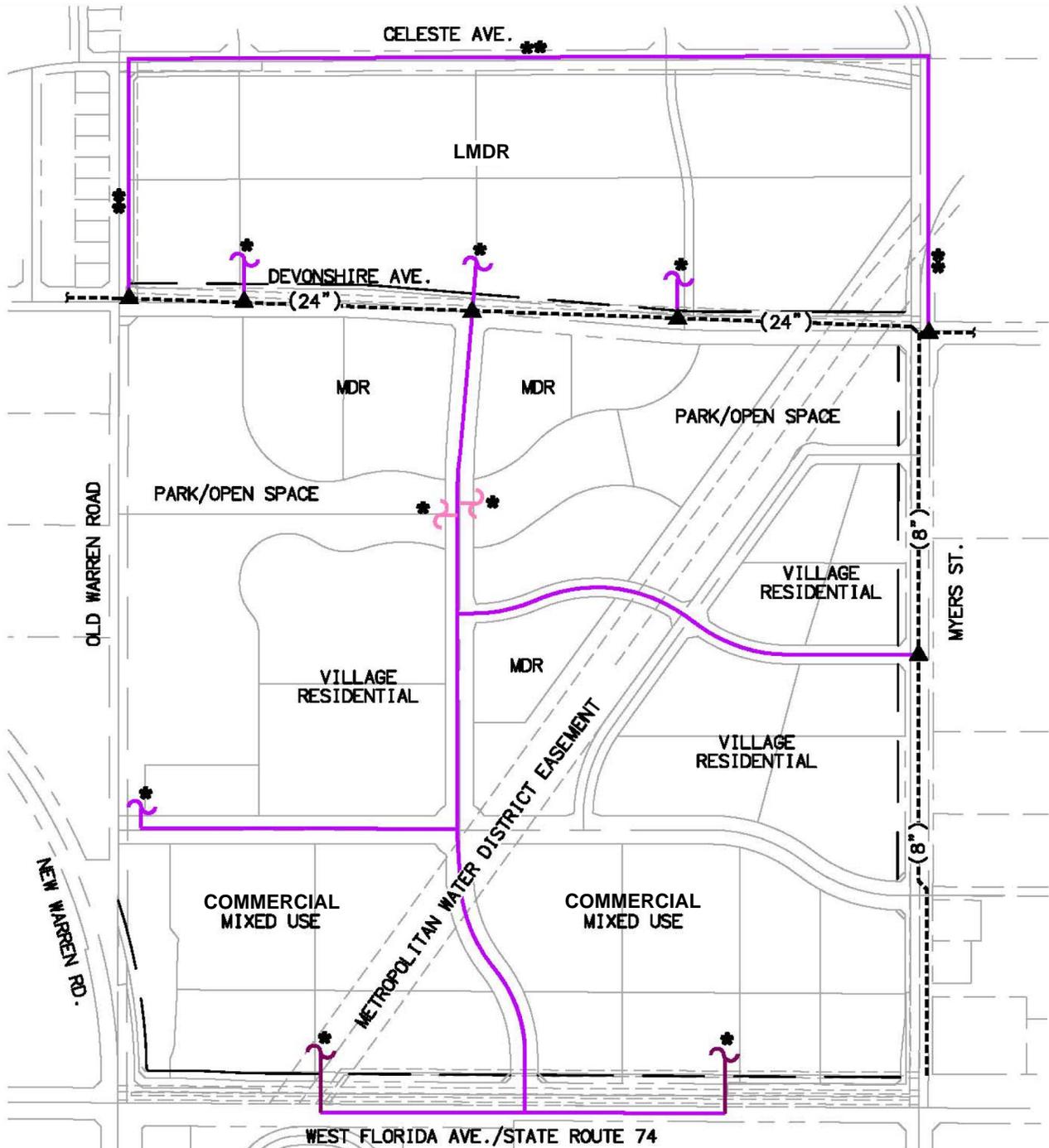
* ON-SITE PIPE SIZES AND ALIGNMENT CORRIDORS MAY VARY DEPENDENT ON FINAL SITE PLANS.

- LEGEND**
- (W)-- EXISTING WATER
 - 12" WATER
 - 10" WATER
 - 8" WATER
 - ▲ POINT OF CONNECTION TO EXISTING SYSTEM



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- LEGEND**
- (RW)--- EXISTING RECYCLED WATER
 - 8" RECYCLED WATER
 - 6" RECYCLED WATER (ON-SITE)
 - 4" RECYCLED WATER (ON-SITE)
 - ▲ POINT OF CONNECTION TO EXISTING SYSTEM
- * ON-SITE PIPE SIZES AND ALIGNMENT CORRIDORS MAY VARY DEPENDENT ON FINAL SITE PLANS.
- ** OFF-SITE PIPE ALIGNMENT MAY VARY DURING FINAL DESIGN DEPENDENT ON EXISTING UTILITIES.



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**Table IV.P-5
Approximate Cumulative Water Demand – Acre Feet per Year (AFY)**

Land Use	Size (sf/unit/rooms)	Size in Acres	Demand Per Unit/Acre (AFY)	Demand (AFY)
Commercial/Retail		38.35	1.79	68.65
Hotel		2.30	1.79 ^a	4.12
Senior/Assisted Living	1,977		0.56 ^b	1,107.12
Single-Family Residential	12,124		0.56	6,789.44
Office/Industrial		13.28	1.79	23.77
Hospital	49		0.56 ^c	27.44
Park/Open Space		110.2	3.34	368.07
Schools	2,250		1.0 ^d	2,250.00
Multi-Family Residential	867		0.27	234.09
Related Projects Total				3,939.05
Plus Project				560.70
Cumulative Total				4,499.75
<p><i>sf = square feet;</i></p> <p>^a Hotel use is based on conservative Mixed-Use Generation Rate obtained from EMWD WSA for the Ramona Creek Specific Plan.</p> <p>^b Senior Housing Use based on Medium-Density Residential Generation Rate obtained from EMWD WSA for the Ramona Creek Specific Plan.</p> <p>^c Hospital use based on High-Density Residential Generation Rate obtained from EMWD WSA for the Ramona Creek Specific Plan.</p> <p>^d School use is based on 1-af per year per student obtained from EMWD WSA for the Ramona Creek Specific Plan.</p> <p>Source: CAJA Environmental Services, LLC. 2013.</p>				

Furthermore, each related project would be required to comply with city and state water code requirements and conservation programs for both water supply and infrastructure. As stated previously, EMWD concluded that the Project’s demand for water could be accommodated by existing and projected water supplies. Therefore, the Project’s contribution to any cumulative water supply impacts would not be considerable. As stated above, the remaining yearly water treatment capacity of both the HFP and SJVRWRF is 25,780 acre-feet of water per year. Thus, the EMWD would have adequate capacity to treat the water demanded by the Project and related projects. Therefore, cumulative impacts related to water treatment would be less than significant.

