

4.14 UTILITIES AND SERVICE SYSTEMS

This section analyzes the proposed Project’s potential impacts to the City of Goleta’s water supply, wastewater conveyance infrastructure system, and solid waste management system. Issues pertaining to drainage control facilities and stormwater impacts are discussed in Section 4.8, *Hydrology and Water Quality*.

4.14.1 Setting

a. Water Supply.

Water Sources, Supply, and Demand. The Goleta Water District (GWD) is the water purveyor for the City of Goleta. The GWD service area is located in the South Coast portion of Santa Barbara County with its western border adjacent to El Capitan State Park, its northern border along the foothills of the Santa Ynez Mountains and the Los Padres National Forest, the City of Santa Barbara to the east, and the Pacific Ocean to the south. The service area encompasses approximately 29,000 acres and includes approximately 86,950 residents. GWD includes the City of Goleta, the University of California Santa Barbara, and Santa Barbara Municipal Airport as well as nearby unincorporated areas of Santa Barbara County.

In November 2011, the GWD adopted its most recent Urban Water Management Plan (UWMP). As discussed in the UWMP, the GWD draws its existing water supplies from four primary sources: Lake Cachuma surface water, the State Water Project, the Goleta Groundwater Basin, and recycled water from wastewater treatment. Table 4.14-1 shows current water supplies from each of these sources for the City and compares overall water supplies to current demand. Currently, the GWD is projected to have a surplus of 1,376 acre-feet per year (AFY) with implementation of demand reductions associated with the Stage III Emergency Drought conditions in the City.

**Table 4.14-1
 Projected 2015-2016 Water Supply and Demand for the Goleta Water District**

| Projected Conditions* | Amount (AFY) |
|----------------------------------|---------------------|
| Current Demand | 9,274 |
| Supply Sources | |
| Cachuma Carryover | 2,281 |
| State Water | 2,235 |
| Groundwater | 6,134 |
| Total Supply | 10,650 |
| Current Surplus (Deficit) | 1,376 |

Source: GWD Water Supply and Demand Update, April 15, 2015.

**Projected conditions assuming implementation of Stage III and Stage IV Emergency Drought restrictions and exhaustion of Cachuma Reservoir entitlement in Spring 2016.*

In addition to potable water, GWD has had the ability to deliver recycled water for irrigation purposes since 1995. However, the ability to fully utilize recycled water is limited by recycled water use patterns, which are typically condensed into a 12-hour rather than a 24-hour period, and are driven by the irrigation season. While storage is available to address daily needs, storage is not available to address



seasonal variability in irrigation demand. However, under drought conditions and restrictions, City water supply projections do not include recycled water as a supply source (Goleta Water District, April 2015).

Recycled wastewater, distributed by GWD, has gone through tertiary treatment, including the maximum three-levels of wastewater treatment, and contains no live bacterium. This is the same level of water quality treatment that is required by the National Pollutant Discharge Elimination System (NPDES) permit for discharge as surface water, and is considered safe for exposure, but slightly below drinking water standards. Recycled water is approved for use as irrigation for landscaping, which allows the water purveyor to conserve potable water (i.e., meeting drinking water standards) supplies.

Current local GWD customers of recycled wastewater for landscape irrigation include the University of California Santa Barbara, the Camino Real Marketplace, Sandpiper and Glen Annie golf courses, Dos Pueblos High School and residential properties in the City located adjacent to Hollister Avenue. The GWD Recycled Water System does not exist in the vicinity of the Project site.

GWD's rights to groundwater drawn from the Goleta Groundwater Basin (Basin) were adjudicated through a court case in 1985 entitled *Wright v. Goleta Water District* [*Wright v. Goleta Water Dist.* (1985) 174 Cal. App.3d74]. The Wright Judgment gave GWD the right to pump up to 2,000 AFY from the Basin in addition to the right to surplus waters, injected water, return flows, and rights transferred from private pumpers, identified as Exchange Service and Augmented Service. Based on the GWD's reported amounts of these Exchange and Augmented Services, it has conservatively reported an entitlement of 2,350 AFY from the Basin. The Wright Judgment also gave GWD the right to inject excess surface water supplies into the Basin to recharge the Basin and replenish groundwater supplies (GWD, 2010).

In addition to its fixed adjudicated allotment, GWD safeguards for less-than-normal rainfall years by storing excess water runoff during high rainfall years. This helps to maintain supplies during drought conditions. Excess surface water (e.g., from Cachuma Project "spill") during high rainfall years is injected into the Basin as "recharge" through GWD maintained injection wells. The injected recharge volumes are then available to GWD in the future, providing a variable increase in the annual allotment that can be tapped, as needed. This is also known as "banking." Unexercised groundwater rights at the end of a year revert to a stored water right in the Basin. As of 2009, the GWD Groundwater Management Plan (2010) reported that GWD storage in the Basin was 43,253 acre-feet.

