4.13 WATER RESOURCES

This section has been adapted from the *Final SB610 Water Supply Assessment* (WSA) prepared by Cannon (November 7, 2016; refer to Appendix M). The WSA was prepared for the project, pursuant to the requirements of Section 10910 of the State Water Code, as amended by Senate Bill 610, Chapter 643 (2001). Figures 2-10 and 2-11, included in Section 2.0, *Project Description,* show the proposed layout of the water and recycled water utility lines within the San Luis Ranch Specific Plan Area, respectively.

4.13.1 Setting

a. Water Supply. The City of San Luis Obispo Utilities Department provides potable and recycled water to the community and is responsible for water supply, treatment, distribution, and resource planning. The City is the sole water provider within the City and the City's potable water is supplied from multiple surface water sources. In addition, groundwater and recycled water are used to supplement irrigation demand. Recycled water may also be used for all approved uses consistent with the City's Master Permit and Title 22.

The Water and Wastewater Element of the City's General Plan, updated in 2016, specifies that the City shall utilize multiple water resources to meet its water supply needs. Having several sources of water avoids dependence on any one source that may not be available during a drought or other water supply reduction or emergency. The City's 2015 Urban Water Management Plan (UWMP) provides detailed information on water sources for the City.

Surface Water Supply. City surface water supply comes from three sources: Salinas Reservoir, Whale Rock Reservoir, and Nacimiento Reservoir. Each is described in more detail below.

Salinas Dam, which created Salinas Reservoir (Santa Margarita Lake), was built in 1942 by the War Department to supply water to Camp San Luis Obispo and to meet the water needs of the City of San Luis Obispo. Salinas Reservoir captures water from a 112-square mile watershed and can store up to 23,843 acre-feet (AF). Since the late 1940s, the San Luis Obispo County Flood Control and Water Conservation District has operated this water supply for the City under a lease from the U.S. Army Corps of Engineers (USACE). Water from the reservoir is pumped through Cuesta Tunnel, a one-mile tunnel through the mountains of the Cuesta Ridge, and then flows by gravity to the City's Water Treatment Plant on Stenner Creek Road.

Whale Rock Reservoir is a 40,662 AF facility created by Whale Rock Dam, an earthen dam on Old Creek near the town of Cayucos. Whale Rock Dam captures water from a 20.3 square mile watershed, and water is delivered through 17.6 miles of 30-inch pipeline with the assistance of two pumping stations. The City of San Luis Obispo owns 55.05 percent of the water storage rights at the reservoir. The remaining water storage rights are divided between the two State agencies with California Polytechnic State University (Cal Poly) owning 33.71 percent and the California Men's Colony owning 11.24 percent.

Nacimiento Reservoir (Lake Nacimiento), which is owned and operated by the Monterey County Water Resources Agency, provides flood protection and groundwater recharge for the Salinas Valley. Since 1959, the San Luis Obispo County Flood Control and Water Conservation District has had an entitlement to 17,500 AFY from the reservoir for use in the County of San