MITIGATION MEASURES

No significant impacts related to water service have been identified, and no mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts related to water services would be less than significant.

IV. ENVIRONMENTAL IMPACT ANALYSIS

P. UTILITIES AND SERVICE SYSTEMS

3. SOLID WASTE

ENVIRONMENTAL SETTING

Solid Waste and Collection Facilities

Within the City of Hemet (the “City”), solid waste management, including collection and disposal services and landfill operation, is administered by various public agencies and private companies. Refuse from single-family residential and limited multi-family residential land uses on public streets is collected by the Riverside County Waste Management Department (RCWMD) and disposed of at County-operated landfills. Waste generated by the majority of multi-family residential sources and all commercial and industrial sources is collected by private contractors. Construction waste is also collected by private contractors. Private contractors can dispose of waste at a County-operated landfill or a landfill of their choosing.

The City currently complies with the 50 percent landfill diversion requirement mandated by the State of California.⁴ Long-term compliance with new requirements for 70 percent diversion will require increased public education and participation in recycling program offerings in the community. The Project site is vacant and thus, no solid waste is currently being collected from the Project site.

Landfills

There are two solid waste management providers within the area of the Project Site: CR&R Waste and Recycling Services, which provide services within the City boundaries, and Waste Management of the Inland Empire (WM), which serves unincorporated areas of the City. Additionally, Hemet owners or residents may obtain a City permit that allows self-hauling of solid waste in lieu of utilizing services offered by CR&R.

CR&R provides waste and recycling services in the City of Hemet, replacing the City’s Integrated Waste Management Division in December 2011. Services offered include the following:

- Single-family residential recycling services.
- Multiple-family residential recycling services.
- Commercial businesses recycling services.
- Commercial food waste collection program.
- Clean air vehicles.
- Hazardous materials disposal.

⁴ *City of Hemet, General Plan 2030, Chapter 5.3.6, Solid Waste Management, Community Services and Infrastructure, Page 5-29.*

- Guaranteed landfill diversion rate of 50 percent by the end of 2012 and 55 percent by the end of 2016.
- Comprehensive public education and outreach to maintain high diversion rates.

CR&R delivers the solid waste and recycling materials that it collects to its Perris Transfer and Material Recovery Facility located in Perris, California. At this facility, waste collected may be processed or transferred to another site for processing depending on the type of waste material. Waste materials are occasionally disposed at the Lamb Canyon Sanitary Landfill in Beaumont (discussed below along with other landfills within the County or Riverside), which is owned and operated by the RCWMD and located 10 miles north of Hemet on State Route 79. E-Waste is also accepted for drop off at the Lamb Canyon landfill and is occasionally collected through events sponsored by local non-profit organizations, such as the Green Coalition.

Lamb Canyon Landfill⁵

The Lamb Canyon Landfill is located between the City Beaumont and City of San Jacinto at 16411 Lamb Canyon Road. As mentioned previously, the landfill is owned and operated by the RCWMD. The landfill property comprises approximately 1,189 acres, of which 580.5 acres encompass the current landfill permit area. Of the 580.5-acre landfill permit area, approximately 144.6 acres are permitted for waste disposal. The landfill is currently permitted to receive 5,000 tons of refuse per day and had an estimated total disposal capacity of approximately 15.646 million tons. As of January 1, 2013, the landfill had a total remaining capacity of approximately 7.616 million tons. The current landfill remaining disposal capacity is estimated to last, at a minimum, until approximately 2021. During 2012, the Lamb Canyon Landfill accepted a daily average volume of 1,638 tons (or 3,362 tons per day [tpd]? remaining capacity based on the 5,000 tpd allowed under its current permit) and a period total of approximately 504,388 tons. Landfill expansion exists at the Lamb Canyon Landfill site, if needed.

Badlands Landfill

The Badlands Landfill is located northeast of the City of Moreno Valley at 31125 Ironwood Avenue and accessed from State Highway 60 at Theodore Avenue. The landfill is owned and operated by RCWMD. The existing landfill comprises 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 17.620 million tons. As of January 1, 2013, the landfill had a total remaining disposal capacity of approximately 7.930 million tons. The Badlands Landfill is projected to reach capacity, at the earliest time, in 2024.

⁵ *The information regarding the Lamb Canyon Landfill, the Badlands Landfill, and the El Sobrante Landfill was provided via written correspondence from Riverside County Waste Management Department, Sung key Ma, Urban/Regional Planner IV, March 11, 2013. Refer to Appendix I.*

During 2012, the Badlands Landfill accepted a daily average volume of 1,757 tons (or 2,243 tpd remaining capacity based on the 4,000 tpd allowed under its current permit) and a period total of approximately 541,034 tons.

El Sobrante Landfill

The El Sobrante Landfill is located east of Interstate 15 and Temescal Canyon Road to the south of the City of Corona and Cajalco Road at 10910 Dawson Canyon Road. The landfill is owned and operated by USA Waste of California (private company) and encompasses 1,322 acres, of which 645 acres are permitted for landfill operation. According to Solid Waste Facility Permit (SWFP) #AA-33-0217 issued on October 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 tons per week for in-County refuse, including the City of Hemet, and the SWFP allows a maximum of 16,054 tpd of waste to be accepted into the landfill, due to the limits on vehicle trips. If needed, 5,000 tpd may be reserved for County waste, leaving the maximum commitment of non-County waste at 11,054 tpd. As of January 1, 2013, the landfill had a remaining in-County disposal capacity of approximately 37.157 million tons. In 2012, the El Sobrante Landfill accepted a total of 651,709 tons, or approximately 0.652 million tons, of waste generated within Riverside County. The landfill is expected to reach capacity in approximately 2045.

