5.13 UTILITIES AND SERVICE SYSTEMS

This section of the DEIR addresses the potential for implementation of the Sierra Madre General Plan Update (General Plan Update) to impact utility and service systems, including water, wastewater, storm drainage systems, solid waste, and dry utilities within the City of Sierra Madre. The analysis in this section is based in part on questionnaire responses from the service providers included in Appendix D of this DEIR, as well as the following technical report, which is incorporated by reference in this DEIR:

- City of Sierra Madre General Plan Update Technical Background Report, PlaceWorks, September 2012.

5.13.1 Wastewater Treatment and Collection Systems

5.13.1.1 ENVIRONMENTAL SETTING

Regulatory Background

Federal, state, and local laws, regulations, plans, or guidelines that are potentially applicable to the General Plan Update are summarized below.

Federal and State

National Pollution Discharge Elimination System

Under the National Pollutant Discharge Elimination System (NPDES) program promulgated under Section 402 of the Clean Water Act, which is overseen by the US Environmental Protection Agency (EPA), all facilities that discharge pollutants from any point source into waters of the United States are required to obtain an NPDES permit. In California, the State Water Resources Control Board (SWRCB) and local Regional Water Quality Control Boards (RWQCB) have assumed the responsibility of implementing the NPDES permit program. Wastewater treatment plants, which are direct point-source dischargers (that is, facilities that discharge sources directly to receiving water), are required by EPA to meet applicable standards of treatment plant discharge requirements. Specifically, they are regulated under NPDES permits, which are issued by RWQCBs. The NPDES permit regulates the amount and type of pollutants that the wastewater treatment plants can discharge into receiving waters.

Local

City of Sierra Madre Sewer System Management Plan

The City's Sewer System Management Plan (SSMP) was updated in August 2014 and was prepared in compliance with statewide executive orders issued by the State Water Regional Control Board (SWRCB). The SSMP sets goals and actions to ensure the City's sewer system is adequately maintained, repaired, replaced, and expanded. The SSMP also includes a response plan to potential Sewer System Overflow occurrences within Sierra Madre, including reporting obligations. Additionally, the plan also outlines operation and maintenance, and design and performance provisions, as well as the City's fats, oil, and grease source control

program, system evaluation and capacity assurance plan, and monitoring, measurement, and modification program (Sierra Madre 2014).

City of Sierra Madre Municipal Code

The City's Municipal Code contains existing standards and regulations that help mitigate potential impacts related to wastewater treatment and collection systems. The following provisions from the City of Sierra Madre's Municipal Code are applicable to the General Plan Update.

- **Chapter 13.08 (Sewer System), Section 13.08.070 (Connection Charges).** Requires any person desiring to connect to the City's sewer system to apply for a permit and pay a connection charge. The funds from the connection charges are placed in the sewer fund and are required to be used only for the acquisition, construction, reconstruction, maintenance, and operation of sanitation or sewerage facilities, and to repay principal and interest on bonds or federal or state loans issued for the construction and reconstruction of such sewerage facilities. Sewer connection fees are currently $314 per nonresidential connection and $111 per residential connection (Sierra Madre 2013).

- **Chapter 13.12 (Sanitary Sewers).** Also known as the Sanitary Sewer Ordinance, this chapter requires all plumbing fixtures to connect to the City's public sewer system.

- **Chapter 13.14 (Fats, Oils, and Grease Ordinance).** Ensures proper maintenance of the City's sewer services and facilities by prohibiting discharge of fats, oil, and grease (FOG) to the public sewer to prevent potential sewer line blockages. Section 13.14.060 establishes the City's FOG control program in order to minimize sanitary sewer overflow. Grease interceptors and trap requirements, and cleanup, monitoring, and reporting details are also included in Chapter 13.14.

- **Chapter 15.52 (Public Facilities Fee).** The chapter, also known as the "Sierra Madre Public Facilities Fee Ordinance", outlines the City's Public Facilities Fee, which is required to be paid at the time building permits are issued. As stated in Section 15.52.070 (Special Fund), the fees go into a special fund, entitled the "public facilities fee fund", which are to be expended only on the installation, acquisition, construction and improvement of eligible facilities.

Existing Conditions

Wastewater Collection System

The City of Sierra Madre does not have wastewater treatment capacity or facilities, only a wastewater collection system. The system is primarily comprised of pipelines eight inches in diameter or less, and is managed, operated, and maintained by the City's Sewer Division, a division within the Sierra Madre Public Works Department. The wastewater collection system is connected to and discharges to sewer mains in the City of Arcadia and to Sanitation Districts of Los Angeles County (Sanitation Districts) trunk mains in Baldwin Avenue, Sierra Madre Boulevard and East Orange Grove Avenue.

According to the City's SSMP, there are a total of 747 sewer manholes, 32 miles of 6- and 8-inch sewer lines, and 3,248 lateral connections in the City's existing sewer system. Sewer structural defects and deficiencies in the City's wastewater collection system are also identified and prioritized by critical defectiveness (Sierra Madre 2014). Currently, there are no plans to expand the City's wastewater collection facilities.

Additionally, there remain a few scattered neighborhoods in Sierra Madre that are not served by public sewers, and instead are served by septic systems. These include:

- Mt. Wilson Trail (private street)
- Auburn Avenue above Auburn Debris Basin
- West Bonita Avenue, north side, west of mid-block to Hermosa Street
- Webster Way
- East Alegria Avenue, mid-block to Baldwin Avenue

Sewer system expansions in Sierra Madre have historically been funded either by developers of housing tracts or by the formation of assessment districts. The City's Sewer Division does not fund construction of new infrastructure.

Wastewater Treatment Facility

Under contract with the City, the Sanitation Districts provides treatment and disposal of wastewater generated in the City. The Sanitation Districts operate 11 wastewater treatment facilities, 10 of which are classified as water reclamation plants (WRPs); all of the Sanitation Districts wastewater treatment facilities are regulated under an NPDES permit. These 11 facilities serve approximately 5.5 million people in 78 cities and unincorporated areas within Los Angeles County, including the City of Sierra Madre. Effluent quality from the WRPs ranges from disinfected secondary to filtered, disinfected tertiary (Sanitation Districts 2013).

The wastewater from the City's service area, which is estimated at approximately one million gallons per day (mgd) or 365 million gallons annually (or 1,120 acre feet per year), primarily flows to (via the City's wastewater collection system and Sanitation Districts regional trunk lines) and receives tertiary treatment at the Whittier Narrows WRP (WNWRP) located in South El Monte (Sierra Madre 2011). The WNWRP, which is owned and operated by the Sanitation Districts, is regulated under NPDES Permit No. CA0053716, issued by the Los Angeles RWQCB (LARWQCB) in 2009 under Order No. R4-2009-0077 (Order). Although the current Order expired on May 10, 2014, the terms and conditions of the Order have been automatically continued and remain in effect until new Waste Discharge Requirements and NPDES permit are adopted by LARWQCB pursuant to this Order.

The WNWRP has a treatment capacity of approximately 15 mgd and provides coagulated, filtered and disinfected tertiary effluent. WNWRP receives wastewater (which is a mixture of residential, commercial and industrial wastewater) from the cities of Alhambra, Arcadia, Azusa, Bradbury, Industry, Duarte, El Monte, Glendale, Irwindale, La Cañada Flintridge, Los Angeles, Monrovia, Monterey Park, Pasadena, Rosemead, San Gabriel, San Marino, Sierra Madre, South El Monte, South Pasadena, and Temple City. The current and projected volume of wastewater collected and treated at the WNWRP is shown in Table 5.13-1.

Table 5.13-1 Whittier Narrows Water Reclamation Plant – Current and Projected Wastewater Treatment (In Acre Feet Per Year)

	Year				
	2010	2015	2020	2025	2030
Wastewater Collected and Treated	6,769	8,000	8,000	8,000	8,000
Volume that Meets Recycled Water Standards	6,769	8,000	8,000	8,000	8,000

Source: Sierra Madre 2011.

Approximately 99 percent of the reclaimed water is beneficially reused, mostly for groundwater replenishment and landscape irrigation (Sanitation Districts 2013). Treated recycled water (non-recycled water) that is not used is discharged to the San Gabriel River/Rio Hondo and eventually flows into the Pacific Ocean.

5.13.1.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

U-1 Would exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

U-2 Would 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.

U-5 Would result in a determination by the wastewater treatment provider which serves or may serve the project that is has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

5.13.1.3 RELEVANT GENERAL PLAN POLICIES AND IMPLEMENTATION PROGRAM MEASURES

The following are relevant policies and measures of the Sierra Madre General Plan Update and Implementation Program, respectively, which are designed to reduce potential impacts related to wastewater services and facilities from implementation of the General Plan Update.

General Plan Update Policies

Community Services Element

- **Policy C31.2:** Provide for the maintenance of existing water, sewer, and storm drainage systems.
- **Policy C31.3:** Require that new development be contingent upon the ability to be served by adequate sanitation collection and treatment, water, electrical and natural gas energy, telecommunication, storm drainage, and other supporting infrastructure.

Implementation Program Measures

Public Services Implementation Program

- **Measure IM-1:** The City shall review and amend as necessary Titles 15 (Buildings and Construction), 16 (Subdivisions), and 17 (Zoning) of the Municipal Code to require that all proposed development be provided with adequate water, sewer, drainage, electrical, and telecommunications systems to meet the demands of the project.

5.13.1.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation (see Appendix A) disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

For the impact analysis of all thresholds below, it should be noted that the large infill opportunity site shown in Figure 3-5*, Infill Opportunity Sites*, just north of Carter Avenue, which is associated with the residential subdivision known as Stonegate, is an approved development project and was analyzed under separate environmental documentation in accordance with CEQA. The impact on wastewater services and facilities resulting from Stonegate were addressed and mitigated for in that environmental documentation. Also, in addition to the provisions of Title 17 (Zoning) of the City's Municipal Code and the Hillside Management zone regulations (Chapter 17.52 of the City's Municipal Code), all residential lots within Stonegate are subject to the Stonegate Residential Design Guidelines, which among other design guidelines, requires that each residential development within Stonegate obtain a hillside development permit. As part of the hillside development permit review, each residential development is required to be reviewed by the City's Planning Commission to ensure that it complies with the design guidelines.

For the purpose of the following analysis, it is also important to note that, based on the requirements of CEQA, this analysis is based on a comparison to existing land uses and does not address the differences that would result from a comparison with the existing General Plan land use map, from which there is little variation when compared to the proposed General Plan land use map.

Furthermore, it is important to note that while the General Plan Update establishes City-wide policy level guidance, it includes a revision to the current land use plan (see Figures 3-4, *Current Land Use Plan*, and 3-6, *Proposed Land Use Plan*) and modifies the development potential of certain parcels in the City (see Figure 3-5, *Infill Opportunity Sites*); it does not contain specific development project proposals. The General Plan Update is a regulatory document that sets forth the framework for future growth and development (e.g., infill development, redevelopment, and revitalization/restoration) in the City and does not directly result in development in and of itself. Before any development can occur in the City, all such development is required to be analyzed for conformance with the City's General Plan, zoning requirements, and other applicable local and state requirements; comply with the requirements of CEQA (e.g., preparation of site-specific environmental documentation in accordance with CEQA); and obtain all necessary approvals, clearances, and permits.

Impact 5.13-1: Wastewater generated from future development that would be accommodated by the General Plan Update would not exceed wastewater treatment requirements of the Regional Water Quality Control Board. [Threshold U-1]

Impact Analysis: While the City of Sierra Madre operates the local wastewater collection system that serves the various land uses in the City, wastewater generated in the City flows through this system and is discharged via the Sanitation Districts regional trunk lines to the WNWRP in South El Monte, which is owned and operated by the Sanitation Districts. The WNWRP is required by federal and state law to meet applicable standards of treatment plant discharge requirements. Specifically, the WNWRP is regulated under NPDES Permit No. CA0053716, issued by LARWQCB in 2009 under Order No. R4-2009-0077. The NPDES permit regulates the amount and type of pollutants that the WNWRP can discharge into receiving waters, which include the San Gabriel River/Rio Hondo. Although the current Order expired in May 2014, the terms and conditions of the Order have been automatically continued and remain in effect until new Waste Discharge Requirements and NPDES permit are adopted by LARWQCB pursuant to this Order.

The WNWRP is operating and would continue to operate subject to state waste discharge requirements and federal NPDES permit requirements, as set forth in the aforementioned permit and order numbers. The additional wastewater that would be generated by future development that would be accommodated by the General Plan Update and treated by the Sanitation Districts would not impede the Sanitation Districts ability to continue to meet its wastewater treatment requirements, which include not only the treatment of wastewater, but also the beneficial reuse of treated wastewater for groundwater replenishment and landscape irrigation.

For these reasons, impacts on the Sanitation Districts wastewater treatment requirements are not anticipated to be significant with implementation of the General Plan Update.