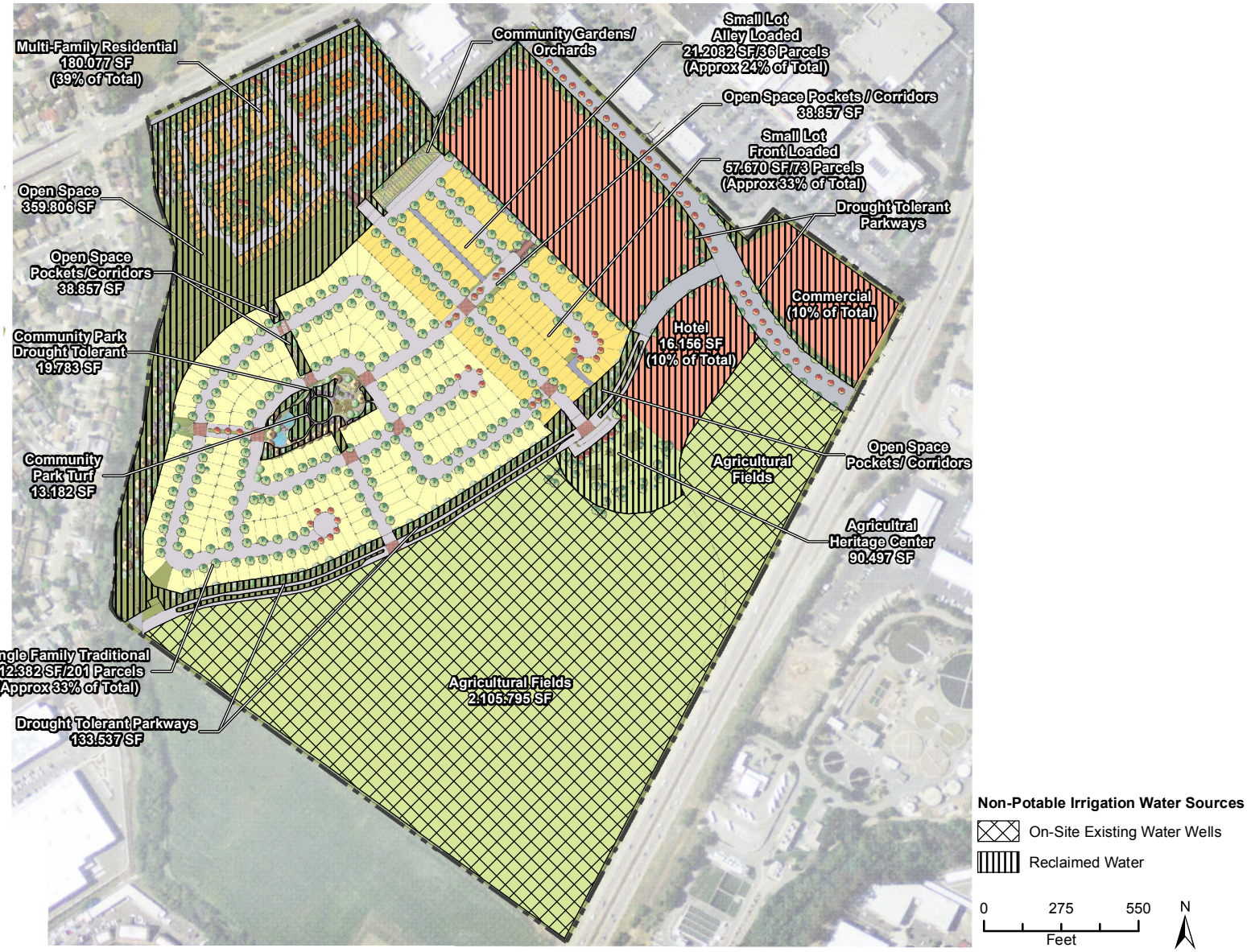
Luis Obispo. Approximately 1,750 AFY have been designated for uses around Lake Nacimiento, leaving 15,750 AFY for allocation to other areas within the County. The City's contractual water right from Nacimiento Reservoir is 5,482 AFY (City of San Luis Obispo UWMP, 2016a).

Recycled Water. The primary non-potable water source in the City is the Water Resource Recovery Facility (WRRF; formerly the Water Reclamation Facility), which has a design flow rate of 5,700 AFY (5.1 million gallons per day [gpd]). Water recycling has been envisioned as part of the City's overall water supply strategy since the 1980s. In 1994, the City completed a major capital improvement project at the WRRF. The improvement project included addition of tertiary treatment and other unit processes required to meet stringent effluent quality limits, set forth by the Regional Water Quality Control Board (RWQCB) with the intention of protecting and enhancing the receiving waters of San Luis Obispo Creek. The City completed construction of the project in 2006 and recycled water deliveries began in May of the same year. The City is currently planning a series of upgrades to the WRRF, which will help the City implement its long-term strategy for resource management. The City's WRRF effluent meets the criteria for Municipal and Domestic Water Supply (MUN). The MUN designation is the main driver for treatment upgrades at the WRRF. These new requirements have been placed in the WRRF's recently revised National Pollutant Discharge Elimination System (NPDES) permit to meet nutrient and disinfection by-products limits.

The City is required to release 1,807 AFY of flow to San Luis Creek for environmental enhancement. According to the Water and Wastewater Element of the General Plan, the City has used a market assessment, potential customer surveys, and water demand estimates for specific plan areas to estimates a City demand of approximately 1,000 AFY of recycled water. The recorded City recycled water usage for calendar year 2014 was 153 AFY and for calendar year 2015 was 187 AFY. Figure 4.13-1 shows the non-potable irrigation water sources for the proposed land uses within the project site.