Accounting for all three landfills, the total daily remaining capacity is roughly 10,605 tpd, as outlined below in Table IV.P-6.

**Table IV.P-6
Landfill Capacity and Intake**

Landfill Facility^a	Estimated Closure (Capacity) Date	Permitted Daily Intake (tpd)	Average Daily Intake (tpd)	Remaining Permitted Daily Intake (tpd)
Lamb Canyon Landfill	2021	5,000	1,638	3,362
Badlands Landfill	2024	4,000	1,757	2,243
El Sobrante Landfill	2045	16,054	1,785	5,000 ^b
Total Remaining Intake				10,605
<i>tpd = tons per day</i>				
^a <i>Written correspondence from Riverside County Waste Management Department, Sung key Ma, Urban/Regional Planner IV, March 11, 2013. Refer to Appendix I.</i>				
^b <i>Based on the 5,000 tpd required commitment per day reserved for County waste.</i>				

Recycling Facilities

CR&R delivers recycling materials that it collects to its Perris Transfer and Material Recovery Facility located in Perris, California.⁶ At this facility, waste collected may be processed or transferred to another site for processing depending on the type of waste material. Disposal for certain hazardous materials is available to City residents through services provided through CR&R Inc. Hazardous materials collection events are also held locally by RCWMD.

Construction and Demolition Debris

The U.S. Environmental Protection Agency (EPA) report, *Characterization of Building-Related Construction and Demolition Debris in the United States*, characterizes the quantity and composition of building-related construction and demolition (C&D) debris generated in the United States, and summarizes the waste management practices for this waste stream.⁷ The report also includes building-related C&D debris generation rate estimates based on empirical data for new construction sites gathered by the National Association of Homebuilders (NAHB) Research Center; the Metropolitan Service District (METRO) in Portland, Oregon; Woodbin 2, a non-profit organization in Wake County, North Carolina; McHenry County, Illinois; and Cornell University. The following information is based on this U.S. EPA report.

The California State definition of C&D debris includes concrete, asphalt, wood, drywall, metals, and many miscellaneous and composite materials generated by the demolition and/or new construction of structures such as residential and commercial buildings and roadways. Construction debris from building sites typically consists of trim scraps of construction materials, such as wood, sheetrock, masonry, and roofing materials. There is typically much less concrete in construction debris than demolition debris, although some construction projects produce considerable quantities of concrete, often depending on the technology used to build concrete structures such as walls. Trim scraps from residential construction sites typically represent between six and eight percent of the total weight of the building materials delivered to the site, excluding the foundation, concrete floors, driveways, patios, etc. There is typically very little waste concrete to dispose of from residential construction projects.

⁶ City of Hemet, *General Plan 2030, Chapter 5, Community Services and Infrastructure, Page 5-30.*

⁷ U.S. EPA Report No EPA530-98-010, *Characterization of Building Related Construction and Demolition Debris in the United States, June 1998, website: <http://www.epa.gov/osw/hazard/generation/sqg/c%26d-rpt.pdf>.*

REGULATORY SETTING

State

Recognizing the need to address declining landfill capacity, the State of California has enacted three key pieces of legislation relating to solid waste: Assembly Bill 939 – the California Integrated Waste Management Act of 1989 (Public Resources Code Sections 41000 – 41460, referred to as AB 939); Senate Bill 1327 – the California Solid Waste Reuse and the Recycling Access Act of 1991 (Public Resources Code Sections 42900 – 42911, SB 1327); and Senate Bill 1374 – Construction and Demolition Waste Materials Diversion Requirements (SB 1374). Each of these regulations is described below.

Assembly Bill 939 – California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 and the California Solid Waste Reuse and Recycling Access Act of 1991, as amended, were enacted to reduce, recycle, and reuse solid waste generated in the State to the maximum extent feasible. Specifically, AB 939 requires city and county jurisdictions to identify an implementation schedule to divert 50 percent of the total waste stream from landfill disposal by 2000. AB 939 also requires each city and county to promote source reduction, recycling, and safe disposal or transformation. Cities and counties are required to maintain the 50 percent diversion specified by AB 939 past the year 2000.

AB 939 further requires each city and county to conduct a Solid Waste Generation Study and to prepare a Source Reduction and Recycling Element (SRRE) to describe how it would reach the goals. The SRRE contains programs and policies for fulfillment of the goals of AB 939, including the above-noted diversion goals, and must be updated annually to account for changing market and infrastructure conditions. As projects and programs are implemented, the characteristics of the waste stream, the capacities of the current solid waste disposal facilities, and the operational status of those facilities are upgraded, as appropriate. California cities and counties are required to submit annual reports to the California Integrated Waste Management Board (CIWMB) to update their progress toward the AB 939 goals (i.e., source reduction, recycling and composting, and environmentally safe land disposal).⁸ This is typically done through an Integrated Waste Management Plan at a County level. As mentioned above, the City currently complies with the 50 percent landfill diversion requirement mandated by the State of California.⁹ Long-term compliance with new requirements for 70 percent diversion will require increased public education and participation in recycling program offerings in the community.

⁸ *California Public Resources Code, §40050 et seq.*

⁹ *City of Hemet, General Plan 2030, Chapter 5.3.6, Solid Waste Management, Community Services and Infrastructure, Page 5-29.*

Senate Bill 1327 – California Solid Waste Reuse and the Recycling Access Act of 1991

The California Solid Waste Reuse and the Recycling Access Act of 1991, as amended, requires each local jurisdiction to adopt an ordinance requiring commercial, industrial, or institutional building, marina, or residential buildings having five or more living units to provide an adequate storage area for the collection and removal of recyclable materials. The sizes of these storage areas are to be determined by the appropriate jurisdictions' ordinance. If no such ordinance exists with the jurisdiction, the CIWMB model ordinance shall take effect.