Impact 5.13-2: Future development that would be accommodated by the General Plan Update would result in an increase in wastewater generation; however, additional generation would be adequately collected and treated, respectively, by the City of Sierra Madre and Sanitation Districts. [Thresholds U-2 (part) and U-5]

Impact Analysis: Sierra Madre does not have wastewater treatment capacity or facilities, only a wastewater collection system, which is primarily comprised of pipelines eight inches in diameter or less, and is managed, operated, and maintained by the City's Sewer Division. The City's wastewater collection system connects and discharges to sewer mains in the City of Arcadia and to Los Angeles County trunk mains in Baldwin Avenue, Sierra Madre Boulevard and East Orange Grove Avenue.

The wastewater from the City's service area, which is estimated at approximately one million gallons per day (mgd) or 365 million gallons annually (equates to 1,120 acre feet per year), primarily flows to (via the City's wastewater collection system and Sanitation Districts regional trunk lines) and receives tertiary treatment at the WNWRP located in South El Monte (Sierra Madre 2011), which is owned and operated by the Sanitation Districts.

Wastewater Treatment

Buildout of the General Plan Update would increase wastewater generation compared to existing conditions. In order to calculate the estimated project-generated wastewater, CalEEMod wastewater generation rates for each of the proposed land uses were used. As shown in Table 5.13-2, future development that would be accommodated by the General Plan Update would generate approximately 21.2 million gallons of wastewater per year. This equates to approximately 65.1 acre feet per year.

Table 5.13-2 Projected Wastewater Generation under the General Plan Update

Land Use	Net Buildout Under the General Plan Update	Wastewater Generation Rate (Gallons Per Year)	
		Rate	Total
Residential	121 units	65,154 per unit	7,883,634
Commercial	43,696 SF	74,073 per 1,000 SF	3,236,694
Industrial	43,696 SF	231,250 per 1,000 SF	10,104,700
TOTAL	—	—	**21,225,028**

Source: South Coast Air Quality Management District (SCAQMD). 2013. California Emissions Estimator Model (CalEEMod), Version 2013.2.2, Appendix D.
Notes: SF = square feet; GPD = gallons per day

The 21.2 million gallons of wastewater generated per year (or approximately 58,000 gallons per day) under the General Plan Update would be transported to and treated by the WNWRP, which has a treatment capacity of 15 mgd. The additional wastewater would account for approximately 0.4 percent of WNWRP's wastewater treatment capacity. As shown in Table 5.13-1, *Whittier Narrows Water Reclamation Plant – Current and Projected Wastewater Treatment (In Acre Feet Per Year)*, the current and projected volume of wastewater collected and treated at the WNWRP is 8,000 acre feet per year through 2035, which equates to approximately 7.1 mgd. The current and projected capacity (volume of wastewater collected and treated) of the WNWRP is well within the established limits; in fact, the WNWRP is operating at approximately half its maximum capacity.

Therefore, the amount of wastewater generated under the General Plan Update would be more than adequately accommodated by the WNWRP since it has a remaining treatment capacity of approximately 7.9 mgd. Implementation of the General Plan Update would not require construction of future wastewater treatment facilities, or the expansion of existing facilities.

Wastewater Collection

The estimated wastewater that would be generated at buildout of the General Plan Update would be adequately handled by the City's wastewater collection system. Currently, there are no plans and there is no need to expand the City's wastewater collection facilities. Any expansion or extension of existing wastewater collection facilities necessitated by a development project would be constructed at the expense of the project applicant and noted as such in project conditions of approval.

Additionally, costs for City's wastewater collection system are funded by City's Public Facilities Fee placed on all new residential development, pursuant to Chapter 15.52 (Public Facilities Fee) of the City's Municipal Code. During the City's development review process, applicants of future development projects that would be accommodated under the General Plan Update would be required to comply with the requirements in

effect at the time building permits are issued, including payment of the required Public Facilities Fee, as outlined in Section 15.52.050 (Timing of Payment). As stated in Section 15.52.070 (Special Fund), the fees go into a special fund, entitled the "public facilities fee fund", which are to be expended only on the installation, acquisition, construction and improvement of eligible facilities.

Future development projects under the General Plan Update would also be required to pay sewer connection charges per Section 13.08.070 (Connection Charges) of the City's Municipal Code, part of which fund construction and maintenance of the City's wastewater collection system. Sewer connection fees are currently $314 per nonresidential connection and $111 per residential connection (Sierra Madre 2013).

Chapter 13.14 (Fats, Oils, and Grease Ordinance) of the City's Municipal Code also ensures proper maintenance of the City's sewer services and facilities by prohibiting discharge of fats, oil, and grease (FOG) to the public sewer to prevent potential sewer line blockages. Section 13.14.060 establishes the City's FOG (which is outlined in the City's SSMP) control program in order to minimize sanitary sewer overflow.

Furthermore, the City's SSMP, which was updated in 2014, sets goals and actions to ensure the City's wastewater collection system is adequately maintained, repaired, replaced, and expanded. The SSMP also includes a response plan to potential sewer system overflow occurrences within Sierra Madre, including reporting obligations.

Conclusion

As demonstrated above, implementation of the General Plan update would not necessarily result in an impact to the Sanitation Districts wastewater treatment facility or on the City's wastewater collection system. According to the 2014 SSMP, adequate treatment and collection systems and capacity are in place to handle the additional wastewater that would be generated by future development that would be accommodated by the General Plan Update. It remains incumbent on any development project proponent to provide an analysis of each development project to ensure that said project will not impact the City's wastewater system.

Additionally, under the policies and implementation measures of General Plan Update and Implementation Program, respectively, the City would take the following actions to reduce impacts of potential development projects on wastewater collection and treatment systems:

- **Community Service Element Policy C31.2:** Provide for the maintenance of existing water, sewer, and storm drainage systems.

- **Community Service Element Policy C31.3:** Require that new development be contingent upon the ability to be served by adequate sanitation collection and treatment, water, electrical and natural gas energy, telecommunication, storm drainage, and other supporting infrastructure.

- **Public Services Implementation Program Measure IM-1:** The City shall review and amend as necessary Titles 15 (Buildings and Construction), 16 (Subdivisions), and 17 (Zoning) of the Municipal Code to require that all proposed development be provided with adequate water, sewer, drainage, electrical, and telecommunications systems to meet the demands of the project.

For these reasons, impacts on wastewater collection and treatment systems resulting from implementation of the General Plan Update are not anticipated to be significant.

5.13.1.5 EXISTING REGULATIONS

Federal

- NPDES regulations

Local

- City of Sierra Madre Municipal Code Chapters 13.08 (Sewer System), 13.12 (Sanitary Sewers), 13..14 (Fats, Oils, and Grease Ordinance), and 15.52 (Public Facilities Fee)

5.13.1.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon compliance with the regulatory requirements and implementation of the General Plan Update policies and Implementation Program measures, the following impacts would be less than significant: 5.13-1 and 5.13-2.

5.13.1.7 MITIGATION MEASURES

Impacts are less than significant and mitigation measures are not required.

5.13.1.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

No mitigation measures are required and impacts would remain less than significant.

5.13.2 Water Supply and Distribution Systems

5.13.2.1 ENVIRONMENTAL SETTING

Regulatory Background

State and local laws, regulations, plans, or guidelines that are potentially applicable to the General Plan Update are summarized below.

State

20x2020 Water Conservation Plan

The 20x2020 Water Conservation Plan was issued by the California Department of Water Resources (DWR) in 2010 pursuant to Senate Bill 7, which was adopted during the 7th Extraordinary Session of 2009–2010 and therefore dubbed "SBX7-7." SBX7-7 mandated urban water conservation and authorized the DWR to prepare a plan implementing urban water conservation requirements (20x2020 Water Conservation Plan). In addition, it required agricultural water providers to prepare agricultural water management plans, measure water deliveries to customers, and implement other efficiency measures. SBX7-7 requires urban water

providers to adopt a water conservation target of 20 percent reduction in urban per capita water use by 2020 compared to 2005 baseline use (DWR 2010).

Senate Bills 610 and 221

To assist water suppliers, cities, and counties in integrating water and land use planning, the state passed Senate Bill (SB) 610 (Chapter 643, Statutes of 2001) and SB 221 (Chapter 642, Statutes of 2001), effective January 1, 2002. SB 610 and SB 221 improve the link between information of water supply availability and certain land use decisions made by cities and counties. SB 610 and SB 221 are companion measures that promote more collaborative planning between local water suppliers, cities, and counties. Both require detailed information regarding water availability to be provided to city and county decision makers prior to approval of specified large development projects. This detailed information must be included in the administrative record as the evidentiary basis for an approval action by the city or county on such projects. The statutes recognized local control and decision making regarding the availability of water for projects and the approval of projects. While SB 610 and SB 221 are not applicable to general plans, future projects subject to these statutes are required to provide a water supply assessment. Under SB 610, water supply assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects subject to CEQA, as defined in Water Code Section 10912[a], including this one. Under SB 221, approval by a city or county of certain types of residential subdivisions requires an affirmative verification of sufficient water supply. SB 221 is intended as a fail-safe to ensure collaboration on finding the needed water supplies to serve a new large subdivision before construction begins. General plans serve as an important planning tool for the local water supply when they prepare the 20 year vision for the Urban Water Management Plan (UWMP).

Urban Water Management Planning Act

The Urban Water Management Planning Act of 1983, California Water Code Sections 10610 et seq., requires preparation of a plan that:

- Plans for water supply and assesses reliability of each source of water, over a 20-year period, in 5-year increments

- Identifies and quantifies adequate water supplies, including recycled water, for existing and future demands in normal, single-dry, and multiple-dry years.

- Implements conservation and the efficient use of urban water supplies. Significant new requirements for quantified demand reductions have been added by the Water Conservation Act of 2009 (SBX7-7), which amends the act and adds new water conservation provisions to the Water Code.

The Urban Water Management Planning Act states that every urban water supplier that provides water to 3,000 or more customers or provides over 3,000 acre-feet of water per year should make every effort to ensure the appropriate level of reliability in its water service to meet the needs of its various categories of customers during normal, dry, and multiple-dry years. Both SB 610 and SB 221 identify the UWMP as a planning document that can be used by a water supplier to meet the standards in both statutes. Thorough and complete UWMPs are foundations for water suppliers to fulfill the specific requirements of these two

statutes, and they are important source documents for cities and counties as they update their General Plans. Conversely, General Plans are source documents as water suppliers update the UWMPs. These planning documents are linked, and their accuracy and usefulness are interdependent (DWR 2014a).

Principles Governing CEQA Analysis of Water Supply

In *Vineyard Area Citizens for Responsible Growth, Inc., v. City of Rancho Cordova* (February 1, 2007), the California Supreme Court articulated the following principles for analysis of future water supplies for projects subject to CEQA:

- To meet CEQA's informational purposes, the EIR must present sufficient facts to decision makers to evaluate the pros and cons of supplying the necessary amount of water to the project.

- CEQA analysis for large, multiphase projects must assume that all phases of the project will eventually be built and the EIR must analyze, to the extent reasonably possible, the impacts of providing water to the entire project. Tiering cannot be used to defer water supply analysis until future phases of the project are built. CEQA analysis cannot rely on "paper water." The EIR must discuss why the identified water should reasonably be expected to be available. Future water supplies must be likely, rather than speculative. When there is some uncertainty regarding availability of future water supply, an EIR should acknowledge the degree of uncertainty, include a discussion of possible alternative sources, and identify the environmental impacts of such alternative sources. Where a full discussion still leaves some uncertainly about the long-term water supply's availability, mitigation measures for curtailing future development in the event that intended sources become unavailable may become a part of the EIR's approach.

- The EIR does not need to show that water supplies are definitely assured because such a degree of certainty would be "unworkable, as it would require water planning to far outpace land use planning." The requisite degree of certainty of a project's water supply varies with the stage of project approval. CEQA does not require large projects, at the early planning phase, to provide high degree of assurances of certainty regarding long-term future water supplies.

- The EIR analysis may rely on existing urban water management plans, as long as the project's new demand was included in the water management plan's future demand accounting.

- The ultimate question under CEQA is not whether an EIR establishes a likely source of water, but whether it adequately addresses the reasonably foreseeable impacts of supplying water to the project.

Governor's Drought Declaration

California Governor Edmund Brown Jr. declared a drought state of emergency on January 17, 2014, asking Californians to reduce water use by 20 percent; 2013 was the driest year in recorded history in many parts of California. The extreme drought continued in 2014: statewide, between October 1 2013 and June 30 2014, precipitation was 50 percent of average, runoff was 35 percent of average, and reservoir storage 60 percent of average (DRW 2014b). DWR announced on January 31, 2014, that if current dry conditions persist,

customers would receive no deliveries from the State Water Project in 2014, except for small carryover amounts from 2013. Deliveries to agricultural districts with long-standing water rights in the Sacramento Valley may be cut 50 percent—the maximum permitted by contract—depending on future snow survey results. Almost all areas served by the State Water Project also have other sources of water, such as groundwater and local reservoirs (DWR 2014b).