Groundwater. The principal source of groundwater for the City is the San Luis Obispo Groundwater Basin, and the majority of groundwater use from the basin is for agricultural purposes and private property uses. In 2011, the City relied on groundwater to supply approximately two percent of the City's annual water demand. However, the City discontinued use of the groundwater as part of its drinking water system in April 2015 due to new regulations requiring additional treatment of the wells prior to use. Previously used wells remain in operable standby condition should the use of groundwater be required in the future to meet City needs. Although the City does not consider groundwater a source of domestic use supply due to limitations on its use, three non-potable wells remain in use for construction and irrigation purposes (City of San Luis Obispo, 2015b).

Water Resource Availability. To ensure water supply reliability, the City has determined the amount of water available from the resources identified above, on an annual basis. The method to determine the available yield from each resource varies based on water right, contractual agreement, or the amount of water actually supplied to the City. "Safe annual yield" refers to the annual amount of water which can be withdrawn annually from the Salinas and Whale Rock Reservoirs under critical drought conditions. Safe annual yield analyses of water supply sources are based on rainfall, evaporation, and stream flow experienced during a



Source: Coastal Community Builders, Inc., March 15, 2016, Cannon, 2016

Non-Potable Irrigation Water Sources

Figure 4.13-1

historical period. The City's safe annual yield analysis is based on data from 1943 through 1991 including drought periods in 1946-51, 1959-61, 1976-77, and 1986-91. The Nacimiento Reservoir is operated as a water supply project for Monterey County and thus, safe annual yield is not used for the City's contractual water supply from this source. As described above, for the Nacimiento Reservoir, "dependable yield" is the City's contractual water right from this resource. Recycled water is counted as part of the City's available water resources based on the annual usage. As the City has discontinued groundwater use, this supply is not included in the estimate of available water resources to meet community needs. Table 4.13-1 provides a summary of the City's available water resources.

Table 4.13-1
City Water Resource Availability

Water Resource	Annual Availability (AF)
Salinas and Whale Rock Reservoirs [1]	6,940
Nacimiento Reservoir [2]	5,482
Recycled Water [3]	187
Siltation from 2010 to 2060 [4]	(500)
Total	**12,109**

Source: City of San Luis Obispo 2015 Urban Water Management Plan; City of San Luis Obispo, Water Sources. Utilities Department. http://www.slocity.org/government/department-directory/utilities-department/water/water-sources, accessed June 2016.
1. Safe Annual Yield determined from computer model, which accounts for siltation loss through 2010 (per WWME Policy A 4.2.1).
2. Dependable Yield is the contractual amount of water the City has rights to from Nacimiento Reservoir
3. The quantity of recycled water is the actual prior year's recycled water usage (calendar year 2015) per Policy A 7.2.2 of the General Plan Water and Wastewater Element.
4. Reservoir siltation is a natural occurrence that reduces storage capacity over long periods, resulting in the reduction of safe annual yield.

As shown in Table 4.13-1, the City has an annual water supply availability of 12,109 AFY.

Water Demand. Water use in the City includes single-family, multi-family, commercial (including institutional and industrial), and irrigation customers. No agricultural uses are supplied by City water and the City does not sell water to other agencies. The City does not have additional water demands such as water use for saline barriers or groundwater recharge. During 2015, 68 percent of water use in the City was for single and multi-family residential uses. In 2015, the City's potable water use was 4,908 AF. The 2016 annual water availability includes the City's primary water supply, reliability reserve, and secondary water supply, totaling 12,109 AFY. Table 4.13-2 shows the City's current water demand and water availability.

Table 4.13-2
Current Water Demand and Water Availability in the City of San Luis Obispo

Water Yield and Demand	AFY
Primary Water Supply	7,496
Reliability Reserve	1,201
Secondary Water Supply	3,412
2015 Actual Water Demand	4,908

Source: City of San Luis Obispo 2016a; 2016b.

Current Agricultural Water Demand at the Project Site. Approximately 109 acres of the 131-acre project site are currently used for the production of irrigated row crops including

celery, broccoli, lettuce, Asian vegetables, and peas. The 109 acres of agricultural uses on the project site rely on groundwater irrigation wells from the San Luis Obispo Groundwater Basin. Table 4.13-3 shows the property's current demand on the groundwater basin of approximately 458 AFY based on the *Santa Barbara County Environmental Thresholds and Guidelines Manual* (2008), which is the best available use factor data in the vicinity of the project area.