Senate Bill 1374 Construction and Demolition Waste Materials Diversion Requirements

Passed in 2002, the Construction and Demolition Waste Materials Diversion Requirements dictate that jurisdictions include in their annual AB 939 report a summary of the progress made in diverting C&D waste. The legislation also required that the CIWMB adopt a model ordinance for diverting 50 to 75 percent of all C&D waste from landfills. Illustrating compliance with Senate Bill 1374, the City currently complies with the 50 percent landfill diversion requirement mandated by the State of California.

Regional***Countywide Integrated Waste Management Plan***

The County of Riverside implemented its Countywide Integrated Waste Management Plan (CIWMP) in 1996 in accordance with AB939, which was adopted in an effort to reduce the volume and toxicity of solid waste that is landfilled. The CIWMP is required, via a five-year report to the CIWMB, to illustrate their progress towards achieving AB939 goals. According to the latest available review report dated 2009, most of the jurisdictions within the County achieved an increase in their diversion rates from 2002 to 2006. Twenty-three jurisdictions (including City of Hemet) achieved 50 percent diversion, and two other jurisdictions are still awaiting review.

Countywide Siting Element

The Riverside Countywide Siting Element, as one component of the CIWMP, was prepared in accordance with the objectives of AB 939 to describe those facilities that would be used for the development of adequate transformation or disposal capacity for waste that has been first reduced through source reduction, reuse, recycling and composting. It continues to serve as a policy guideline, outlining strategies, rather than specific development programs, to meet the disposal needs of Riverside County and its cities. The County's Annual Review Report continues to be the tool used to evaluate the adequacy of the County's solid waste system to handle and dispose of the solid waste generated that cannot be diverted, and to report on the changes in permitted disposal capacity.

During the CIWMP five-year review period from September 2003 to September 2008, Riverside County had eight active Class III landfills that were permitted for the disposal of non-hazardous, municipal solid

waste. These landfills are each located in the County unincorporated area. With the exception of the El Sobrante Landfill, which is privately owned and operated, each is operated by RCWMD.

Local

City of Hemet General Plan

The Hemet General Plan includes goals and policies aimed at maintaining an adequate disposal system of solid waste within the City. The following are goals and policies contained within the City's General Plan that are relevant to the Project:

Goal CSI-6: Maintain an adequate and efficient system of collection and disposal of solid waste generated in the City in compliance with California Integrated Waste Management Board requirements.

- **Policy CSI-6.1 Solid Waste System:** Promote efficient, economical, and environmentally sound waste collection, management, and disposal.
- **Policy 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.
- **Policy 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.

ENVIRONMENTAL IMPACT ANALYSIS

Threshold of Significance

In accordance with Appendix G of the CEQA Guidelines, a project could have a significant environmental impact if the following would occur:

- a) Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs; or
- b) Conflict with federal, state, and local statutes and regulations related to solid waste.

As discussed in Section IV.A (Impacts Found to be Less Than Significant), the Project would not result in significant impacts related to issue "b." Thus, no further analysis of this issue is required.

Project Design Features

The Project includes the following Project Design Features (PDFs) related to reducing the need for landfill capacity:

-
-
- The construction contractor shall only contract for waste disposal services with a company that recycles demolition and construction-related wastes. The contract specifying recycled waste service shall be presented to the Building and Safety Department prior to approval of Certificate of Occupancy.
 - To facilitate on-site separation and recycling of construction-related wastes, the construction contractor should provide temporary separation bins onsite during demolition.
 - Trash service may be individual or centralized collection, as is appropriate for the design of each area of the Project.
 - Individual collection is trash collection that is provided at each unit. Homes serviced using individual containers shall have a minimum of nine square feet of designated space for each container and the space to store two containers. The container storage space does not have to be contiguous or indoors. The approved floor plan must identify the container storage area.
 - Centralized collection areas provide common trash bins for projects without individual containers. Walking distance to a bin or compactor should be less than 250 feet from the door of the facility it serves. Unless a larger area is specifically required by the trash hauler based upon the proposed use, common refuse and recycling enclosures shall have a minimum interior dimension of ten square feet.
 - Centralized trash collection areas shall be enclosed within a building or screened with masonry walls having a minimum height of six feet with self-latching gates. Access gates or doors to any trash area not enclosed within a building are to be of opaque material. Screening and enclosures shall be designed to be architecturally compatible with the building and landscape design in terms of material, color, shape, and size. Refuse and recycling receptacles shall be completely screened from public rights-of-way and parking areas through site orientation, enclosures, and/or landscaping, and shall be situated so as to eliminate noise and visual intrusion and eliminate fire hazards.
 - The certified waste hauler contracted by the developer(s) shall implement a curbside recycling program within the proposed project. The contract shall also include provisions for separating lawn trimmings and other green waste for recycling. The responsibility for the waste hauler contract shall ultimately be transferred from the developer to the homeowner's association for residential areas or property owner for non-residential areas.
 - All commercial use shall be required to provide trash compactors for non-recyclable wastes. Each separate building in the Commercial Mixed-Use District shall provide one refuse bin and one recycling bin, or as required by trash provider.
 - Prior to recordation of the first subdivision map on the property, a comprehensive waste-recycling program for the City shall be submitted and approved by the City's waste hauler.

Project Impacts

Impact IV.P-6: The Project would be served by landfills with sufficient permitted capacity to accommodate the project's solid waste disposal needs, and no significant impacts would occur.

Construction Impacts

Because the Project site is not developed with any structures, no demolition activities would occur as a result of construction of the Project. Based on construction waste generation rates estimated by the U.S. EPA's *Characterization of Building-Related Construction and Demolition Debris in the United States* (see "Environmental Setting" discussion, above), construction of the Project would generate a total of approximately 4,095 tons of solid waste, conservatively assuming no recycling efforts (refer to Table IV.P-7).