The State Water Resources Control Board approved emergency regulations requiring water conservation in outdoor water use on July 15, 2014. The regulation prohibits washing down driveways and sidewalks; watering of outdoor landscapes that cause excess runoff; using a hose to wash a motor vehicle, unless the hose is fitted with a shut-off nozzle, limiting the number of days per week that water may be used for outdoor irrigation, and using potable water in a fountain or decorative water feature, unless the water is recirculated. Violators could be fined (SRWCB 2014).

In a subsequent Executive Order (B-29-15; announcing first-ever California mandatory state water reductions), issued April 1, 2015, by Governor Jerry Brown responded to worsening drought conditions by directing the State Water Resources Control Board to require urban water suppliers to reduce water production even further. The State Water Resources Control Board (SWRCB) set the Sierra Madre target at a reduction of 32 percent over a 2013 base year consumption level. Additional statewide water use regulations are being written and will be made available by state agencies, which will be applicable to the City of Sierra Madre and General Plan Update.

Local

City of Sierra Madre 2010 Urban Water Management Plan

The City's 2010 UWMP is required under Water Code Section 10610 through 10656 of the Urban Water Management Planning Act. The act requires all urban water suppliers to prepare, adopt, and file a UWMP with the California Department of Water Resources every five years. The City's 2010 UWMP outlines water demands, sources, and supply reliability to the City by forecasting water use based on climate, demographics, and land use changes within the City. The 2010 UWMP also provides demand management measures to increase water use efficiency for various land use types and details a water supplies contingency plan in case of shortage emergencies (Sierra Madre 2011). However, the 2010 UWMP was prepared during a pre-drought environment and therefore makes no consideration of current (2015) conservation requirements and Gallons-Per-Capita-Daily water use.

City of Sierra Madre Municipal Code

The City's Municipal Code contains existing standards and regulations that help mitigate potential impacts related to water supply and distribution systems. The following provisions from the City of Sierra Madre's Municipal Code are applicable to the General Plan Update.

- **Section 13.04.080 (Fees for Service Connections and Installations or Extensions of Existing Distribution Mains).** This section establishes service connection fees to cover the expense of making new water connections to the City's existing water supply system.

- **Chapter 13.20 (Cross-Connection Control).** The purpose of this chapter is to protect the public water supply against actual or potential cross-connection by isolating within the premises contamination that may occur because of some undiscovered or unauthorized cross-connection on the premises. Section 13.20.030 outlines cross-connection protection requirements, including installation of backflow prevention devices, to ensure existing connections between drinking water systems and sources of contamination are eliminated.

- **Chapter 13.24 (Mandatory Water Conservation Plan).** The mandatory water conservation plan is to minimize the effects of a water shortage to the water customers of the City, complies with California Water Code Section 10608(a)(b), and significantly reduces the delivery and consumption of water. Section 13.24.060 details prohibited water uses to all water department customers (e.g., water used for decorative fountains must be part of a recycling system, lawn and landscaping irrigation must occur between the hours of 10 A.M. and 4 P.M., etc.). Sections 13.24.070 and 13.24.080 require 10 and 20 percent water curtailment to all water department customers by January 1, 2016, and 2021, respectively. Due to the ongoing drought and increasing state mandates for urban water conservation, it is anticipated that there will be numerous amendments to Chapter 13.24 in the coming months and years.

- **Chapter 15.52 (Public Facilities Fee).** This chapter, also known as the "Sierra Madre Public Facilities Fee Ordinance", outlines the City's Public Facilities Fee, which is required to be paid at the time building permits are issued. As stated in Section 15.52.070 (Special Fund), the fees go into a special fund, entitled the "public facilities fee fund", which are to be expended only on the installation, acquisition, construction and improvement of eligible facilities.

- **Chapter 15.30 (Green Building Standards Code).** Adopts by reference the 2010 Green Building Standards Code, which contains requirements for indoor water use reduction and site irrigation conservation.

- **Chapter 15.60 (Water Efficient Landscape Ordinance).** This chapter establishes landscape design and plant, irrigation, and soil and grading requirements to encourage the appropriate design, installation, maintenance, and management of landscapes so that water demand can be decreased, runoff can be retained, and flooding can be reduced without a decline in the quality or quantity of landscapes. The April 1, 2015 Executive Order issued by Governor Jerry Brown requires urban water suppliers to update their water efficient landscape ordinances in order to enhance conservation and to specifically limit the planting of turf grass.

Existing Conditions

Water Supply and Reliability

Water Supply

For many years, Sierra Madre was the only city in the San Gabriel Valley that relied entirely on groundwater for its water supply, which came from its own local source by pumping, treating, and distributing its own water. This is reflected in the 2010 UWMP. However, on October 9, 2013, the City switched to a new source

of water supply, imported water from the State Water Project. The change in the water source was necessitated by drought-related low levels of water in the City's aquifer.

Sierra Madre's water quality and supply is maintained by the City's Water Division, a water retail agency and department within the Sierra Madre Public Works Department. Currently, the City has approximately 3,700 connections serving a population of approximately 11,030 people. Table 9 (Water Supplies – Past, Current, and Projected (Acre Feet) of the 2010 UWMP shows Sierra Madre's past, current and projected water supply sources, as provided in the 2010 UWMP.

Per Table 9, groundwater pumped from the Santa Anita Subarea (Eastern Unit) of the Raymond Basin (via the aforementioned wells) has historically been and was considered (until 2013) the primary water supply for the City. Sierra Madre shares this source of water with the City of Arcadia. As stated in the 2010 UWMP, through adjudication the City has the right to draw 1,764 acre feet (574,808,220 gallons) of water per year from the aquifer (Sierra Madre 2011). However, that decreed right was reduced to 940 acre feet in 2014 at the direction of the Raymond Basin Management Board in response to historically low water levels in the Eastern Unit due to the severe drought and is in effect until the level in the Arcadia Orange Grove #1 well is at the 500-foot above average mean sea level. It is assumed that the 940 acre-foot limit will be in place until 2020.

In addition to the decreed right, the City is allowed credit for "replacement" or recharge water that is percolated into the Eastern Unit at the City's spreading basins located on East Grandview Avenue. The sources of the water used for groundwater recharge are Sierra Madre Creek, Santa Anita Canyon, and storm runoff collected off of East Grandview at Sycamore Place. The amount of water captured for recharge purposes varies depending on annual rainfall. However, due to low levels of water in the aquifer, both the 940 acre-foot right and the recharge water may not be accessible at times, such as it was/is in 2015.

In summary, the 2010 UWMP, which was prepared prior to more recent drought conditions throughout the state, notes that water from this source is not a reliable source of water in dry years or multiple dry years due to fluctuations in water level and the overall trend towards a decrease in water levels in the Eastern Unit. Additionally, due to the present serious drought conditions and in recognition of any potential droughts, and the inability to access its adjudicated ground water in the Eastern Unit of the Raymond Basin, Sierra Madre declared a water shortage emergency in July 2014 and imposed a water service connection moratorium until the Raymond Basin aquifer recovers sufficiently to allow Sierra Madre to pump its ground water for delivery to its existing customers.

The City's secondary local source of water is its horizontal wells (tunnels) in Little Santa Anita Canyon, located at the upper end of Woodland Drive at the base of Little Santa Anita Dam. Water flows by gravity from the two tunnels, with the amount of water varying greatly depending on rainfall amounts and season of the year. Water from the west tunnel meets drinking water quality standards and is taken directly into the City's distribution system. East tunnel discharge does not meet drinking water quality standards, so it is discharged to Little Santa Anita Creek where it is collected downstream and routed to the City's spreading basins. As noted in the 2010 UWMP, because production in the spring tunnels is dependent upon the

hydrologic cycle, during dry years less water is available. If multiple dry years were to be experienced the tunnels would not provide a significant source of water supply (Sierra Madre 2011).

A third source of water for the City is water through its membership in the San Gabriel Valley Municipal Water District (SGVMWD). SGVMWD is a state water contractor much like Metropolitan Water District. The other members of SGVMWD are the cities of Alhambra, Monterey Park and Azusa. SGVMWD imports untreated water from the Bay delta via the State Water Project and its own pipeline, which runs from Devil's Canyon in San Bernardino County to an outlet in Azusa Canyon. Water imported by SGVMWD is placed in the Main San Gabriel Groundwater Basin (Main Basin) via percolation. Sierra Madre may at any time request to purchase a limited supply of water from SGVMWD, which is then credited to Sierra Madre for extraction from the Main Basin. Water obtained from this source is purchased from SGVMWD and incurs additional costs to Sierra Madre in the form of Watermaster fees and City of Arcadia production and pumping costs. As a result of the relatively high cost of this water source, it is used only in emergencies, and if it is available from Arcadia. Additionally, this source of water is limited in quantity and cannot fulfill the entire needs (demand) of the City.

A fourth source of water supply, and the current and only reliable source, is imported water from SGVMWD; in this source, water flows to Sierra Madre via the MWD Foothill Feeder. The City began using this source of water on October 9, 2013, due to the ongoing drought and depleted groundwater levels of its aquifer. Water from this source is limited to a maximum of 2,500 acre feet per calendar year. This limited amount of water is insufficient to meet the City's normal demand unless significant water conservation measures are implemented and/or the imported supply can be supplemented with local groundwater.

Water Reliability

While the City's most recent UWMP met all of the state requirements for such a Plan, the basic assumptions of the 2010 UWMP have since proven to be incorrect. The 2010 UWMP assumed that the City would continue to obtain the majority of water through groundwater production from its aquifer, with supplemental water coming via a system interconnection with the City of Arcadia. The 2010 UWMP water supply, demand, and reliability projections are rendered obsolete and therefore not relied upon in the analysis provided herein. In the ensuing five years, Sierra Madre has switched water sources and is now getting the majority of its water from SGVMWD via a connection to the MWD Foothill Feeder pipeline in East Grandview Avenue. Under the authorizing agreement between those two state water contractors, Sierra Madre is limited to a maximum of 2,500 acre feet of water per calendar year. The limit of 2,500 acre feet results in a need for supplemental water from another source, whether that be groundwater or flow from the City's horizontal wells (tunnels). In light of the impact that the current drought has had on the groundwater basin that supplies Sierra Madre, those supplemental sources may be considered speculative in the near term. Therefore, the most reliable source of water for Sierra Madre during multiple dry-year or drought times is the 2,500 acre feet per year via the SGVMWD/MWD connection. However, as stated above, this limited amount of water is insufficient to meet the City's normal demand unless significant water conservation measures are implemented and/or the imported supply can be supplemented with local groundwater.

Water Conservation

Since the City is primarily built out, only limited increases in population and service connections are anticipated in the future. However, while Sierra Madre does not anticipate great increases in water demand, the City has prepared for the possibility of future water stress, in which case conservation measures would be needed to ensure adequate supply to all water customers. Water conservation can be considered an additional source of potable water because it frees up water that otherwise might be used inefficiently. For this reason the City adopted a Mandatory Water Conservation Plan (Chapter 13.24 of the City's Municipal Code), which restricts the use of water under circumstances determined to be "urgent" by the Sierra Madre City Council. With shortage restrictions already adopted, Sierra Madre will be able to respond quickly and efficiently to water shortages that may arise in its future. Due to the ongoing drought and increasing state mandates for urban water conservation, it is anticipated that there will be numerous amendments to the Mandatory Water Conservation Plan in the coming months and years.

The City also implements its Water Efficient Landscape (Chapter 15.60 of the City's Municipal Code) and Low Impact Development Ordinances (integrated within Section 15.04.070 [Stormwater Retention] of the City's Municipal Code) to require water conservation efforts associated with development and redevelopment. Additionally, the April 1, 2015 Executive Order issued by Governor Jerry Brown requires urban water suppliers (including Sierra Madre) to update their water efficient landscape ordinances in order to enhance conservation and to specifically limit the planting of turf grass. Furthermore, the City implements the 2010 Green Building Standards Code (adopted by reference in Chapter 15.30 [Green Building Standards Code] of the City's Municipal Code), which contains requirements for indoor water use reduction and site irrigation conservation.. Future development projects are also required to comply with the provisions of the 2010 Green Building Standards Code

Water Infrastructure

The City of Sierra Madre is the licensee and operator of its own water production and distribution system under the City's Water Division, a department within the Sierra Madre Public Works Department. Water is normally produced from four wells located in the vicinity of Sierra Vista Park. Water from the wells flows directly into the City's Granulated Activated Charcoal treatment system. The water then flows into a small reservoir/pumping forebay at the City maintenance yard and is pumped from there directly and indirectly to the City's eight reservoirs; the combined storage capacity of the reservoirs is 7.46 million gallons. From the reservoirs, the water is distributed to all residential, commercial and institutional customers via over 46 miles of pipeline. Water is moved through the distribution pipeline system by gravity to over 3,700 individual metered water services.