Table 4.13-3
Current Water Demand at the Project Site

Land Use	Area (acres)	Use Factor	Total (AFY)
Row Crop Agriculture	109	1.4 AF/acre/season	457.8*
Total			**457.8**

Source: Santa Maria and Lompoc Valleys average for broccoli/cabbage, Table E-9, Santa Barbara County Environmental Thresholds and Guidelines Manual, 2008.
** Assumes three growing seasons per year.*

b. Regulatory Setting.

Water Resources.

Urban Water Management Planning Act – California Water Code Section 10610. The Urban Water Management Planning Act became part of the California Water Code with passage of Assembly Bill (AB) 797 in 1984. The Act requires every urban water supplier (providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 AFY of water) to adopt and submit an UWMP at least once every five years to the Department of Water Resources. The City's most recent UWMP was adopted on June 14, 2016 by the City Council, but has not yet been adopted by the Department of Water Resources. The UWMP provides a description of the City's service area, demographics, multi-source water supply, treatment, and conveyance/distribution facilities. The UWMP also includes historical and future water demand to serve the buildout of the City consistent with the General Plan.

California SB 610 and SB 221. Senate Bill (SB) 610 became effective January 1, 2002, and requires cities and counties to review and consider water supply assessments when evaluating certain development projects to determine if projected water supplies can meet the project's anticipated water demand. SB 610 also requires lead agencies to consider additional factors in the preparation of UWMPs, water supply assessments, and for certain development projects that are otherwise subject to CEQA review. SB 221 requires similar analysis for subdivision maps that meet the threshold review criteria.

California Water Code Section 10912. Section 10912 of the state Water Code (also contained in CEQA Guidelines Section 15155) identifies development projects that need to be reviewed and considered for impact on the water supply. Those projects are defined as:

(a) a residential development of more than 500 dwelling units;
(b) a shopping center or business employing more than 1,000 persons or having more than 500,000 gross square feet of floor space;
(c) a commercial office building employing more than 1,000 persons or having more than 250,000 gross square feet;
(d) a hotel or motel with more than 500 rooms;

(e) an industrial or manufacturing establishment housing more than 1,000 persons or having more than 650,000 gross square feet or 40 acres;
(f) a mixed use project containing any of the foregoing; or
(g) any other project that would generate a water demand at least equal to a 500 dwelling unit residential project.

Water Code Section 10912 applies to the project because it would result in buildout of 580 dwelling units and additional commercial development. As such, the project requires review and consideration of its potential impact on water supply.

California SB X7-7. Senate Bill X7-7 was enacted in 2009, requiring that water agencies reduce per capita water use by 25 percent by 2020. SBX7-7 requires each urban retail water supplier to develop urban water use targets to help meet this reduction goal.

State and Local Emergency Drought Regulations. On July 15, 2014, the California State Water Resources Control Board (SWRCB) adopted emergency drought regulations to be implemented by all urban water suppliers who have over 3,000 water connections regardless of that community's water supply situation. Water purveyors who do not implement the mandatory requirements face up to $10,000 per day in fines and penalties. The emergency regulations were in effect for 270 days, but could be rescinded, extended, or amended based on drought conditions. The emergency regulations specifically mandate that the City implement mandatory outdoor water restriction and water waste prohibitions or face maximum fines and no access to State grants or loans. Accordingly, in 2015 the City Council adopted Water Conservation Ordinance section 13.07.030(C) limiting the outdoor irrigation of ornamental landscape and turf with potable water three days a week, and allocated funding for education and public outreach efforts.

In response to continued drought conditions, the governor issued Executive Order (EO) B-29-15 on April 1, 2015, requiring municipalities to reduce water consumption. In compliance with EO B-29-15, the SWRCB extended the 2014 emergency regulations and added new measures on March 17, 2015 to achieve a statewide 25 percent reduction in potable urban water usage through February 28, 2016. These new measures required that the City of San Luis Obispo reduce its water use by an average of 12 percent from June 2015 to February 2016. To achieve this reduction, the City Council adopted a drought response strategy in June 2015. This strategy includes:

- Adoption of a resolution declaring a drought emergency;
- Adoption of a resolution to defer new landscape installation or the use of modified landscape plans during the drought emergency;
- Introduction of an ordinance amending Chapter 13.07 of the City's Municipal Code to include two-days-a-week and time-of-day restrictions for outdoor watering.
- Approval of an incentive program for high efficiency toilets and washing machines; and
- Adoption of a resolution establishing a permit fee for the use of the Corporation Yard groundwater well.