**Table IV.P-7
Project Solid Waste Generation – Construction**

Land Use	Size (sf)	Generation Rate (lbs/sf) ¹	Total Daily Solid Waste Generation (lbs)
Residential	1,227,600	4.38	5,376,888
Commercial	723,288 ²	3.89	2,813,590
Total Construction Waste			8,190,478 (or 4,095 tons)
<i>sf = square feet lbs = pounds</i>			
¹ U.S. EPA Report No EPA530-98-010, <i>Characterization of Building Related Construction and Demolition Debris in the United States</i> , June 1998. Applied generation rates are averages of empirical waste assessments of residential demolition, non-residential demolition, residential construction, and non-residential construction waste streams in the United States.			
² Includes development of the elementary school, assuming 250 sf/student (250sf x 750 students = 187,500 sf).			
<i>Source: CAJA Environmental Services, 2013.</i>			

As discussed previously, the remaining combined daily intake capacity of the landfills serving the Project area is 10,605 tpd. As such, these landfills would have adequate capacity to accommodate the average daily construction waste generated by the Project. Additionally, adherence to AB 939 and required use of recycling facilities would reduce further the amount of construction waste that could be deposited in the landfills. Therefore, Project impacts related to construction solid waste disposal would be less than significant.

Operational Impacts

As shown on Table IV.P-8, the Project would generate approximately 9.53 tons (19,066 pounds) of solid waste per day during its operation, conservatively assuming no recycling efforts. As stated previously, the remaining combined daily intake capacity of the landfills serving the Project area is 10,605 tpd. As such, these facilities would have adequate capacity to accommodate the daily operational waste (9.53

tons) generated by the Project. Additionally, adherence to AB 939 and required use of recycling facilities would reduce further the amount of waste that could be deposited in the landfills. Also, the Project would be required to participate in the City’s on-going recycling efforts (refer to Mitigation Measures P-1 through P-18) to further reduce the need the landfill capacity. Therefore, Project impacts related to operational solid waste disposal would be less than significant.

**Table IV.P-8
Project Solid Waste Generation – Operation**

Land Use	Size	Generation Rate (lbs/1,000 sf/day)¹	Total Daily Solid Waste Generation (lbs/day)
Residential Units	954 DU	12.23 lbs/unit/day	11,667
General Office ²	113,256 sf	0.006 lbs/sf/day	680
Elementary School ³	750 students	1 lbs/student/day ⁴	750
Institutional ⁵	166,000 sf	0.007 lbs/sf/day	1,162
Shopping Center ⁶	369,788 sf	0.013 lbs/sf/day	4,807
Parks/Open Space	37.1 acres	---	---
Total Daily Waste			19,066 (9.53 tons)
<i>sf = square feet</i> <i>DU = dwelling unit</i> ¹ California Integrated Waste Management Board (CIWMB) 2004. ² Assumes development of the Mixed-Use Overlay. ³ Assumes development of the School Overlay. ⁴ CIWMB, Estimated Solid Waste Generation Rates for Institutions, website: http://www.calrecycle.ca.gov/WasteChar/WasteGenRates/Institution.htm . ⁵ Institutional land uses would be developed within the east side of the Mixed-Use Overlay. ⁶ Shopping Center land uses would be developed within the west side of the Mixed-Use Overlay. Source: CAJA Environmental Services, 2013; The Planning Center, 2013.			

CUMULATIVE IMPACTS

Implementation of the Project in combination with the 73 related projects could further increase regional demands on landfill capacities. As shown on Table IV.P-9, the Project and the related projects would generate approximately 83.1 tons (approximately 166,162 pounds) of solid waste per day. Similar to the Project, the related projects would participate in regional source reduction and recycling programs, further reducing the amount of solid waste to be disposed of at the landfills described above. Because the related projects are located in the same vicinity as the Project, they would also likely utilize Lamb Canyon, Badlands, and El Sobrante landfill facilities during construction and operation. As discussed previously, the remaining combined daily intake of these landfills is 10,605 tons per day. As such, these landfills would have adequate capacity to accommodate the 83.1 tons per day disposal needs of the Project and the related projects. Therefore, cumulative solid waste impacts would be less than significant.

**Table IV.P-9
Cumulative Solid Waste Generation**

Land Use	Size	Generation Rate	Total (lbs/day)
Commercial/Retail	1,670,590 sf	5 lbs/1000 sf/day ^{a, b}	8352.95
Hotel	105 Rooms	2 lbs/room/day	210
Senior/Assisted Living	1977 DU	4 lbs/unit/day	7908
Single-Family Residential	12,124 DU	10 lbs/unit/day	121240
Office/Industrial	578,540 sf	6 lbs/1000 sf/day	3471.24
Hospital	49 Rooms	4 lbs/unit/day	196
Park/Open Space	110.2 acres	0	0
Schools	2,250 Students	1 lbs/student/day ^c	2250
Multi-Family Residential	867 DU	4 lbs/unit/day	3468
Related Projects Total			147,096.19
Plus Project			19,066.00
Cumulative Total			166,162.19 83.1 tons
<p><i>DU = dwelling unit; sf = square feet</i> ^a CIWMB, Estimated Solid Waste Generation Rates for Commercial Establishments, website: http://www.calrecycle.ca.gov/WasteChar/WasteGenRates/Commercial.htm. ^b CIWMB, Estimated Solid Waste Generation Rates for Service Establishments, website: http://www.calrecycle.ca.gov/WasteChar/WasteGenRates/Service.htm. ^c CIWMB, Estimated Solid Waste Generation Rates for Institutions, website: http://www.calrecycle.ca.gov/WasteChar/WasteGenRates/Institution.htm. Source: CAJA Environmental Services, 2013.</p>			

The County has also supported State legislation (such as AB 1939 in 2000 and AB 2770 in 2002) that encourages the development of waste conversion technologies. Therefore, this ongoing process of improving solid waste facilities and advancing disposal techniques and strategies would further minimize the already less than significant impact on cumulative solid waste generation and disposal.

MITIGATION MEASURES

No significant impacts related to solid waste have been identified, and no mitigation measures are required. However, the following PDFs have been identified to ensure a reduction in the Project's demand for landfill capacity.