The City's water system also incorporates four interconnections with the water systems of other agencies. On the west, there are two four-inch unidirectional flow interconnections with the City of Pasadena water system. The northerly interconnection on Michillinda Avenue flows east to west, for Sierra Madre to supply water to Pasadena. The southerly interconnection flows west to east; from this location Sierra Madre can request to draw water from Pasadena. These connections are suitable for use only in extreme emergency, as their small diameter and location within system pressure zones will not provide a significant flow of water, and because

of differences in the treatment processes of the two cities' water, if the two waters are mixed in either system, a harmless discoloration results. The third system connection is a twelve-inch pipeline along East Sierra Madre Boulevard linking Sierra Madre with the water system of the City of Arcadia. It is via this pipeline that Sierra Madre can indirectly access its SGVMWD source of water from the Main Basin. The 4th system interconnection is the connection to the MWD Foothill Feeder on East Grandview. The source can provide up to 2,500 acre feet of water per year.

While significant strides have been made to upgrade the City's water system, multiple components of the water infrastructure system have reached the end of their service lives. Each of the City's four production wells, several of the system's booster pumps, one water storage reservoir, and a large number of water main segments are in need of replacement. There are neighborhoods throughout Sierra Madre that are served by water mains that are of inadequate size to properly serve existing development and land uses. Some of these are old infrastructure that is in need of replacement simply because of age and deterioration. In addition, one reservoir is in need of seismic upgrades and the City should construct a production well in the Main Basin to increase water supply reliability. The majority of planned water system improvements are needed in order to improve water supply reliability, rather than system capacity (SMWD 2012). Replacement of reservoirs, pipelines and wells will be done to ensure that the system is dependable; however, each project will be implemented with consideration given to current standards of service and capacity (SMWD 2012).

The City's Water Division has historically used several sources of funding for water system improvements. Federal funding in the form of congressional grants through the United States Environmental Protection Agency (USEPA) have paid for portions of several projects in Sierra Madre. Each federal grant must be "matched" with local funds. Sierra Madre's local match has been provided from local water revenue, loans, and grants from SGVMWD, and from the proceeds of the City's water revenue bonds (SMWD 2012).

5.13.2.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

U-2 Would 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.

U-4 Would not have sufficient water supplies available to serve the project from existing entitlements and resources, and new and/or expanded entitlements would be needed.

5.13.2.3 RELEVANT GENERAL PLAN POLICIES AND IMPLEMENTATION PROGRAM MEASURES

The following are relevant policies and measures of the Sierra Madre General Plan Update and Implementation Program, respectively, which are designed to reduce impacts related to water supply and distribution systems as a result of implementation of the General Plan Update.

General Plan Update Policies

Land Use Element

- **Policy L1.6:** Require that new residential development, substantial remodeling and additions comply with all adopted water conservation measures that reduce and minimize the impact on the City's water supply and its ability to serve its water customers.

- **Policy L4.3:** Ensure that new development and the expansion of existing uses incorporate water conservation measures that reduce and minimize the impact on the City's water supply and its ability to serve its customers.

- **Policy L8.2:** Incorporate water conservation measures in the zoning development standards for new construction and substantial remodeling or building expansion, including but not limited to green building construction, the percentage of permeable ground surfaces, building floor area limitations, lot coverage, landscaping and irrigation, greywater plumbing requirements, rainwater capture, and design review.

- **Policy L8.3:** Consider a water impact fee to apply to new residential dwelling units and additions to existing development that increase water consumption, to fund water fixture retrofits of existing homes and other water conservation measures.

Resource Management Element

- **Policy R12.1:** Protect settling basins for water collection for the purposes of groundwater recharge.

- **Policy R12.2:** Actively follow state legislative and policy actions to ensure that Sierra Madre is able to use all of its water through the conservation of lands for groundwater recharge and storm water management.

- **Policy R12.3:** Develop new ways to capture and percolate storm water.

- **Policy R12.4:** Identify ways in which reclaimed water can be utilized in Sierra Madre.

- **Policy R12.5:** Work collaboratively with Los Angeles County Department of Public Works/Flood Control to utilize existing debris basins for groundwater recharge.

- **Policy R13.1:** Charge water usage fees which anticipate capital improvement needs.

- **Policy R13.2:** Maintain a capital plan for the maintenance of the City's water facilities.

- **Policy R14.1:** Maintain an Urban Water Management Plan.

- **Policy R14.2:** Evaluate water availability in conjunction with public and private development projects.

- **Policy R15.1:** Prohibit washing of concrete surfaces such as sidewalks and driveways with a hose.
- **Policy R15.2:** Regulate water used for decorative fountains.
- **Policy R15.3:** Require restaurants to limit use of drinking water.
- **Policy R15.4:** Restrict hours of water usage for landscape and irrigation.
- **Policy R15.5:** Explore other methods or innovations to conserve water during times of drought and implement as necessary.
- **Policy R15.6:** Consider a rate structure that encourages the efficient use of water and that does not discriminate unfairly against those with larger lots.
- **Policy R16.1:** Work with Raymond Basin Management Board (Watermaster) to improve management of the Eastern Unit of the Raymond Basin.
- **Policy R16.2:** Collaborate with other Raymond Basin water producers, especially the City of Arcadia, to eliminate the overdraft of the Raymond Basin.
- **Policy R17.1:** Diligently carry out minimum control measures and source reduction programs as required and/or is beneficial to water quality.
- **Policy R17.2:** Continue to identify programs or projects with multiple benefits with water quality, water retention, recreation, flood safety, and aesthetics as priorities.
- **Policy R17.3:** Continue to work with regional partners to increase efficiency, effectiveness, and cost savings as priorities.
- **Policy R17.4:** Participate in the discussion regarding emerging regulatory National Pollutant Discharge Elimination System topics, and provide comments as necessary.
- **Policy R17.5:** Develop public education and outreach programs with regard to specific City and regional topics.

Community Services Element

- **Policy C31.2:** Provide for the maintenance of existing water, sewer, and storm drainage systems.
- **Policy C31.3:** Require that new development be contingent upon the ability to be served by adequate sanitation collection and treatment, water, electrical and natural gas energy, telecommunication, storm drainage, and other supporting infrastructure.

Implementation Program Measures

Land Use Implementation Program

- **Measure IM-3:** The City shall amend the Municipal Code as necessary to include a requirement for compliance with all adopted water conservations measures.

Public Services Implementation Program

- **Measure IM-1:** The City shall review and amend as necessary Titles 15 (Buildings and Construction), 16 (Subdivisions), and 17 (Zoning) of the Municipal Code to require that all proposed development be provided with adequate water, sewer, drainage, electrical, and telecommunications systems to meet the demands of the project.

5.13.2.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation (see Appendix A) disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

For the impact analysis of all thresholds below, it should be noted that the large infill opportunity site shown in Figure 3-5*, Infill Opportunity Sites*, just north of Carter Avenue, which is associated with the residential subdivision known as Stonegate, is an approved development project and was analyzed under separate environmental documentation in accordance with CEQA. The impact on wastewater services and facilities resulting from Stonegate were addressed and mitigated for in that environmental documentation. Also, in addition to the provisions of Title 17 (Zoning) of the City's Municipal Code and the Hillside Management zone regulations (Chapter 17.52 of the City's Municipal Code), all residential lots within Stonegate are subject to the Stonegate Residential Design Guidelines, which among other design guidelines, requires that each residential development within Stonegate obtain a hillside development permit. As part of the hillside development permit review, each residential development is required to be reviewed by the City's Planning Commission to ensure that it complies with the design guidelines.

For the purpose of the following analysis, it is also important to note that, based on the requirements of CEQA, this analysis is based on a comparison to existing land uses and does not address the differences that would result from a comparison with the existing General Plan land use map, from which there is little variation when compared to the proposed General Plan land use map.

Furthermore, it is important to note that while the General Plan Update establishes City-wide policy level guidance, includes a revision to the current land use plan (see Figures 3-4, *Current Land Use Plan*, and 3-6, *Proposed Land Use Plan*), and modifies the development potential of certain parcels in the City (see Figure 3-5, *Infill Opportunity Sites*), it does not contain specific development project proposals. The General Plan Update is a regulatory document that sets forth the framework for future growth and development (e.g., infill development, redevelopment, and revitalization/restoration) in the City and does not directly result in development in and of itself. Before any development can occur in the City, all such development is required

to be analyzed for conformance with the City's General Plan, zoning requirements, and other applicable local and state requirements; comply with the requirements of CEQA (e.g., preparation of site-specific environmental documentation in accordance with CEQA); and obtain all necessary approvals, clearances, and permits.

Impact 5.13-3: Existing water delivery systems are adequate to meet the needs of future development that would be accommodated by the General Plan Update. However, although the 2010 Urban Water Management Plan indicates sufficient water supplies, the severity and uncertain duration of California's recent drought conditions makes water supply unreliable. Therefore, water supply impacts are considered potentially significant under buildout of the General Plan Update. [Thresholds U-2 (part) and U-4]

Impact Analysis:

Water Supply

The Sierra Madre General Plan Update has a 2035 buildout population of approximately 11,307 persons (see Table 3-5, *General Plan Update Summary of Changes in Land Use from Existing Conditions*) while the City's 2010 UWMP has a 2030 buildout population of 11,099 persons (per Table 4, [Current and Projected Population] of the 2010 UWMP). The 2010 UWMP does not have population and water demand projections for 2035; however, the projected populations are off by only a nominal amount for the five year difference (208 persons). As shown in Table 5.13-3, the proposed General Plan Update would result in a water demand of approximately 2,660 acre feet per year (AFY) at 2035 buildout, which is only nominally higher than the 2010 UWMP's anticipated demand of 2,611 AFY for year 2030 (49 AFY difference).

Table 5.13-3 Total Water Demand Projections under the General Plan Update (In Acre Feet Per Year)

	Water Demand
UWMP 2010	2,660
UWMP 2030	2,611
General Plan Update 2035 Buildout	2,660

Source: Sierra Madre 2011.

The minor increase of 121 homes and 87,392 square feet of nonresidential uses under the General Plan Update is not anticipated to adversely impact the City's water supply. The water demand projections shown in Table 5.13-3 for 2030 and 2035 are lower and/or similar to 2010 water demands even though the population would be greater because the City will be required to achieve the urban water use target goal of 210 gallons per capita per day (GPCD), which is based on a 20 percent reduction from the City's baseline per capita daily water use of 262 GPCD.

The City also has a number of conservation measures, including the City's Mandatory Water Conservation Plan (Chapter 13.24 of the City's Municipal Code), which restrict the use of water under circumstances determined to be "urgent" by the City Council. With shortage restrictions already adopted, Sierra Madre will be able to respond quickly and efficiently to water shortages that may arise in its future. Additionally, due to

the ongoing drought and increasing state mandates for urban water conservation, it is anticipated that there will be numerous amendments to the Mandatory Water Conservation Plan in the coming months and years.

Applicants of future development projects would also be required to comply with the City's Water Efficient Landscape Ordinance (Chapter 15.60 of the City's Municipal Code) and Low Impact Development Ordinance (integrated within Section 15.04.070 [Stormwater Retention] of the City's Municipal Code), which assist in water conservation efforts associated with development and redevelopment. For example, the Water Efficient Landscape Ordinance establishes landscape design and plant, irrigation, and soil and grading requirements to encourage the appropriate design, installation, maintenance, and management of landscapes so that water demand can be decreased, runoff can be retained, and flooding can be reduced without a decline in the quality or quantity of landscapes. Additionally, the April 1, 2015 Executive Order issued by Governor Jerry Brown requires urban water suppliers (including Sierra Madre) to update their water efficient landscape ordinances in order to enhance conservation and to specifically limit the planting of turf grass.

Furthermore, future development projects that would be accommodated under the General Plan Update are required to comply with the provisions of the 2010 Green Building Standards Code (adopted by reference in Chapter 15.30 [Green Building Standards Code] of the City's Municipal Code), which contains requirements for indoor water use reduction and site irrigation conservation.

Finally, the General Plan Update and Implementation Program includes policies and implementation measures, respectively, related to water conservation and designed to sustain Sierra Madre's ability to be self-sufficient in supplying water from its traditional sources (groundwater from the Eastern Unit of the Raymond Basin) to its customers. Policies and implementation measures include:

- **Land Use Element Policy L1.6:** Require that new residential development, substantial remodeling and additions comply with all adopted water conservation measures that reduce and minimize the impact on the City's water supply and its ability to serve its water customers.

- **Land Use Element Policy L4.3:** Ensure that new development and the expansion of existing uses incorporate water conservation measures that reduce and minimize the impact on the City's water supply and its ability to serve its customers.

- **Land Use Element Policy L8.2:** Incorporate water conservation measures in the zoning development standards for new construction and substantial remodeling or building expansion, including but not limited to green building construction, the percentage of permeable ground surfaces, building floor area limitations, lot coverage, landscaping and irrigation, greywater plumbing requirements, rainwater capture, and design review.

- **Resource Management Element Policy R12.5:** Work collaboratively with Los Angeles County Department of Public Work/Flood Control to utilize existing debris basins for groundwater recharge.

- **Resource Management Element Policy R16.1:** Work with Raymond Basin Management Board (Watermaster) to improve management of the Eastern Unit of the Raymond Basin.

- **Resource Management Element Policy R16.2:** Collaborate with other Raymond Basin water producers, especially the City of Arcadia, to eliminate the overdraft of the Raymond Basin.