City of San Luis Obispo General Plan. The City is the provider of water services to residents of the City. Applicable regulations that would affect the provision of city utilities are based on local policies and other regulations that place requirements on the level of service that

must be provided. Established policies and regulations that would apply to the project are provided below.

Land Use Element

Policy 1.13.1: Water and Sewer Service*. The City shall not provide nor permit delivery of City potable water or sewer services to the following areas. However, the City will serve those parties having valid previous connections or contracts with the City.*

A. Outside the City limits;
B. Outside the urban reserve line;
C. Above elevations reliably served by gravity-flow in the City water system;
D. Below elevations reliably served by gravity-flow or pumps in the City sewer system.

Policy 1.13.2: Recycled Water*. Provision of recycled water outside of City limits may only be considered in compliance with Water and Wastewater Element Policy A 7.3.4 and the following findings:*

A. Non-potable/recycled water is necessary to support continued agricultural operations.
B. Provision of non-potable/recycled water will not be used to increase development potential of property being served.
C. Non-potable/recycled water will not be further treated to make it potable.
D. Prior to provision of non-potable/recycled water, the property to be served will record a conservation, open space, Williamson Act, or other easement instrument to maintain the area being served in agriculture and open space while recycled water is being provided.

Policy 3.7.4: Utility Service*. The City shall require Services and Manufacturing uses to connect to the City water and sewer systems, unless other means of providing service are identified in a City-adopted plan.*

Water & Wastewater Management Element (WWME)

Policy A 2.2.1: Multiple Water Sources*. The City shall utilize multiple water resources to meet its water supply needs.*

Policy B 2.2.2: Service Capacity*. The City's wastewater collection system and Water Reclamation Facility shall support population and related service demands consistent with the General Plan.*

Policy B 2.2.3: Wastewater Service for New Development*. New development shall pay its proportionate or "fair share" of expanded treatment and collection system capacity and upgrades. New development will only be permitted if adequate capacity is available within the wastewater collection system and/or Water Reclamation Facility.*

Conservation and Open Space Element

Policy 10.2.2: Ahwahnee Water Principles*. - In planning for its water operations, programs and services, the City will be guided by the Ahwahnee Water Principles and will encourage individuals, organizations, and other agencies to follow these policies:*

A. *Community design should be compact, mixed use, walkable and transit-oriented so that automobile generated urban runoff pollutants are minimized and the open lands that absorb water are preserved to the maximum extent possible.*
B. *Natural resources such as wetlands, flood plains, recharge zones, riparian areas, open space, and native habitats should be identified, preserved and restored as valued assets for flood protection, water quality improvement, groundwater recharge, habitat, and overall long-term water resource sustainability.*
C. *Water holding areas such as creekbeds, recessed athletic fields, ponds, cisterns, and other features that serve to recharge groundwater, reduce runoff, improve water quality and decrease flooding should be incorporated into the urban landscape.*
D. *All aspects of landscaping from the selection of plants to soil preparation and the installation of irrigation systems should be designed to reduce water demand, retain runoff, decrease flooding, and recharge groundwater.*
E. *Permeable surfaces should be used for hardscape. Impervious surfaces such as driveways, streets, and parking lots should be minimized so that land is available to absorb storm water, reduce polluted urban runoff, recharge groundwater and reduce flooding.*
F. *Dual plumbing that allows grey water from showers, sinks and washers to be reused for landscape irrigation should be included in the infrastructure of new development, consistent with State guidelines.*
G. *Community design should maximize the use of recycled water for appropriate applications including outdoor irrigation, toilet flushing, and commercial and industrial processes. Purple pipe should be installed in all new construction and remodeled buildings in anticipation of the future availability of recycled water.*
H. *Urban water conservation technologies such as low-flow toilets, efficient clothes washers, and more efficient water-using industrial equipment should be incorporated in all new construction and retrofitted in remodeled buildings.*
I. *Ground water treatment and brackish water desalination should be pursued when necessary to maximize locally available, drought-proof water supplies.*

***Policy 10.3.1: Efficient Water Use**. The City will do the following in support of efficient water use, and will encourage individuals, organizations, and other agencies to do likewise:*