In response to the extreme drought conditions throughout California, the GWD Board of Directors declared a Stage III Water Shortage Emergency on May 12, 2015. The District has updated watering times and mandatory water use restrictions to ensure adequate supplies for drinking, health, and public safety within the City. New water restrictions include prohibition of irrigation within 48 hours of measurable rainfall, requirement of water shortage notices and laundry service minimization for hotels, motels, and other lodging facilities, and time constraints on agricultural irrigation spray schedules. Existing water use restrictions to avoid water waste remain in effect. In addition, wasting water is prohibited, including irrigating in a manner resulting in runoff from the property, and allowing water to escape from plumbing breaks for more than 48 hours. Repeated violations will be penalized with fines ranging from \$100 up to \$500 following a warning and written notice. The GWD Board of Directors also amended the GWD Code to further specify unlawful uses of water, such as through a fire hydrant or fire line, through a waterline with no meter, or from another account holder or property.

Water Agreement. Based upon the Judgement Upon Arbitration Award, Case Number 232281 filed in Santa Barbara Superior Court on February 26, 2002, the combined Willow Springs properties



(Willow Springs I, Willow Springs II, and the Project) have been granted allocation of a total of 100.89 AFY of potable water from the GWD (refer to Appendix J). The Annual Water Demand Report, prepared by MAC Design Associates in July 2015, determined that the Project's water service demand would total 44.812 AFY. Willow Springs I and Willow Springs II were determined to use a combined total of 55.983 AFY. The total estimated water demand for the three properties is 100.795 AFY.

b. Wastewater. The Goleta West Sanitary District (GWSD) provides sewer service in the Project area via its system of sewer mains that ultimately connect to Goleta Sanitary District's (GSDs) main treatment plant located at 1 William Moffett Place next to the Santa Barbara Municipal Airport. Treatment of wastewater collected by GWSD is provided through a contract with GSD. The GSD treatment plant has a capacity of 9.7 million gallons per day (based on average daily flow) but is currently limited to a permitted discharge of 7.64 million gallons per day pursuant to a National Pollutant Discharge Elimination System (NPDES) permit issued by the US Environmental Protection Agency (EPA) in concurrence with the States' Central Coast Regional Water Quality Control Board (CCRWQCB). The GWSD is allocated 40.78 percent of the capacity at the sewage treatment plant, which equates to about 3.12 million gallons per day (mgd). The GWSD currently generates approximately 1.71 mgd of sewage that is treated at the GSD plant, leaving about 1.41 mgd of remaining capacity in the GWSD's existing system.

Wastewater Collection. The GWSD owns and operates sewer collection infrastructure serving approximately 6,100 customer accounts in its service area. The average annual flow of wastewater through GWSD's collection system is 1.7 mgd (Mark Nation, General Manager/Superintendent, Goleta West Sanitary District, personal communication, June 2, 2015). The system includes approximately 62 linear miles of pipeline, consisting of a series of lateral sewer pipelines that connect lines from individual properties to a sewer mainline, which connects to a trunk line.

Existing wastewater collection lines in the vicinity of the Project site include an existing 12-inch trunkline running down the eastern edge of the property and existing 8-inch collector lines throughout the adjacent Willow Springs development (Mark Nation, General Manager/Superintendent, Goleta West Sanitary District, personal communication, June 2, 2015). These are public lines, to which the Project site's privately maintained collector system would connect. As wastewater is predominantly gravity-fed along Los Carneros Road from Hollister Avenue and toward Isla Vista to the GWSD pump house located on the UCSB campus, the wastewater conveyance pipes expand in size to 24 inches. Wastewater is pumped from the pump house to the GSD's main treatment plant.

Wastewater Treatment. Under contract with GWSD, the GSD provides treatment of wastewater at the Goleta Wastewater Treatment Plan (GWWTP). The GWWTP has a design capacity of 9.7 mgd, based on an average daily flow rate. However, the discharge is restricted under the facility's National Pollution Discharge Elimination System (NPDES) permit (a Clean Water Act Requirement), to a daily dry weather discharge of 7.64 mgd (RWQCB, 2010). This permit can be renewed regularly to reconsider discharge needs of the facility. It was last renewed in 2010 and will be reconsidered again in the current year (2015).

In September of 2013, the GSD completed a major upgrade of its treatment facility and is now a Full Secondary Treatment Plant. The District plans on obtaining a new Full Secondary Discharge NPDES Permit to match upgraded plant treatment capability. Through the secondary treatment process the District produces effluent that has been treated to full secondary standards.