- **Land Use Implementation Program Measure IM-3:** The City shall amend the Municipal Code as necessary to include a requirement for compliance with all adopted water conservations measures.

- **Public Services Implementation Program Measure IM-1:** The City shall review and amend as necessary Titles 15 (Buildings and Construction), 16 (Subdivisions), and 17 (Zoning) of the Municipal Code to require that all proposed development be provided with adequate water, sewer, drainage, electrical, and telecommunications systems to meet the demands of the project.

However, while the City's most recent UWMP met all of the state requirements for such a Plan, the basic assumptions of the 2010 UWMP have since proven to be incorrect. The 2010 UWMP assumed that the City would continue to obtain the majority of water through groundwater production from its aquifer, with supplemental water coming via a system interconnection with the City of Arcadia. The 2010 UWMP water supply, demand, and reliability projections are rendered obsolete and therefore not relied upon in the analysis provided herein. In the ensuing five years, Sierra Madre has switched water sources and is now getting the majority of its water from SGVMWD via a connection to the MWD Foothill Feeder pipeline in East Grandview Avenue. Under the authorizing agreement between those two state water contractors, Sierra Madre is limited to a maximum of 2,500 acre feet of water per calendar year. The limit of 2,500 acre feet results in a need for supplemental water from another source, whether that be groundwater or flow from the City's horizontal wells (tunnels). In light of the impact that the current drought has had on the groundwater basin that supplies Sierra Madre, those supplemental sources may be considered speculative in the near term. Therefore, the most reliable source of water for Sierra Madre during multiple dry-year or drought times is the 2,500 acre feet per year via the SGVMWD/MWD connection. However, this limited amount of water is insufficient to meet the City's normal demand unless significant water conservation measures are implemented and/or the imported supply can be supplemented with local groundwater.

Due also to the present serious drought conditions and in recognition of any potential droughts, and the inability to access its adjudicated ground water in the Eastern Unit of the Raymond Basin, Sierra Madre declared a water shortage emergency in July 2014 and imposed a water service connection moratorium until the Raymond Basin aquifer recovers sufficiently to allow Sierra Madre to pump its ground water for delivery to its existing customers.

Water Delivery Systems

The estimated water supply that would be required for buildout of the General Plan Update would be adequately handled by the City's water delivery system. There are no deficiencies in the City's water delivery system and none would occur with implementation of the General Plan Update. Additionally, costs for City's wastewater collection system are funded by City's Public Facilities Fee placed on all new residential development, pursuant to Chapter 15.52 (Public Facilities Fee) of the City's Municipal Code. During the City's development review process, applicants of future development project that would be accommodated under the General Plan Update would be required to comply with the requirements in effect at the time

building permits are issued, including payment of the required Public Facilities Fee, as outlined in Section 15.52.050 (Timing of Payment). As stated in Section 15.52.070 (Special Fund), the fees go into a special fund, entitled the "public facilities fee fund", which are to be expended only on the installation, acquisition, construction and improvement of eligible facilities.

Future development projects under the General Plan Update would also be required to pay service connection fees per Section 13.04.080 (Fees for Service Connections and Installations or Extensions of Existing Distribution Mains) of the City's Municipal Code. The fees collected cover the expense of making new water connections to the City's existing water supply system.

Furthermore, the proposed General Plan Update and Implementation Program includes policies and implementation measures, respectively, related to water delivery systems, including:

- **Resource Management Element Policy R13.2:** Maintain a capital plan for the maintenance of the City's water facilities.
- **Policy C31.2:** Provide for the maintenance of existing water, sewer, and storm drainage systems.
- **Community Services Element Policy C31.3:** Require that new development be contingent upon the ability to be served by adequate sanitation collection and treatment, water, electrical and natural gas energy, telecommunication, storm drainage, and other supporting infrastructure.
- **Public Services Implementation Program Measure IM-1:** The City shall review and amend as necessary Titles 15 (Buildings and Construction), 16 (Subdivisions), and 17 (Zoning) of the Municipal Code to require that all proposed development be provided with adequate water, sewer, drainage, electrical, and telecommunications systems to meet the demands of the project.

Conclusion

For the reasons outlined above, future development that would be accommodated by the General Plan update would not result in an impact on the City's water delivery system, but would result in an impact on the City's water supply. Although adequate distribution systems and capacity are in place to handle the additional water demand that would be required to accommodate future development associated with the General Plan Update, the projected water supply is not sufficient to meet future demands associated with buildout of the General Plan Update. Therefore, impacts on water supply resulting from implementation of the General Plan Update are considered significant.

5.13.2.5 EXISTING REGULATIONS

- Senate Bill 610
- 20x20x20 Water Conservation Plan (SBX7-7)
- City of Sierra Madre Municipal Code:

- Section 13.04.080 (Fees for Service Connections and Installations or Extensions of Existing Distribution Mains)
- Chapter 13.20 (Cross-Connection Control)
- Chapter 13.24 (Mandatory Water Conservation Plan)
- Chapter 15.30 (Green Building Standards Code)
- Chapter 15.60 (Water Efficient Landscape Ordinance)
- Section 15.04.070 (Stormwater Retention)

5.13.2.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon compliance with the regulatory requirements and implementation of the General Plan Update policies and Implementation Program measures, the following impacts would be less than significant: 5.13-3 (partial; related to water delivery systems only).

Without mitigation, the following impacts would be **potentially significant (partial; related to water supply only)**:

- **Impact 5.13-3** Water supply would not be adequate to meet the water demands of future development that would be accommodated by the General Plan Update.

5.13.2.7 MITIGATION MEASURES

13-1 The City of Sierra Madre shall apply the City's water conservation measures and policies (including those of the General Plan Update) to all development proposals (new development and redevelopment) and encourage water conservation in construction and landscape design.

13-2 The City of Sierra Madre shall promote energy efficiency and water conservation upgrades to existing non-residential buildings at the time of major remodel or additions.

13-3 The City of Sierra Madre shall evaluate development proposals (new development and redevelopment) for consistency with the 2010 Green Building Standards Code (adopted by reference in Chapter 15.30 [Green Building Standards Code] of the City's Municipal Code) and the City's.

13-4 The City of Sierra Madre shall evaluate development proposals (new development and redevelopment) for consistency with the City's Water Efficient Landscape Ordinance (Chapter 15.60 of the City's Municipal Code) and Low Impact Development Ordinance (integrated within Section 15.04.070 [Stormwater Retention] of the City's Municipal Code) to ensure that development proposals incorporate all necessary and feasible water conservation measures.

13-5 The City of Sierra Madre shall require that all development proposals (new development and redevelopment) demonstrate a sufficient and sustainable water supply (i.e., provision of a "will serve" letter from the City's Water Division) prior to approval of the development proposal, consistent with the requirements of the City's Water Division.

13-6 The City of Sierra Madre shall encourage project applicants/developers of development proposals (new development and redevelopment), where feasible, to retain stormwater for onsite use and thereby offset the use of other water sources.

13-7 The City of Sierra Madre shall monitor development growth, and coordinate with the City's Water Division to ensure that long-range needs for potable water will be met.

13-8 If water supplies are reduced from projected levels due to drought, emergency, or other unanticipated events, the City of Sierra Madre shall take appropriate steps to limit, reduce, or otherwise modify growth permitted by the General Plan Update in consultation with the City's Water Division to ensure adequate long-term supply for existing businesses and residents.

13-9 The City of Sierra Madre shall conduct a periodic assessment of the City's water conservation measures and policies based on water supply changes, droughts, and environmental issues (e.g. contamination of potable water).

13-10 The City of Sierra Madre shall promote programs for retrofitting plumbing, providing cost rebates, identifying leaks, changing landscaping, irrigating efficiently and other methods of reducing water consumption by existing users.

13-11 The City of Sierra Madre shall assess the water use by City buildings and facilities (e.g., City Hall, parks) and reduce water consumption to the maximum extent practicable.

13-12 The City of Sierra Madre shall develop an information sharing program in cooperation with the City's Water Division to make appropriate data available to the public pertaining to water supply and water use in Sierra Madre.

5.13.2.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the mitigation measures outlined above would help reduce impacts on water supply as a result of future development that would be accommodated by the General Plan Update. However, considering the City's current water supply constraints— including the present serious drought conditions and the City's inability to access its adjudicated ground water in the Eastern Unit of the Raymond Basin due to low groundwater levels—impacts on water supply due to future development that would be accommodated by the General Plan Update are considered significant and unavoidable.

5.13.3 Storm Drainage Systems

5.13.3.1 ENVIRONMENTAL SETTING

Regulatory Background

Local laws, regulations, plans, or guidelines that are potentially applicable to the General Plan Update are summarized below.

City of Sierra Madre Municipal Code

The City's Municipal Code contains existing standards and regulations that focus on storm drainage facility impacts. The following provisions from the City of Sierra Madre's Municipal Code are applicable to the General Plan Update.

- **Title 15 (Buildings and Construction), Chapter 15.04 (Building Code and Permits), Section 15.04.070 (Stormwater retention).** Requires new developments to incorporate design elements for prevention of stormwater runoff onto non-permeable areas, stormwater retention and reuse for irrigation of landscaping, and rooftop designs, rain gutters, and other designs that can reuse stormwater.

- **Title 15 (Buildings and Construction), Chapter 15.58 (Low Impact Development Plan).** Contains requirements for construction activities and facility operations of development and redevelopment projects to comply with the current "municipal NPDES permit," lessen the water quality impacts of development, and integrate LID design principles to mimic predevelopment hydrology through infiltration, evapotranspiration and rainfall harvest and use.

- **Title 15 (Buildings and Construction), Chapter 15.60 (Water Efficient Landscape Ordinance), Section 15.60.100 (Stormwater Management).** Under the Water-Efficient Landscaping Ordinance, this section encourages stormwater management to minimize runoff and water waste to recharge groundwater, and to improve water quality. Best management practices involving landscape, irrigation and grading design plans can help effectively retain and reuse stormwater.

Existing Conditions

The City of Sierra Madre is in the Rio Hondo sub-watershed of the main Los Angeles River Watershed, which is approximately 834 square miles in area. The City discharges all stormwater and other discharges via three outlets at the City's southern border. The only above-ground (visible) outlet is the Santa Anita Wash, which meanders through the lower canyon and is also seen at Sierra Madre Boulevard, near the Community Nursery School. The two underground outlets are located at Orange Grove Boulevard at Lima Street and Orange Grove Boulevard at the City boundary. They are part of the Arcadia Wash and join together near the Santa Anita Race Track. The Santa Anita Wash discharges enter Peck Road Park Lake and continue to the Rio Hondo sub-watershed. The Arcadia Wash discharges enter the Rio Hondo below the Peck Road Park Lake. The Rio Hondo sub-watershed joins the Los Angeles River in the City of Lynwood (right where Interstate 710 crosses Imperial Highway), and then finally discharges into the Long Beach Harbor.

The City of Sierra Madre owns and maintains approximately 9.62 miles of storm drains. The City's drainage system is typical in design and function of those in other municipalities in southern California. While the system is thoroughly regulated for pollutants, it was created for flood control purposes.

5.13.3.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

U-3 Would 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.

5.13.3.3 RELEVANT GENERAL PLAN POLICIES AND IMPLEMENTATION MEASURES

The following are relevant policies and measures of the Sierra Madre General Plan Update and Implementation Program, respectively, which are designed to reduce impacts related to stormwater drainage facilities as a result of implementation of the General Plan Update.

General Plan Update Policies

Community Services Element

- **Policy C31.1:** Provide for storm drainage improvements where existing systems are deficient.
- **Policy C31.2:** Provide for the maintenance of existing water, sewer, and storm drainage systems.
- **Policy C31.3:** Require that new development be contingent upon the ability to be served by adequate sanitation collection and treatment, water, electrical and natural gas energy, telecommunication, storm drainage, and other supporting infrastructure.
- **Policy C 31.5:** Require that new development capture for percolation on site the maximum practical amount of storm water.
- **Policy C31.6:** Provide for the modification of existing drainage systems to capture for percolation the maximum practical amount of storm water.

Resources Management Element

- **R3.4:** Ensure the protection of natural open space so as to maintain it as a preventative measure against flooding, and as a means of capturing stormwater runoff for groundwater recharge.
- **R12.2:** Actively follow state legislative and policy actions to ensure that Sierra Madre is able to use all of its water through the conservation of lands for groundwater recharge and storm water management.
- **R12.3:** Develop new ways to capture and percolate storm water.

Hazard Prevention Element

- **Policy Hz8.1:** Require that residential tract developers be responsible for construction of drainage/storm drain systems improvements that are compatible with City and County systems within or adjacent to their project site.

- **Policy Hz8.2:** Install required public storm drainage improvements.

Implementation Program Measures

Flood/Landslide Implementation Program

- **Measure IM-1:** The City shall require that all new tract developments provide storm drainage infrastructure designed and built according to Los Angeles County Public Works/Flood Control District standards to allow for inclusion of those systems into the County Transfer Drain program.