A. *Landscaping:*

    1. *Choose plants that are suitable for the climate and their intended function, with emphasis on use of native and drought-tolerant plants.*
    2. *Prepare soils for water penetration and retention.*
    3. *Design and operate suitable and efficient irrigation systems.*
    4. *The City will encourage drought-tolerant landscaping, vegetable gardens and fruit trees in lieu of large expanses of lawn or other more water-demanding plantings.*
    5. *Landscape maintenance: Landscaped areas will be properly designed for upkeep and replacement of low-flow irrigation fixtures and equipment.*
    6. *Facilitate use of tertiary-treated water and seek to legalize use of grey water for non-potable household purposes.*

4.13.2 Previous Program-Level Environmental Review

The 2014 Land Use and Circulation Elements Update EIR (LUCE Update EIR) previously analyzed impacts to utilities – including water supply and infrastructure – related to the adoption and implementation of the 2014 Land Use and Circulation Elements (LUCE), including planned future land use development and proposed goals, policies, and programs. The LUCE Update EIR concluded that implementation of the General Plan policies would ensure that future land use and development under the adopted Land Use and Circulation Elements would not exceed service capacities for water supply. In particular, the City's General Plan, Conservation and Open Space Element (COS) Policy 10.2.2 Ahwahnee Water Principles, promotes maximizing the use of recycled water for appropriate applications, including outdoor irrigation, toilet flushing, and commercial and industrial processes (City of San Luis Obispo 2014a). Accordingly, the LUCE Update EIR found water supply impacts associated with City land use buildout to be less than significant.

4.13.3 Impact Analysis

a. Methodology and Significance Thresholds. To analyze impacts to water resources, the development potential under the project was compared to the available capacity of facilities that serve the project site. In accordance with Appendix G of the *State CEQA Guidelines*, the effects of the San Luis Ranch project on water resources would be significant if the project would:

- *Have insufficient water supplies available to serve the project from existing entitlements and resources, or are new and expanded entitlements needed;*

The Initial Study (refer to Appendix A) determined that the project would have a less than significant impact on other public services and utilities checklist items from Appendix G of the *State CEQA Guidelines*, including wastewater issues and infrastructure, stormwater facilities, and solid waste disposal and facilities. Refer to Section 4.14, *Issues Addressed in the Initial Study*, for a discussion of these less than significant impacts. The project's potential impacts to water supply are discussed below.

Project water use estimates are based on duty factors found within the General Plan as well as information provided within the WSA.

b. Project Impacts and Mitigation Measures.

Threshold:	*Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new and expanded entitlements needed?*

Impact WR-1 The project would increase water demand as a result of new residential and commercial development on the project site. However, the project's water demand would be within the City of San Luis Obispo's projected primary water supply. Therefore, impacts to water supply would be Class III, *less than significant*.

Municipal Water Demand and Supply. The project would result in development of single-family and multi-family dwelling units, commercial uses including retail, office, and hotel space, and parks and open space on the project site. 40.7 percent of the site would remain in agricultural use. Table 4.13-4 shows the City's municipal water use factors for each land use category.

Table 4.13-4
City Municipal Water Use Factors for Land Use Categories

Land Use	Municipal Water Use Factors
Single-family residences (traditional)	0.3 AFY/unit
Single-family residences (small lot)	0.21 AFY/unit
Apartment (multi-family/affordable)	0.18 AFY/unit
Neighborhood commercial	0.3 AFY/1,000 square feet
Parkland	2 AFY/acre
Hotel	0.122 AF/room/day
Office space	0.1 AF/day/1,000 SF

Source: Cannon, 2016 (Appendix M).

The municipal water use factors in Table 4.13-4 were developed in 2008 and are the basis upon which the City reviews proposed water usage. Since 2008, the City and State have implemented water conservation measures for indoor and outdoor water usage. As a result, the 2008 water duty rates are up to 30 percent higher than the City's water usage rates in 2015. Nevertheless, these factors provide a conservative estimate of the project's projected water use. Table 4.13-5 shows the project's water demand, based on the City's water use factors.