- P-1: The construction contractor shall only contract for waste disposal services with a company that recycles demolition and construction-related wastes. The contract specifying recycled waste service shall be presented to the Building and Safety Department prior to approval of Certificate of Occupancy.
- P-2: To facilitate on-site separation and recycling of construction-related wastes, the construction contractor should provide temporary separation bins onsite during demolition.

- P-3: Trash service may be individual or centralized collection, as is appropriate for the design of each area of the Project.
- P-4: Individual collection is trash collection that is provided at each unit. Homes serviced using individual containers shall have a minimum of nine square feet of designated space for each container and the space to store two containers. The container storage space does not have to be contiguous or indoors. The approved floor plan must identify the container storage area.
- P-5: Centralized collection areas provide common trash bins for projects without individual containers. Walking distance to a bin or compactor should be less than 250 feet from the door of the facility it serves. Unless a larger area is specifically required by the trash hauler based upon the proposed use, common refuse and recycling enclosures shall have a minimum interior dimension of ten square feet.
- P-6: Centralized trash collection areas shall be enclosed within a building or screened with masonry walls having a minimum height of six feet with self-latching gates. Access gates or doors to any trash area not enclosed within a building are to be of opaque material. Screening and enclosures shall be designed to be architecturally compatible with the building and landscape design in terms of material, color, shape, and size. Refuse and recycling receptacles shall be completely screened from public rights-of-way and parking areas through site orientation, enclosures, and/or landscaping, and shall be situated so as to eliminate noise and visual intrusion and eliminate fire hazards.
- P-7: The certified waste hauler contracted by the developer(s) shall implement a curbside recycling program within the proposed project. The contract shall also include provisions for separating lawn trimmings and other green waste for recycling. The responsibility for the waste hauler contract shall ultimately be transferred from the developer to the homeowner's association for residential areas or property owner for non-residential areas.
- P-8: All commercial use shall be required to provide trash compactors for non-recyclable wastes. Each separate building in the Commercial Mixed-Use District shall provide one refuse bin and one recycling bin, or as required by trash provider.
- P-9: Prior to recordation of the first subdivision map on the property, a comprehensive waste-recycling program for the City shall be submitted and approved by the City's waste hauler.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts related to solid waste would be less than significant.

IV. ENVIRONMENTAL IMPACT ANALYSIS
P. UTILITIES AND SERVICE SYSTEMS
4. ENERGY

ENVIRONMENTAL SETTING

Electricity

Electrical power in the City is provided by Southern California Edison (SCE). SCE maintains and operates the transmission and distribution infrastructure necessary to provide electricity to users throughout its service area of approximately 50,000 square miles in central, coastal, and southern California.¹⁰ A growing percentage of the energy supplied by SCE is from these renewable sources in compliance with a state mandate to generate 33 percent of their electricity from renewable resources by 2020.¹¹ According to the County of Riverside General Plan Update EIR, electrical consumption at buildout (year 2030) of the General Plan would be roughly 684,601,745 kilowatts per hour (kWh) per year, which is supplied by SCE annually.¹²

Per the City's General Plan, SCE also recognizes that high voltage overhead lines are generally considered to have negative visual impacts; therefore, SCE participates with efforts to underground regular overhead utility lines. The City requires that new projects install underground connections and that they underground existing power and telephone poles in commercial and residential areas when practical based on the size of the lines.

Natural Gas

Southern California Gas Company (SoCal Gas), a subsidiary of Sempra Energy and the nation's largest natural gas supplier, distributes natural gas to 19.5 million residential, commercial, and industrial customers throughout the southern half of California. SoCal Gas owns and operates 95,000 miles of gas distribution mains and service lines, as well as nearly 3,000 miles of transmission and storage pipeline. The utility also owns gas transmission compressor stations and underground storage facilities.

The 135.1 billion cubic feet (Bcf) of natural gas storage capacity is divided as follows: 82 Bcf is for core customers, four Bcf is for system balancing, and 49.1 Bcf is available to other customers.¹³ Natural gas service is provided in accordance with SoCal Gas's policies and extension rules on file with the California Public Utilities Commission (PUC) at the time contractual agreements are made.

¹⁰ *City of Hemet General Plan 2030. Chapter 5 – Community Services and Infrastructure, Page 5-29.*

¹¹ *Ibid.*

¹² *County of Riverside General Plan Update Final Environmental Impact Report;*
<http://www.rctlma.org/genplan/content/eir/volume1.html#4.8>; Accessed July 2013.

¹³ *SCG 2012 California Gas Report, July 2012, page 89.*

California produces about 15 percent of the natural gas it uses. The remaining 85 percent is obtained from sources outside of the state, 62 percent from the Southwest and Rocky Mountain area, and 23 percent from Canada. In the last ten years, three new interstate gas pipelines were built to serve California, expanding the over one million miles of existing pipelines. However, the availability of natural gas is based upon present conditions of gas supply and regulatory policies. As a public utility, SoCal Gas is under the jurisdiction of the PUC, but can be affected by the actions of federal regulatory agencies. Should these agencies take any action affecting natural gas supply or the conditions under which service is available, natural gas service would be provided in accordance with those revised conditions.

The 2012 California Gas Report has projections regarding future demand for natural gas in the southern California region. SoCal Gas predicts natural gas demand to increase at an annual rate of 0.12 percent from 2011 to 2030, due to modest economic growth.¹⁴

Supply

Under an average temperature and hydroelectric (power) year, it was estimated that statewide gas demand for California averaged 6,248 million cubic feet per day (cf/day) in 2012, decreasing to 5,975 million cf/day by 2030, a decline of -0.25% per year.¹⁵ In 2011 (the latest data available from the 2012 California Gas Report), SCG's actual highest winter sendout was 4,152 million cf/day and highest summer sendout was 3,313 million cf/day.¹⁶

Project Site Conditions

The Project site is currently vacant, and no natural gas or electricity consumption occurs at the site.

REGULATORY SETTING

State

State Building Energy Efficiency Standards

Energy consumption, including electricity, by new buildings in California, is regulated by the State Building Energy Efficiency Standards, embodied in Title 24 of the California Code of Regulations (Title 24). The efficiency standards apply to new construction of both residential and non-residential buildings, and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. The building

¹⁴ *Ibid* at page 66.