Public Services Implementation Program

- **Measure IM-1:** The City shall review and amend as necessary Titles 15 (Buildings and Construction), 16 (Subdivisions), and 17 (Zoning) of the Municipal Code to require that all proposed development be provided with adequate water, sewer, drainage, electrical, and telecommunications systems to meet the demands of the project.

5.13.3.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation (see Appendix A) disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

For the impact analysis of all thresholds below, it should be noted that the large infill opportunity site shown in Figure 3-5*, Infill Opportunity Sites*, just north of Carter Avenue, which is associated with the residential subdivision known as Stonegate, is an approved development project and was analyzed under separate environmental documentation in accordance with CEQA. The impact on stormwater drainage facilities resulting from Stonegate were addressed and mitigated for in that environmental documentation. Also, in addition to the provisions of Title 17 (Zoning) of the City's Municipal Code and the Hillside Management zone regulations (Chapter 17.52 of the City's Municipal Code), all residential lots within Stonegate are subject to the Stonegate Residential Design Guidelines, which among other design guidelines, requires that each residential development within Stonegate obtain a hillside development permit. As part of the hillside development permit review, each residential development is required to be reviewed by the City's Planning Commission to ensure that it complies with the design guidelines.

For the purpose of the following analysis, it is also important to note that, based on the requirements of CEQA, this analysis is based on a comparison to existing land uses and does not address the differences that

would result from a comparison with the existing General Plan land use map, from which there is little variation when compared to the proposed General Plan land use map.

Furthermore, it is important to note that while the General Plan Update establishes City-wide policy level guidance, includes a revision to the current land use plan (see Figures 3-4, *Current Land Use Plan*, and 3-6, *Proposed Land Use Plan*), and modifies the development potential of certain parcels in the City (see Figure 3-5, *Infill Opportunity Sites*), it does not contain specific development project proposals. The General Plan Update is a regulatory document that sets forth the framework for future growth and development (e.g., infill development, redevelopment, and revitalization/restoration) in the City and does not directly result in development in and of itself. Before any development can occur in the City, all such development is required to be analyzed for conformance with the City's General Plan, zoning requirements, and other applicable local and state requirements; comply with the requirements of CEQA (e.g., preparation of site-specific environmental documentation in accordance with CEQA); and obtain all necessary approvals, clearances, and permits.

Impact 5.13-4: Existing storm drainage systems are adequate to serve the drainage requirements of future development that would be accommodated by the General Plan Update. [Threshold U-3]

Impact Analysis: Implementation of the General Plan Update would not allow for substantial new development given the built-out nature of Sierra Madre, nor would it lead to an increase of impervious areas or substantial increase in runoff, which in turn would affect the City's storm drainage system. The General Plan Update would guide the growth and development (e.g., infill development, redevelopment, and revitalization/restoration) that could occur within the City's infill opportunity sites (Figure 3-5, *Infill Opportunity Sites*), which include mostly underutilized parcels in various areas of the City. The infill opportunity sites shown in Figure 3-5 mostly occur in the developable foothill areas of the City, with just a few sites shown in the hillside areas (shown in green in Figure 3-5). No new development would occur in areas that are not already improved with or served by storm drainage collection systems.

Minor infrastructure upgrades such as the construction of new surface conveyances and storm drains may be required for individual development projects that would be accommodated by the General Plan Update. However, each proposed development project would require an assessment by the City of how the project would affect existing and proposed storm drain systems. Necessary system improvements would be identified for each development project during the City's assessment.

Additionally, per SWRCB and Chapter 15.58 (Low Impact Development Plan) of the City's Municipal Code, the NPDES program permit requires proposed development projects greater than one acre in size to implement structural and nonstructural BMPs that would mimic predevelopment quantity and quality runoff conditions for new development. BMPs related to low impact development features and infiltration/biotreatment would help to decrease and maintain existing levels of stormwater runoff. Sections 15.04.070 and 15.60.100 also require new developments to incorporate design elements for prevention of stormwater runoff, stormwater retention and reuse, and additional designs that allow for reuse. Each development project approved under the General Plan Update would also be required to install and maintain onsite storm drainage improvements as needed.

Furthermore, under the policies and implementation measures of General Plan Update and Implementation Program, respectively, the City would take the following actions to reduce impacts of potential development projects on the City's storm drainage system:

- **Community Services Element Policy C31.1:** Provide for storm drainage improvements where existing systems are deficient.

- **Community Services Element Policy C31.3:** Require that new development be contingent upon the ability to be served by adequate sanitation collection and treatment, water, electrical and natural gas energy, telecommunication, storm drainage, and other supporting infrastructure.

- **Community Services Element Policy C 31.5:** Require that new development capture for percolation on site the maximum practical amount of storm water.

- **Community Services Element Policy C31.6:** Provide for the modification of existing drainage systems to capture for percolation the maximum practical amount of storm water.

- **Hazard Prevention Element Policy Hz8.1:** Require that residential tract developers be responsible for construction of drainage/storm drain systems improvements that are compatible with City and County systems within or adjacent to their project site.

- **Public Services Implementation Program Measure IM-1:** The City shall review and amend as necessary Titles 15 (Buildings and Construction), 16 (Subdivisions), and 17 (Zoning) of the Municipal Code to require that all proposed development be provided with adequate water, sewer, drainage, electrical, and telecommunications systems to meet the demands of the project.

The specific location and design of future storm drainage systems (new or expanded, as needed) required to provide services for future development that would be accommodated by General Plan Update are not known at this time, and therefore, it would be speculative to provide environmental analysis for construction-related impacts. Improvements would also be subject to the proposed General Plan Update policies; local regulations; and applicable mitigation measures as detailed in each topical section of this DEIR. Moreover, these improvements would fall within the impact significance conclusions in this DEIR for construction-related impacts for implementation of the General Plan Update (e.g., construction impacts related to air quality, noise, GHG, cultural resources). Therefore, construction-related impacts are concluded to be less than significant within this topical DEIR section (Utilities and Service Systems).

5.13.3.5 EXISTING REGULATIONS

- City of Sierra Madre Municipal Code, Title 15 (Buildings and Construction)
  - Chapter 15.04 (Building Code and Permits), Section 15.04.070 (Stormwater retention)
  - Chapter 15.58 (Low Impact Development Plan)
  - Title 15 (Buildings and Construction), Section 15.60.100 (Stormwater management)

5.13.3.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon compliance with the regulatory requirements and implementation of the General Plan Update policies and Implementation Program measures, the following impacts would be less than significant: 5.13-3.

5.13.3.7 MITIGATION MEASURES

Impacts are less than significant and mitigation measures are not required.

5.13.3.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

No mitigation measures are required and impacts would remain less than significant.

5.13.4 Solid Waste Services and Facilities

5.13.4.1 ENVIRONMENTAL SETTING

Regulatory Background

Federal, state, and local laws, regulations, plans, or guidelines that are potentially applicable to the General Plan Update are summarized below.

Federal

The Resource Conservation and Recovery Act of 1976 (RCRA) (Title 40 of the Code of Federal Regulations), Part 258, contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the federal landfill criteria. The federal regulations address the location, operation, design (liners, leachate collection, run-off control, etc.), groundwater monitoring, and closure of landfills.

State

Assembly Bill 939 and 341

Assembly Bill AB 939 (California Integrated Solid Waste Management Act of 1989; Public Resources Code 40050 et seq.) established an integrated waste-management system that focused on source reduction, recycling, composting, and land disposal of waste. AB 939 required every California city and county to divert 50 percent of its waste from landfills by the year 2000.

In addition, AB 939 requires a Countywide Integrated Waste Management Plan (CIWMP) for each county. The CIWMP must contain a Source Reduction and Recycling Element (SRRE) for the county and each city within the county, identifying waste characterization, source reduction, recycling, composting, solid waste facility capacity, education and public information, funding, special waste (asbestos, sewage sludge, etc.), and household hazardous waste. Additionally, the CIWMP must also incorporate a countywide siting element, specifying areas for transformation or disposal sites to provide capacity for solid waste generated in the jurisdiction that cannot be reduced or recycled for a 15-year period.

Assembly Bill 341 (AB 341; Chapter 476, Statutes of 2011) increased the statewide solid waste diversion goal to 75 percent by 2020. The law also mandates recycling for commercial and multifamily residential land uses.

Local

City of Sierra Madre Municipal Code

The City's Municipal Code contains existing standards and regulations that focus on solid waste services impacts. The following provisions from the City of Sierra Madre's Municipal Code are applicable to the General Plan Update.

- **Title 3 (Revenue and Finance), Chapter 3.36 (Utility Users Tax), Section 3.36.095 (Solid Waste Disposal Users Tax).** Imposes a tax upon every person in the City using waste or refuse collection and disposal services. This solid waste disposal user's tax is part of the Utility Users Tax (UUT), which provides for a 10 percent rate until July 2015, then 8 percent until July 2016 and 6 percent after July 2016.

- **Title 8 (Health and Safety), Chapter 8.12 (Garbage and Refuse Collection and Disposal).** Details the City's regulations related to garbage and refuse collection and disposal, including prohibited collection and placement of garbage, waste, or refuse; residential, commercial, and industrial use responsibilities, construction contractor and gardener exclusions; and receptacle placement and collection times.

- **Title 8 (Health and Safety), Chapter 8.13 (Construction and Demolition Waste Disposal).** Requires preparation of a waste management plan (WMP) for all projects within the City that will cost $50,000 or more to construct. Compliance with the WMP shall be a condition of approval on any building or demolition permit issued by the City.

Existing Conditions

Solid Waste Collection and Disposal

The Sanitation Districts of Los Angeles County (Sanitation Districts) are responsible for implementation of the CIWMP and managing solid waste on a regional basis. The City of Sierra Madre is within the service boundary of District 15. The Sanitation Districts operate three sanitary landfills, four landfill energy recovery facilities, two recycle centers, three materials recovery/transfer facilities, and participate in the operation of two refuse-to-energy facilities. Since the primary landfill for Los Angeles County (Puente Hills Landfill) has closed and opening new local landfills is difficult, the Sanitation Districts have chosen to open remote disposal sites using waste-by-rail transport.

Specifically, the Puente Hills Intermodal Facility (PHIMF) for the waste-by-rail operation will be located next to the Puente Hills Materials Recovery Facility (MRF) in the City of Industry, which is owned and operated by the Sanitation Districts. The PHIMF will be a dedicated rail yard to serve the Sanitation Districts' waste-by-rail program. The PHIMF will expand the county's ability to dispose of solid waste by providing a facility that transfers containerized municipal solid waste and transports it by train to the Mesquite Regional Landfill in Imperial County. At the PHIMF, rail-ready shipping containers of municipal solid waste will be transferred from trucks to trains for transport to the Mesquite Regional Landfill. The PHIMF will have a design capacity

of two trains per day, which equates to 8,000 tons per day of containerized municipal solid waste; the Mesquite Regional Landfill has capacity for 100 years disposal at that rate. The Sanitation Districts began construction of the PHIMF in the City of Industry in 2009; the date of actual operation for the PHIMF is yet to be determined (Sanitation District 2015a and 2015b).

Sierra Madre is also one of only a few jurisdictions that are allowed to use Scholl Canyon Landfill due to a City of Glendale ordinance. Use of this landfill is necessary to support its viability (Carlson 2011). Scholl Canyon Landfill has a permitted throughput of 3,400 tons per day and a maximum capacity of 58.9 cubic yards. As of 2011, Scholl Canyon Landfill's remaining capacity was 9.9 million cubic yards; the landfill is expected to close in April 2030 (CalRecycle 2015a).

The City of Sierra Madre uses Athens Services as its exclusive franchise residential and commercial waste and recycling hauler. Athens Services' MRF is located at 14048 Valley Boulevard in unincorporated Basset near the City of Industry. The facility is a computer-controlled, state-of-the-art plant designed specifically for the processing of municipal solid waste. The maximum permitted throughput is 5,000 tons of waste per day (CalRecycle 2015b). Construction and demolition debris is also processed at this facility, although in a separate building. At the facility, waste is sorted and recyclable materials are removed. Many materials are baled and shipped to both foreign and domestic markets. For household hazardous waste collection, the City uses programs provided by Los Angeles County. Residents of Sierra Madre are provided automated containers from Athens Services for dispensing organic waste, green waste, and recyclables. Athens Services also offers other services, including the pick-up of bulky and hard-to-handle items (e.g., water heaters, furnaces, and dryers) and the provision of large containers that can handle large volumes of material.

The City is involved in curbside recycling with the assistance of Athens Services. Since July 1, 2012, the City has also been implementing commercial recycling. Additionally, the City's Green Committee has set a goal of diverting 66 percent of total waste by 2015 to work towards the statewide goal of 75 percent by 2020, which is tied into the City's mandatory commercial recycling program (Carlson 2011). Furthermore, a drop-off recycling center is located in the City.