Table 4.13-5
San Luis Ranch Project Water Demand: City Water Use Factors

Land Use	Water Use Factor	Quantity	Water Demand (AFY)
Single-family residences (traditional)	0.3 AFY/unit	200 units	60.0
Single-family residences (small lot)	0.21 AFY/unit	100 units	21.0
Apartment (multi-family/affordable)	0.18 AFY/unit	280 units	50.4
Neighborhood commercial	0.3 AFY/1,000 SF	150,000 SF	45.0
Parkland	2 AFY/acre	3.4 acres	6.8
Hotel	0.122 AF/room/day	200 room	24.4
Office space	0.1 AF/day/1,000 SF	100,000 SF	10.0
Total (AFY)			**217.6**

Based on the City Water Use Factors and the Final Water Supply Assessment (Cannon, 2016; Appendix M).

As shown in Table 4.13-5, based on the City's water demand factors, the total municipal water use by the project would be 217.6 AFY.

Table 4.13-6 provides a summary of the project's water demand under each land use proposed for the project site. In contrast to projected water demand based on the City's water use factors, the water demands presented in Table 4.13-6 reflect the implementation of measures of State and local water saving programs, created in response to recent drought conditions, into specific components of the project. The average indoor and outdoor customer water use is provided in

the American Water Works Association's *A Guide to Customer Water-Use Indicators for Conservation and Financial Planning* and totaled 50 GPCD. The irrigation demand (outdoor water use) was calculated and presented in the *Preliminary Irrigation Water-Use Estimate* (Appendix A to the WSA, which is included as Appendix M to this EIR) and totaled 13 gallons per capita per day (GPCD). The residential indoor domestic water use is the result of the average indoor and outdoor customer use of 50 GPCD minus the irrigation use of 13 GPCD from the *Preliminary Irrigation Water-use Estimate*, totaling 37 GPCD of water use. The indoor demand for the hotel, commercial uses, and agricultural heritage center were estimated assuming that the State and local required drought response programs would be able to reduce the water usage by approximately 30 percent from the City water use factors presented above.

Table 4.13-6
San Luis Ranch Project Water Demand: Project-Specific

Land Use	Person Per Unit	Water Use (GPCD)	Irrigation Demand Potable (gal/yr)	Irrigation Demand Non-Potable (gal/year)	Indoor Domestic Demand (gal/year)	Total
200 SFR (traditional)	2.29	37	2,155,307		6,185,291	8,340,598
100 SFR (small lot)	2.29	37	736,872		3,092,645	3,829,517
180 (MFR)/ 80 (affordable; 420 SF max)	2.29 (MF) 1.25 (Affordable)	37		1,277,991	6,846,183	8,124,174
Hotel (200 rooms)				495,325	5,070,210	5,565,535
Commercial + Office				1,723,631	8,003,979	9,727,611
Community Garden Orchards			317,056			317,056
Open Space Pocket/ Connections				12,197,892		12,197,892
Agricultural Heritage Center				2,768,937	3,423,656	6,192,593
Community Park (turf)				403,330		403,330
Community Park (drought tolerant)				605,300		605,300
Parkways (drought tolerant)				4,085,832		4,085,832
Total (gallons/year)			3,209,236	23,558,239	32,621,963	59,389,438
Total (AFY)			**9.8**	**72.3**	**100.1**	**182.3**

Source: Cannon, 2016 (Appendix M).

As shown in Table 4.13-6, the estimated total water demand for the project, with implementation of water saving measures under State and local drought response programs, is 182.3 AFY. This is approximately 35 AFY lower than the estimated water demand using the City's water demand factors (refer to Table 4.13-5).

Table 4.13-7 compares the City's available water with the project's projected usage.

Table 4.13-7
Comparison of City Water Supply to Project Use

City Water Supply	City Water Use	City Water Availability	Projected Demand (with proposed water saving measures)	Project Demand (by City use factors)
7,496 AFY	4,908 AFY	2,588 AFY	182.3 AFY	217.6 AFY

Source: Cannon, 2016 (Appendix M).

Municipal water demand, calculated using City use factors for the uses proposed under the project, would be 217.6 AFY or 8.4 percent of the City of San Luis Obispo's current available potable water of 2,588 AFY. The 182.3 AFY of water demand generated by the specified components of the project, including implementation of required water conservation measures, represents 7.0 percent of the City's current available water of 2,588 AFY above current demand levels. Accordingly, the City has sufficient existing municipal water supply to provide potable water to the project.