¹⁵ *Ibid* at page 8.

¹⁶ *Ibid* at page 29.

efficiency standards are enforced through the local building permit process. Local government agencies may adopt and enforce energy standards for new buildings, provided that these standards meet or exceed those provided in Title 24.

Title 24 establishes “energy budgets” for different types of residential and nonresidential buildings, with which all new buildings must comply. The energy budget has a space conditioning component and a water-heating component, both expressed in terms of energy (British thermal units, BTU) consumed per year. The regulations allow for trade-offs within and between the components to meet the overall budget.

Local

City of Hemet General Plan

The following General Plan policies pertain to energy:

- CSI-5.2 Utility Facilities:** Promote the availability of reliable and reasonably priced utilities necessary for businesses and residences to prosper.
- CSI-5.3 Energy Services:** Ensure the provision of reliable, quality energy services and promote energy conservation throughout the City.
- 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-5.5 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-5.7 Utility Undergrounding:** Require the coordination of capital improvement planning for utility undergrounding with the utility companies and developers to ensure adequate financing and appropriate timing.
- CSI-5.8 Agency Coordination:** Provide early notification to utility companies regarding new development to ensure that services will be available in a timely manner, and encourage developers of large scale or complex developments to contact local utilities early in the process to insure that projected energy and utility demands will be able to be accommodated.

CSI-5.9 Municipal Operations: Reduce energy consumption in municipal operations.

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).

ENVIRONMENTAL IMPACT ANALYSIS

Thresholds of Significance

Appendix G of the CEQA Guidelines does not address Energy. Rather, Appendix F, Energy Conservation, directs an EIR to include a discussion of the potential energy impacts of projects. According to Appendix F, environmental impacts may include:

- (a) The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project's life cycle including construction, operation, maintenance and/or removal. If appropriate, the energy intensiveness of materials may be discussed.
- (b) The effects of the project on local and regional energy supplies and on requirements for additional capacity.
- (c) The effects of the project on peak and base period demands for electricity and other forms of energy.
- (d) The degree to which the project complies with existing energy standards.
- (e) The effects of the project on energy resources.
- (f) The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

Project Design Features

The following Project Design Features (PDFs) relating to energy consumption have been incorporated into the Project:

- Install radiant barriers to reduce summer heat gain and winter heat loss. Radiant barriers consist of a highly reflective material, such as aluminum, that prevents the radiant heat from being absorbed by the roof of the home.
- Use natural ventilation techniques, such as operable windows, to take advantage of airflow for cooling residential interiors, reducing the amount of energy needed for cooling.

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- Install water and energy saving features and appliances, such as showerheads, toilets, washing machines, clothes dryers, refrigerators, and dishwashers certified as EnergyStar compliant.
 - Utilize a minimum insulation value of R30 in ceilings.
 - Install programmable thermostats in all air conditioned spaces.
 - To reduce electric power demand and consumption, building standards outlined in Title 24 of the California Administrative Code shall be implemented in all new residential, commercial, and recreational development.
 - The Project shall be designed to exceed the current 2010 Title 24 standards by 10 percent on the aggregate.
 - Install only energy-efficient windows, such as models with spectrally selective low-e glass with wood, vinyl, or fiberglass frames.
 - Incorporate building materials that take advantage of heat storage or thermal mass to reduce energy needed for heating and cooling interiors. Materials such as concrete, masonry, and wallboard store heat absorbed during the day and slowly release it throughout the evening, thereby moderating indoor temperatures over a 24-hour period.
 - Specific measures shall be implemented to reduce natural gas consumption including the following:
 - Use of an automatic flue gas damper when using a gas heating system;
 - Use of electrically-lighted pilot lights for all gas systems; and
 - Insulation of all gas-heated hot water tanks.
 - All development shall incorporate energy-saving devices where feasible. These devices may include the following:
 - The use of individual meters versus multiple meters;
 - The installation of lighting switches and multi-switch provisions for control by occupants and building personnel; and
 - The use of time-controlled interior and exterior public lighting limited to that necessary for the safety of persons and property.
 - To reduce energy consumption, the Project shall use the following:

- EnergyStar-rated appliances; and
- High-efficiency lighting in 50 percent of the aggregated Project.

Project Impacts

Electricity

SCE would supply the Project site from its existing system in the vicinity of the Project site. Electrical conduits, wiring, and associated infrastructure would be brought from existing SCE lines in the surrounding streets to the Project site during construction. The Project would require a line extension from the existing off-site lines to the premises, on-site transformation facilities, and conduit and cable throughout the property. The Project itself would not require new (off-site) energy supply facilities and distribution infrastructure. Rather, the on-site transformation is typical of new construction and changes in site layout. Therefore, the Project itself would not result in the need for additional distribution facilities. The City of Hemet, through its research and discussion with SCE for preparation of its updated General Plan 2030, has indicated that electrical service is available and would be provided in accordance with SCE rules and regulations.

The calculation of estimated Project electricity demand in Table IV.P-10 is for informational purposes and is not intended to be representative of actual operational demand, which can only be evaluated during Project operation. The exact electrical demand associated with the Project cannot be determined without detailed load schedules. The generation rates shown in Table IV.P-10 provide a worst-case conservative estimate of consumption so that the electrical demand can be estimated on an order of magnitude scale and also provide an estimated demand for a standard dwelling unit, without regard to size or number of bedrooms.

Information regarding electrical capacity and distribution for local areas is not released publicly, so it is almost impossible to compare the Project's theoretical consumption against an actual supply in the local area. However, the Project's forecasted electricity consumption can be compared to the overall SCE capacity region wide for the County of Riverside. According to the County of Riverside General Plan Update EIR, electrical consumption at buildout (year 2030) of the General Plan would be roughly 684,601,745 kilowatts per hour (kWh) per year, which is supplied by SCE annually.¹⁷ The conservatively estimated Project-related annual electricity consumption of 16,616,409 kWh per year would represent approximately two percent of this forecasted electricity consumption in 2030 for the County of Riverside as a whole. Therefore, it is anticipated that SCE's existing and planned electrical capacity and electricity supplies would be sufficient to support the Project's electricity consumption. Therefore, the Project

¹⁷ *County of Riverside General Plan Update Final Environmental Impact Report*;
<http://www.rctlma.org/genplan/content/eir/volume1.html#4.8>; Accessed July 2013.

would not require the acquisition of additional electricity resources beyond those that are anticipated by SCE.