Los Angeles Regional Agency

The Los Angeles Regional Agency (LARA), recognized and formed in 2004 by CalRecycle, started with 14 charter cities in 2004, and there are now 18 cities (including Sierra Madre) located throughout Los Angeles County. LARA promotes environmental responsibility through the state-mandated reduce, reuse, and recycle philosophy of AB 939, which as stated above, sets forth mandates requiring all cities and counties to achieve a 50 percent solid diversion rate by 2000. As also noted above, the current statewide diversion goal is 75 percent by 2020, as mandated by AB 341; LARA members had a combined diversion rate equivalent of 68 percent in 2013 (LADPW 2015).

5.13.4.2 THRESHOLDS OF SIGNIFICANCE

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project:

U-6 Would be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.

U-7 Would not comply with federal, state, and local statutes and regulations related to solid waste.

5.13.4.3 RELEVANT GENERAL PLAN POLICIES AND IMPLEMENTATION MEASURES

The following are relevant policies and measures of the Sierra Madre General Plan Update and Implementation Program, respectively, which are designed to reduce impacts related to solid waste as a result of implementation of the General Plan Update.

General Plan Update Policies

Resource Management Element

- **Policy R18.1:** Maintain a contract with a waste hauler to provide service to residences, businesses, institutions and City government facilities for trash collection.
- **Policy R18.2:** Maintain a contract with a single waste hauler to provide trash collection services to commercial businesses, thereby simplifying the commercial recycling program.
- **Policy R18.3:** Continue to provide opportunities for the disposal of large household items.
- **Policy R19.1:** Require the waste collection provider to provide recycling bins to all customers in the City, including in the business district. Cardboard should be collected at sites in the business district.
- **Policy R19.2:** Continue the collection of new types of plastic.
- **Policy R19.3:** Continue to enforce the Construction and Demolition Ordinance to require builders to separate and recycle discarded building materials, including lumber, metal, cement, etc.
- **Policy R19.4:** City offices shall purchase and use post-consumer and recycled products to the extent feasible.
- **Policy R19.5:** Promote green waste and recycling programs such as "green and clean" which increase the usage of green waste for compost and reduces the amount of green waste exported.
- **Policy R20.1:** Continue to work with Los Angeles County Department of Public Works to provide a free household hazardous waste pick-up at least once a year.
- **Policy R20.2:** Continue to provide information to community members regarding free household hazardous waste pick-up sponsored by Los Angeles County Department of Public Works.
- **Policy R21.1:** Continue to provide for adequate trash removal, installation and maintenance of trash receptacles on street and in parks, and regular street sweeping.

Community Services Element

- **Policy C31.3:** Require that new development be contingent upon the ability to be served by adequate sanitation collection and treatment, water, electrical and natural gas energy, telecommunication, storm drainage, and other supporting infrastructure.

Implementation Program Measures

Waste Management and Recycling Implementation Program

- **Measure IM-1:** The City shall continue to make adequate waste removal services available to existing and future residents.
- **Measure IM-2:** The City shall encourage recycling through the purchase of recycled products, enforcement of recycling of construction and demolition debris, and the promotion of composting and green waste programs.
- **Measure IM-3:** The City shall continue to provide residents with a proper means of disposal of hazardous waste through participation in the Household Hazardous Waste Roundup.

5.13.4.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation (see Appendix A) disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

For the impact analysis of all thresholds below, it should be noted that the large infill opportunity site shown in Figure 3-5*, Infill Opportunity Sites*, just north of Carter Avenue, which is associated with the residential subdivision known as Stonegate, is an approved development project and was analyzed under separate environmental documentation in accordance with CEQA. The impact related to solid waste services and facilities resulting from Stonegate were addressed and mitigated for in that environmental documentation. Also, in addition to the provisions of Title 17 (Zoning) of the City's Municipal Code and the Hillside Management zone regulations (Chapter 17.52 of the City's Municipal Code), all residential lots within Stonegate are subject to the Stonegate Residential Design Guidelines, which among other design guidelines, requires that each residential development within Stonegate obtain a hillside development permit. As part of the hillside development permit review, each residential development is required to be reviewed by the City's Planning Commission to ensure that it complies with the design guidelines.

For the purpose of the following analysis, it is also important to note that, based on the requirements of CEQA, this analysis is based on a comparison to existing land uses and does not address the differences that would result from a comparison with the existing General Plan land use map, from which there is little variation when compared to the proposed General Plan land use map.

Furthermore, it is important to note that while the General Plan Update establishes City-wide policy level guidance, includes a revision to the current land use plan (see Figures 3-4, *Current Land Use Plan*, and 3-6,

Proposed Land Use Plan), and modifies the development potential of certain parcels in the City (see Figure 3-5, *Infill Opportunity Sites*), it does not contain specific development project proposals. The General Plan Update is a regulatory document that sets forth the framework for future growth and development (e.g., infill development, redevelopment, and revitalization/restoration) in the City and does not directly result in development in and of itself. Before any development can occur in the City, all such development is required to be analyzed for conformance with the City's General Plan, zoning requirements, and other applicable local and state requirements; comply with the requirements of CEQA (e.g., preparation of site-specific environmental documentation in accordance with CEQA); and obtain all necessary approvals, clearances, and permits.

Impact 5.13-5: Existing solid waste facilities would be able to accommodate project-generated solid waste and continue complying with related solid waste regulations. [Thresholds U-6 and U-7]

Impact Analysis:

Solid Waste Facilities

Buildout of the General Plan Update would allow for an additional 121 dwelling units and 87,392 square feet of nonresidential use, which would result in additional solid waste generation in the City. Using solid waste generation rates obtained from the California Department of Resources Recycling and Recovery (CalRecycle) and as shown in Table 5.13-4, buildout under the General Plan Update would generate a net increase of approximately 1,916 pounds of solid waste per day (or 699,340 pounds per year) in the City.

Table 5.13-4 Estimated Solid Waste Generation under the General Plan Update

Land Use	Buildout Under the General Plan Update	Solid Waste Generation Rate	
		Per Day	Total
Residential	121 units	12.23 pounds	1,480
Commercial	43,696 square feet	5 pounds/ 1,000 square feet	218
Industrial	43,696 square feet	5 pounds/ 1,000 square feet	218
TOTAL	**—**	**—**	**1,916 pounds per day**

Source: CalRecycle 2013a, 2013b.

Under a contract with the City, Athens Services will continue to provide solid waste services to future development in Sierra Madre and existing capacity at Scholl Canyon Landfill would not be adversely impacted. As stated above, Scholl Canyon Landfill has a maximum throughput of 3,400 tons per day (or 6,800,000 pounds per day); the additional solid waste generated from future development that would be accommodated by the General Plan Update (1,916 pounds per day) would only account for 0.03 percent of the landfill's daily throughput. In addition, Athens Services would first take the solid waste collected in the City to its MRF near the City of Industry to sort and remove recyclable materials before reaching any landfill.

Additionally, as discussed earlier, once in operation, LACDS's PHMF waste-by-rail system will have a design capacity of two trains per day, which equates to 8,000 tons per day of containerized municipal solid waste, and the Mesquite Regional Landfill (which is the receiving landfill) has capacity for 100 years disposal at that

rate (LACSD 2015a and 2015b). Therefore, LACSD would have adequate solid waste disposal capacity to accommodate solid waste generated by future development that would be accommodated by the General Plan Update, once the PHIMF is in operation.

Solid Waste Regulations

LARA, which Sierra Madre is a member agency of, promotes environmental responsibility through the state-mandated reduce, reuse, and recycle philosophy of AB 939, which sets forth mandates requiring all cities and counties to achieve a 50 percent solid waste diversion rate by 2000. The current statewide diversion goal is 75 percent by 2020, as mandated by AB 341; LARA members had a combined solid waste diversion rate equivalent of 68 percent in 2013 (LADPW 2015). Sierra Madre had solid waste diversion rates of approximately 51 percent in 2011, 54 percent in 2012, and 51 percent in 2013. Therefore, the City has met its yearly solid waste diversion rate in in accordance with AB 939. Additionally, the City's Green Committee has set a goal of diverting 66 percent of total waste by 2015 to work towards the statewide goal of 75 percent by 2020 mandated under AB 341, which is tied into the City's mandatory commercial recycling program (Carlson 2011).

Future development that would be accommodated by the General Plan Update would also be required to comply with all applicable laws and regulations governing solid waste and recycling, and in doing so, not affect the City's ability to continue to meet the required AB 939 solid waste diversion requirements, nor affect the City's goal and ability in achieving the AB 341 solid waste diversion requirements.

In helping meet the waste diversion and recycling requirements of AB 939 and AB 341, the City is also involved in curbside recycling with the assistance of Athens Services, and since July 1, 2012, the City has been implementing commercial recycling. Additionally, a drop-off recycling center is located in the City, which is available to the City's residents. City staff also provides recycling information outreach to Sierra Madre residents through various communication tools throughout the year, including a brochure available at City facilities, and also provides outreach at many City events, such as the Wistaria Festival and Public Works Open House.

Furthermore, future development that would be accommodated by the General Plan Update would be required to comply with the provisions of the 2010 Green Building Standards Code (adopted by reference in Chapter 15.30 [Green Building Standards Code] of the City's Municipal Code), which outlines requirements for construction waste reduction, material selection, and natural resource conservation.

Conclusion

As demonstrated above, implementation of the General Plan Update would not require new or expanded solid waste disposal facilities, nor would it impede the City's ability to continue to meet the required AB 939 and AB 341 waste diversion requirements. In addition, the following General Plan Update policies and Implementation Program measures would ensure that impacts on solid waste facilities and regulations are not significant:

- **Resource Management Element Policy R18.1:** Maintain a contract with a waste hauler to provide service to residences, businesses, institutions and City government facilities for trash collection.

- **Resource Management Element Policy R19.2:** Continue the collection of new types of plastic.

- **Resource Management Element Policy R19.3:** Continue to enforce the Construction and Demolition Ordinance to require builders to separate and recycle discarded building materials, including lumber, metal, cement, etc.

- **Resource Management Element Policy R19.5:** Promote green waste and recycling programs such as "green and clean" which increase the usage of green waste for compost and reduces the amount of green waste exported.

- **Resource Management Element Policy R20.1:** Continue to work with Los Angeles County Department of Public Works to provide a free household hazardous waste pick-up at least once a year.

- **Resource Management Element Policy R21.1:** Continue to provide for adequate trash removal, installation and maintenance of trash receptacles on street and in parks, and regular street sweeping.

- **Waste Management and Recycling Implementation Program Measure IM-1:** The City shall continue to make adequate waste removal services available to existing and future residents.

- **Waste Management and Recycling Implementation Program Measure IM-2:** The City shall encourage recycling through the purchase of recycled products, enforcement of recycling of construction and demolition debris, and the promotion of composting and green waste programs.

- **Waste Management and Recycling Implementation Program Measure IM-3:** The City shall continue to provide residents with a proper means of disposal of hazardous waste through participation in the Household Hazardous Waste Roundup.

5.13.4.5 EXISTING REGULATIONS

- Public Resources Code 40050 et seq. (AB 939)
- Assembly Bill 341 (Chapter 476, Statutes of 2011)
- City of Sierra Madre Municipal Code
  - Section 3.36.095 (Solid waste disposal users tax)
  - Chapter 8.12 (Garbage and Refuse Collection and Disposal)
  - Chapter 8.13 (Construction and Demolition Waste Disposal)

5.13.4.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon compliance with the regulatory requirements and implementation of the General Plan Update policies and Implementation Program measures, the following impacts would be less than significant: 5.13-5.

5.13.4.7 MITIGATION MEASURES

Impacts are less than significant and mitigation measures are not required.

5.13.4.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

No mitigation measures are required and impacts would remain less than significant.

5.13.5 Other Utilities

5.13.5.1 ENVIRONMENTAL SETTING

Regulatory Background

State laws, regulations, plans, or guidelines that are potentially applicable to the General Plan Update are summarized below.

California Building and Energy Efficiency Standards (CCR Title 24)

Energy conservation standards for new residential and nonresidential buildings were adopted by the California Energy Resources Conservation and Development Commission in June 1977 and updated triennially (Title 24, Part 6, of the California Code of Regulations [CCR]). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. On May 31, 2012, the California Energy Commission adopted the 2013 Building and Energy Efficiency Standards, which went into effect on January 1, 2014. Buildings that are constructed in accordance with the 2013 Building and Energy Efficiency Standards are 25 percent (residential) to 30 percent (nonresidential) more energy efficient than the 2008 standards as a result of better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses. Plans submitted for building permits are required to include written notes demonstrating compliance with the 2013 building and energy standards and reviewed and approved by the City's Public Works Department prior to issuance of building permits.

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The 2010 Green Building Standards Code (Part 11, Title 24, known as CALGreen) was adopted as part of the California Building Standards Code (Title 24, California Code of Regulations). CALGreen established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The mandatory provisions of the 2010 Green Building Code Standards Code (adopted by reference in Chapter 15.30 [Green Building Standards Code] of the City's Municipal Code) became effective January 1, 2011.