Consistent with Ahwahnee Water Principles and the City's General Plan, Conservation and Open Space Policy 10.2.2, the project would be required to irrigate parks, open space, and landscaping with recycled water. Project irrigation design would be required to use available tools to ensure water efficiency, including utilizing dedicated landscape water meters, soil moisture sensors, central irrigation controllers and master valves combined with flow sensors as well as weather based irrigation controllers that are tied to California Irrigation Management Information System (CIMIS) weather data for the larger landscape areas.

Groundwater. In addition to new development on the project site, the project would preserve approximately 52.7 acres of the site in agriculture. This is a reduction of approximately 56 acres from the 109 acres currently being used for production of irrigated row crops on the site. Ongoing agricultural uses on the project site would be irrigated using water from existing on-site groundwater wells. Using an agricultural water demand factor of 1.4 AF/acre/season (County of Santa Barbara, 2008), post-project agricultural operations on the project site would result in a water demand of approximately 221 AFY. This represents a 52 percent reduction in water demand on the San Luis Obispo groundwater basin. However, this reduction in water demand associated with agricultural uses would be isolated to the groundwater irrigation wells onsite, and would not change the project's demand on the City's municipal water supply.

Mitigative Components of the Specific Plan and Impact Conclusion. The San Luis Ranch Specific Plan Section 7.2.1, *Potable and Non-Potable Water Systems,* includes water conservation measures intended to manage on-site water consumption associated with development under the Specific Plan, including:

- Requirements that all landscaped areas include drought-tolerant landscape to the maximum extent possible.
- Use of recycled water for exterior landscaped areas reducing the consumption of potable water.
- Use of the latest technology in low-flow water fixtures, including water efficient heating appliances, in the project.
- Interior reuse of gray water to the maximum extent allowed by law.
- Onsite rainwater harvesting, including water storage cisterns as a means of capturing rainwater for use.

- San Luis Ranch will use less water than the current agricultural use by a significant amount.

Nevertheless, the project would create an additional long-term demand for City water supplies. As City water supply would be sufficient to serve the project's estimated demands, impacts to the City's water supply would be adverse but less than significant. Furthermore, the project proposes to use recycled water for parks, open space and landscaping, and includes measures to ensure landscaping water efficiency, consistent with the City's General Plan policies. Development of the project site would require payment of water impact fees to the City of San Luis Obispo. Therefore, this impact would be less than significant.

Mitigation Measures. No mitigation would be required.

Residual Impact. This impact would be less than significant without mitigation.

c. Cumulative Impacts. Planned buildout of the City of San Luis Obispo under the General Plan would result in increased water demand and the project would contribute to this cumulative demand. The City's General Plan allows for the development of up to 4,904 additional dwelling units and approximately five million square feet (SF) of non-residential land uses in the City. As described in Section 2.0, *Project Description*, the project includes a similar extent of overall development to that which would be permitted under the General Plan performance standards. In addition, as discussed in Impact WR-1, water savings measures are not accounted for in the City's water use factors. Therefore, the cumulative analysis of water supply impacts provided herein is conservative.

Table 4.13-8 shows the total additional water demanded by buildout of allowable uses under the General Plan using the City's water use factors.

Table 4.13-8
Estimated Water Demand from Cumulative Projects in the City of San Luis Obispo

Land Use	Size	Demand Rate	Water Demand (AFY)
Residential	4,904 dwelling units	0.17 AFY/unit[1]	834
Non-residential	5,081,708 square feet	0.30 AFY/1,000 square feet[2]	1,525
Total			**2,359**

Source: Cannon, 2016 (Appendix M); City of San Luis Obispo Land Use and Circulation Update Final Program EIR, September 2014 (City of San Luis Obispo 2014b).
1. The demand rate for single-family and multi-family residential units was averaged and applied to all residential development.
2. The neighborhood commercial rate was conservatively applied to all non-residential development.

The total estimated water demand from cumulative projects in the City (including the proposed project) would be 2,359 AFY, which represents approximately 91 percent of the current City's existing water availability of 2,588 AFY. As this figure includes the maximum development potential of the project site, the project's impact on municipal water supply would not be cumulatively considerable such that water demand would exceed supply when combined with all possible future development within the City. In addition, the project would reduce the overall demand on the San Luis Obispo groundwater basin as a result of reduced on-site agricultural uses and, therefore, would not exacerbate potential cumulative impacts on the local groundwater basin associate with future development within the City. Accordingly, the City has sufficient existing and future water supply to provide potable water to the project in

combination with planned future development in the City, and the project's cumulative water supply impact would be less than significant.