In addition, the Project's consistency with the CALGreen Code for building efficiency would help alleviate electrical demand. It should also be again noted that the Project's estimated electricity consumption is based on usage rates that conservatively do not account for the Project's energy conservation features (Project Design Features described above). Therefore, the Project's actual electricity consumption would likely be lower than that forecasted. Overall, Project impacts related to electricity would be less than significant.

**Table IV.P-10
Project Electricity Consumption**

Land Use	Size	Consumption Rate ¹	Electricity Demand
			(kw-h/yr)
Residential	954 du	5,626.50 kw-h/du	5,367,681
General Office	113,256 sf	12.95 kw-h/sf	1,466,665
Retail	369,788 sf	13.55 kw-h/sf	4,992,138
Institutional	166,000 sf	13.55 kw-h/sf	2,249,300
Elementary School	187,500 sf	13.55 kw-h/sf	2,540,625
Project Total			16,616,409
<i>Notes:</i>			
<i>du=dwelling unit; sf =square feet; kw-h = kilowatt-hour; yr = year</i>			
<i>¹ Source: SCAQMD Air Quality Handbook, 1993, Table A9-11-A Electricity Usage Rate</i>			
<i>Table: CAJA Environmental Services, LLC. 2013.</i>			

Natural Gas

The Project Design Features for building efficiency would help to reduce the Project's overall natural gas demand. SoCal Gas has an obligation to serve projects in its service area. Therefore, SoCal Gas would be able to accommodate the Project's demand for natural gas with existing natural gas supplies.

The calculation of natural gas demand in Table IV.P-11 is for informational purposes and is not intended to be representative of actual operational demand, which can only be evaluated during Project operation. In addition, natural gas capacity and distribution data for local areas are not released, and therefore, it is impossible to compare the Project's theoretical consumption against an actual supply in the local area.

The natural gas demand is based on natural gas usage rates from the SCAQMD and conservatively does not account for the Project's energy conservation features that would reduce natural gas usage. The Project's natural gas consumption of roughly 6.1 million cf/month would represent a fraction of one percent of SoCal Gas's total natural gas consumption for projected year 2030 in the County of Riverside,

which is roughly 5.3 billion cf.¹⁸ The Project would not require the acquisition of additional natural gas resources beyond those that are anticipated by SoCal Gas.

Project operation would result in the irreversible consumption of non-renewable natural gas and would thus limit the availability of this resource. However, the continued use of natural gas would be on a relatively small scale and consistent with regional and local growth expectations for the area. In addition, the Project Design Features would help alleviate a portion of the forecasted demand for natural gas by the Project. The Project would be in compliance with Title 24 requiring building energy efficiency standards to be incorporated into the Project. Overall, Project impacts related to natural gas would be less than significant.

**Table IV.P-11
Project Natural Gas Consumption**

Land Use	Size	Consumption Rate ¹	Natural Gas Demand (cf/mo)
Residential	954 du	4,011.5 cf/du	3,826,971
General Office	113,256 sf	2.0 cf/mo/sf	226,512
Retail	369,788 sf	2.9 cf/mo/sf	1,072,385
Institutional	166,000 sf	2.9 cf/mo/sf	481,400
Elementary School	187,500	2.9 cf/mo/sf	543,750
Project Total			6,151,018
<i>Notes:</i>			
<i>du=dwelling unit; sf= square feet; cf= cubic feet; mo = month</i>			
<i>¹ Source: SCAQMD Air Quality Handbook, 1993, Table A9-12-A Natural Gas Usage Rate</i>			
<i>Table: CAJA Environmental Services, LLC. 2013.</i>			

CUMULATIVE IMPACTS

Electricity

SCE would serve all 73 potential cumulative projects. As with the Project, each of the cumulative projects would be evaluated within its own context with consideration of project energy conservation features that could alleviate electrical demand. Further, each cumulative project would need to be consistent with the building energy efficiency requirements of Title 24 and the CALGreen code. SCE undertakes expansion or modification of electrical service infrastructure and distribution systems to serve future growth in the County of Riverside and City of Hemet as required in the normal process of providing electrical service.

¹⁸ *County of Riverside General Plan Update Final Environmental Impact Report;*
<http://www.rctlma.org/genplan/content/eir/volume1.html#4.8>; Accessed July 2013.

Any potential cumulative impacts related to electric power service would be addressed through this process. Cumulative growth is factored into SCE's demand assumptions for the local area and any impact to electricity infrastructure is then factored into SCE's facilities improvement planning process. SCE may, however, postpone new power connections until power supply is adequate at any given location. Therefore, cumulative impacts to electricity demand would be less than significant.

Natural Gas

SoCal Gas would serve all 73 potential cumulative projects. As with the Project, each of the cumulative projects would be evaluated within its own context with consideration of energy conservation design features that could help to alleviate natural gas demand. Further, each cumulative project would need to be consistent with the building energy efficiency requirements of Title 24 and the CALGreen code. SoCal Gas uses gauging to evaluate supply and demand for each project. At the time each cumulative project is developed, SoCal Gas would decide whether new infrastructure is needed. SoCal Gas predicts gas demand to grow at an annual average rate of 0.12 percent from 2011 to 2030. Thus, there is a planned growth rate to acquire and secure additional natural gas supplies. The Project represents a negligible increase in natural gas usage as compared to the 73 cumulative projects, and, as such, the Project's contribution to the cumulative natural gas demand would not be substantial. As each cumulative project would have to comply with State and local energy efficiency standards as well as SoCal Gas' service conditions, cumulative impacts to natural gas demand would be less than significant.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project impacts with respect to energy would be less than significant.