Appliance Efficiency Regulations (CCR Title 20)

The 2006 Appliance Efficiency Regulations (Title 20, CCR Sections 1601 through 1608) were adopted by the California Energy Commission on October 11, 2006, and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally and non–federally regulated appliances.

Existing Conditions

Electricity

The City of Sierra Madre's electrical needs are provided by Southern California Edison (SCE). The majority of SCE facilities in Sierra Madre are overhead, consisting of wood power poles, overhead conductors, transformers, and various other types of pole-mounted equipment. Some customers have individual underground-fed services, such as a customer being served from a pad mounted transformer, or a residential customer who has opted to have their service installed underground (Garcia 2011).

Table 5.13-5 shows the total electrical usage by rate group within Sierra Madre. The electricity demand shown in this table is based on 12 months usage data from January 2010 to December 2010, which is the most current data available from and provided by SCE; therefore, it is assumed that electrical usage has gradually increased over the years. More current (2014) data was not available for preparation of the analysis in this DEIR; therefore, the 2010 electrical usage numbers were used and are considered adequate. As shown in the table, SCE served over 5,400 accounts in 2010 and the total annual electrical usage of these accounts was 47,665,323 kilowatt hours (kWh).

Table 5.13-5 Sierra Madre Electricity Demand for Calendar Year 2010

Rate Group	Annual kWh	Percent of Total	Number of Accounts	% of Total
Domestic	34,456,564	72.3	4,892	90.4
GS-1	3,472,064	7.3	440	8.1
GS-2	9,254,374	19.4	65	1.2
Street Lighting	482,321	1.0	15	0.3
Total	**47,665,323**	**100**	**5,412**	**100**

Source: SCE 2011.
Notes:
Domestic = For all residential service including lighting, heating, cooking, and power or combination thereof in a single-family accommodation; also to domestic farm service when supplied through the farm operator's domestic meter.
GS-1 = Includes single- and three-phase general service including lighting and power, except that the customer whose monthly maximum demand, in the opinion of SCE, is expected to exceed 20 kW in any three months during the preceding 12 months.
GS-2 = Includes single- and three-phase general service including lighting and power customers whose monthly maximum demand registers, or in the opinion of SCE is expected to register, above 20 kW and below 200 kW.
Street Lighting = Includes service for the lighting of streets, highways, and publicly-owned and operated automobile parking lots, which are open to the general public where SCE owns and maintains the street lighting equipment and associated facilities included under this schedule.

According to SCE, no deficiencies or inefficiencies currently exist and there are no plans by SCE to expand electrical facilities in Sierra Madre at this time. Additionally, SCE regularly reviews its grid system and infrastructure for reliability of service to its customers. Furthermore, capital improvements by SCE are funded from SCE's General Rate Case (GRC) approved by the California Public Utilities Commission

(CPUC) for expansion and improvement projects within SCE's power grid. The GRC is SCE's proposal to CPUC for what it needs to continue to provide high level service to its customers. It is a mandated regulatory proceeding that SCE goes through every three years, in which SCE requests funds for its infrastructure, maintenance and upgrade investments. The funding that is allocated to SCE is used to inspect, repair, and when appropriate, upgrade its electrical infrastructure within its 50,000 square-mile service territory, which includes Sierra Madre (Garcia 2011).

Natural Gas

The City of Sierra Madre's natural gas needs are provided by Southern California Gas Company (SoCalGas). SoCalGas does not have any natural gas building facilities within the City's boundaries and no deficiencies or inefficiencies currently exist. Additionally, there are no plans by SoCalGas to expand natural gas facilities at this time. Capital improvement projects for SoCalGas are generally underwritten by SoCalGas ratepayers. Natural gas demand is measured in therms by facility type (e.g., residential, commercial, industrial).

Table 5.13-6 shows the total natural usage by customer class within Sierra Madre. The natural gas demand shown in this table is based on 12 months usage data from January 2014 to December 2014. As shown in the table, the total natural gas usage for active Sierra Madre customers was 1,845,079 therms (or 184,507,900 kBTU). Gas rates are charged per meter per day, or per therm based on land use type.

Table 5.13-6 Sierra Madre Natural Gas Demand for Calendar Year 2014

Customer Class	Therms
Residential	1,617,738
Commercial	203,805
Industrial	17,368
Natural Gas Vehicles	6,168
Total	**1,845,079**

Source: Shaw 2014.

5.13.5.2 THRESHOLDS OF SIGNIFICANCE

Although not specifically in Appendix G of the CEQA Guidelines, the following additional threshold is also addressed in the impact analysis: a project would normally have a significant effect on the environment if the project:

U-8 Would increase demand for other public services or utilities.

5.13.5.3 RELEVANT GENERAL PLAN POLICIES AND IMPLEMENTATION MEASURES

The following are relevant policies and measures of the Sierra Madre General Plan Update and Implementation Program, respectively, which are designed to reduce impacts related to other utilities as a result of implementation of the General Plan Update.

General Plan Update Policies

Resource Management Element

- **Policy R6.2:** Discourage continuous all-night exterior lighting and encourage motion-sensored lighting.
- **Policy R7.1:** The City shall use the lowest wattage of lamp that is feasible and encourage the public to do the same.
- **Policy R7.2:** The City shall, whenever possible, turn off the lights or use motion sensor controlled lighting and encourage the public to do the same.
- **Policy R7.3:** Investigate the possibility of having businesses turn off lights when they are closed.

Community Services Element

- **Policy C31.3:** Require that new development be contingent upon the ability to be served by adequate sanitation collection and treatment, water, electrical and natural gas energy, telecommunication, storm drainage, and other supporting infrastructure.

Implementation Program Measures

Public Services Implementation Program

- **Measure IM-1:** The City shall review and amend as necessary Titles 15 (Buildings and Construction), 16 (Subdivisions), and 17 (Zoning) of the Municipal Code to require that all proposed development be provided with adequate water, sewer, drainage, electrical, and telecommunications systems to meet the demands of the project.

5.13.5.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation (see Appendix A) disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

For the impact analysis of all thresholds below, it should be noted that the large infill opportunity site shown in Figure 3-5*, Infill Opportunity Sites*, just north of Carter Avenue, which is associated with the residential subdivision known as Stonegate, is an approved development project and was analyzed under separate environmental documentation in accordance with CEQA. The impact related to other utilities from Stonegate were addressed and mitigated for in that environmental documentation. Also, in addition to the provisions of Title 17 (Zoning) of the City's Municipal Code and the Hillside Management zone regulations (Chapter 17.52 of the City's Municipal Code), all residential lots within Stonegate are subject to the Stonegate Residential Design Guidelines, which among other design guidelines, requires that each residential development within Stonegate obtain a hillside development permit. As part of the hillside development permit review, each

residential development is required to be reviewed by the City's Planning Commission to ensure that it complies with the design guidelines.

It is also important to note that while the General Plan Update establishes City-wide policy level guidance, includes a revision to the current land use plan (see Figures 3-4, *Current Land Use Plan*, and 3-6, *Proposed Land Use Plan*), and modifies the development potential of certain parcels in the City (see Figure 3-5, *Infill Opportunity Sites*), it does not contain specific development project proposals. The General Plan Update is a regulatory document that sets forth the framework for future growth and development (e.g., infill development, redevelopment, and revitalization/restoration) in the City and does not directly result in development in and of itself. Before any development can occur in the City, all such development is required to be analyzed for conformance with the City's General Plan, zoning requirements, and other applicable local and state requirements; comply with the requirements of CEQA (e.g., preparation of site-specific environmental documentation in accordance with CEQA); and obtain all necessary approvals, clearances, and permits.

Impact 5.13-6: Existing facilities and supplies would be able to accommodate electricity and natural gas demands from future development that would be accommodated by the General Plan Update. [Threshold U-8]

Impact Analysis: Development in accordance with the proposed General Plan Update would increase demand for other utilities, including electricity and natural gas. Table 5.13-7 details the projected electricity and natural gas demand of future development that would be accommodated by future development that would be accommodated by the General Plan Update.

Table 5.13-7 Projected Energy Demand under the General Plan Update

Land Use	Energy Demand	
	Electricity (kWh/yr)	Natural Gas (kBTU/yr)
Single Family	407,306	1,357,450
Multi Family	231,276	724,964
Subtotal	**638,582**	**2,082,414**
Commercial	598,635	58,422
Industrial	490,488	633,679
Subtotal	**1,089,123**	**692,101**
Total	**1,727,705**	**2,774,515**

Source: South Coast Air Quality Management District (SCAQMD). 2013. California Emissions Estimator Model (CalEEMod), Version 2013.2.2, Appendix D.
Notes: kWh/yr = thousand kilowatt hours per year; kBTU/yr = thousand british thermal units per year

Electricity

As shown in Table 5.13-7, electricity demand generated by future development that would be accommodated by the General Plan Update would be approximately 1.7 million kWh per year. Compared to the City's 2010 electricity use of 47.7 million kWh (see Table 5.13-5), development under the General Plan Update would consist of a very nominal increase in electricity use (approximately 3.6 percent increase). As noted above, the electricity demand shown in Table 5.13-5 is based on 12 months usage data from January 2010 to December

2010, which is the most current data available from and provided by SCE; therefore, it is assumed that electrical usage has gradually increased over the years. More current (2014) data was not available for preparation of the analysis in this DEIR; therefore, the 2010 electrical usage numbers were used and are considered adequate.

Additionally, as noted earlier, no deficiencies or inefficiencies currently exist and there are no plans by SCE to expand electrical facilities in Sierra Madre at this time. SCE also regularly reviews its grid system and infrastructure for reliability of service to its customers. Furthermore, capital improvements by SCE are funded from SCE's GRC approved by CPUC for expansion and improvement projects within SCE's power grid. The GRC is SCE's proposal to CPUC for what it needs to continue to provide high level service to its customers. It is a mandated regulatory proceeding that SCE goes through every three years, in which SCE requests funds for its infrastructure, maintenance and upgrade investments. The funding that is allocated to SCE is used to inspect, repair, and when appropriate, upgrade its electrical infrastructure within its 50,000 square-mile service territory, which includes Sierra Madre (Garcia 2011).

Therefore, implementation of the General Plan Update would not require SCE to obtain new or expanded electricity supplies or facilities.

Natural Gas

As shown in Table 5.13-7, natural gas demand generated by future development that would be accommodated by the General Plan Update would be 2,774,515 kBTU (or 27,754 therms) per year. The City's natural gas usage for calendar year 2014 (January to December) was 1,845,079 therms (or 184,507,900 kBTU)(see Table 5.13-6). Therefore, the natural gas demand of 2,774,515 kBTU (or 27,754 therms) associated with future development under the General Plan Update would only account for approximately 1.6 percent of the City's 2014 natural gas usage. This very nominal amount of natural gas demand would be adequately served by SoCalGas' existing natural gas facilities and supplies.

Additionally, as noted earlier, no natural gas deficiencies or inefficiencies currently exist in Sierra Madre. There are also no plans by SoCalGas to expand natural gas facilities at this time. SoCal Gas also stated that implementation of the General Plan Update would not have any impacts on natural gas service or facilities. Furthermore, capital improvement projects for SoCalGas are generally underwritten by SoCalGas ratepayers (Shaw 2011).

Therefore, implementation of the General Plan Update would not require SoCalGas to obtain new or expanded natural gas supplies or facilities.

Conclusion

Overall, electricity and natural gas demands of future development that would be accommodated by the General Plan Update would not adversely impact existing facilities and supplies. The following General Plan Update policies and Implementation Program measures would also ensure that existing electricity and natural gas facilities and supplies are not adversely impacted:

- **Resource Management Element Policy R6.2:** Discourage continuous all-night exterior lighting and encourage motion-sensored lighting.

- **Resource Management Element Policy R7.1:** The City shall use the lowest wattage of lamp that is feasible and encourage the public to do the same.

- **Resource Management Element Policy R7.2:** The City shall, whenever possible, turn off the lights or use motion sensor controlled lighting and encourage the public to do the same.

- **Resource Management Element Policy R7.3:** Investigate the possibility of having businesses turn off lights when they are closed.

- **Community Services Element Policy C31.3:** Require that new development be contingent upon the ability to be served by adequate sanitation collection and treatment, water, electrical and natural gas energy, telecommunication, storm drainage, and other supporting infrastructure.

- **Public Services Implementation Program Measure IM-1:** The City shall review and amend as necessary Titles 15 (Buildings and Construction), 16 (Subdivisions), and 17 (Zoning) of the Municipal Code to require that all proposed development be provided with adequate water, sewer, drainage, electrical, and telecommunications systems to meet the demands of the project.

5.13.5.5 EXISTING REGULATIONS

- California Building and Energy Efficiency Standards (CCR Title 24)
- Appliance Efficiency Regulations (CCR Title 20)

5.13.5.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon compliance with the regulatory requirements and implementation of the General Plan Update policies and Implementation Program measures, the following impacts would be less than significant: 5.13-6.

5.13.5.7 MITIGATION MEASURES

Impacts are less than significant and mitigation measures are not required.

5.13.5.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

No mitigation measures are required and impacts would remain less than significant.

5.13.6 References

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