At the present time, the plant's treatment system consists of primary settling, biofiltration, aeration, secondary clarification, chlorine disinfection, and dechlorination. Wastewater flows greater than 4.38 mgd receive primary treatment only and are blended with treated secondary wastewater before disinfection and discharge to the ocean. Treated wastewater is discharged to the Pacific Ocean through a diffuser 5,912 feet offshore at a depth of approximately 87 feet. In September of 2013, the GSD completed a major upgrade of its treatment facility and is now a Full Secondary Treatment Plant. The District plans on obtaining a new Full Secondary Discharge NPDES Permit to match upgraded plant treatment capability. The GSD treatment also has capacity to treat wastewater to the tertiary standards required for recycled water use.

c. Solid Waste.

Solid Waste Generation and Collection. MarBorg Industries provides solid waste collection services in Goleta. All non-hazardous solid waste in the City and the surrounding South Coast area is handled at two local facilities: the South Coast Recycling and Transfer Station (SCRTS) and Tajiguas Landfill. Both sites are owned and operated by the Santa Barbara County Public Works Department, Resource Recovery and Waste Management Division.

Based on the General Plan Background Report No. 23, the annual per capita residential waste generation in Goleta is estimated at 0.95 tons per person (City of Goleta, 2004). According to the Goleta General Plan, the City averages about 2,400 tons each month, which is approximately eight percent of the solid waste that goes to the Tajiguas Landfill. Although California's diversion rates have increased from 10 percent in 1989 to over 50 percent today, annual per capita waste generation rates for solid waste are still increasing.

Tajiguas Landfill. Solid waste generated within Goleta is disposed of at the Tajiguas Landfill (Tajiguas), located approximately 26 miles west of Santa Barbara. Tajiguas is one of five landfills currently operating in the County. Tajiguas's total permitted operation area is 357 acres, with an approved and permitted waste disposal footprint of 118 acres comprised of both lined and unlined areas (CalRecycle, 2015). Waste filling operations are currently being conducted in both the unlined and the lined lateral expansion areas. Santa Barbara County Environmental Health Services permits Tajiguas to accept up to 1,500 tons of municipal solid waste and yard waste per day.

Based on current waste disposal rates, the landfill will reach permitted capacity in approximately 2023. The landfill is classified by the State Water Resources Control Board as a Class III waste management unit, approved for discharge of Nonhazardous Municipal Solid Waste. Municipal solid waste currently delivered to Tajiguas is generated by the residents and businesses of City of Santa Barbara, the City of Goleta, the unincorporated areas of southern Santa Barbara County, and the Santa Ynez and Cuyama Valleys. The County of Santa Barbara has recently proposed the Resources Recovery Project which would include facilities that would process solid waste currently disposed of at the Tajiguas Landfill. This process would decrease the amount of waste occupying the landfill which would result in increased capacity and expanded life of the landfill.

Waste Diversion and Recycling. In February 1992, the Santa Barbara County Board of Supervisors adopted the County's Source Reduction and Recycling Element (SRRE). The goal of the SRRE is to reduce the amount of solid waste entering landfills by implementing, in order of priority: source reduction, recycling and composting, and environmental transformation (incineration, pyrolysis, or biological conversion). The final option is land disposal of waste.



The City of Goleta participates in recycling programs aimed at achieving a minimum 50 percent diversion rate of solid waste. Based on data from 2009, the diversion rate for Santa Barbara County, including Goleta, was most recently identified as 73 percent (County of Santa Barbara Public Works Department, 2013). Green waste collected by City waste haulers is cleaned and ground into mulch, which is then marketed. Recyclables delivered to SCRTS are delivered to Gold Coast Recycling for sorting and marketing. In addition, a minimum of 65 percent of all construction wastes must be diverted.

d. Regulatory Framework.

Water Supply.

Subdivision Map Act, Government Code Sections 66410 et seq. The Subdivision Map Act sets forth general provisions, procedures, and requirements for the division of land including the provision of public services, and roadway and utilities improvements.

Recycled Water Regulations. The EPA, State Water Resources Control Board (SWRCB), Regional Water Quality Control Boards (RWQCB), and California Department of Health Services (CDHS) all have a role in regulating the use of recycled water in the State of California. The SWRCB has adopted Resolution No 77-1 (Policy with Respect to Water Reclamation in California), which empowers the State Board and Regional Boards to encourage and consider funding for water reclamation projects that do not impair water rights or beneficial in-stream uses. The CDHS determines how recycled water may be used in California, and designates the level of treatment required for each of these permitted uses (Title 22, California Code of Regulations).

Urban Water Management Planning Act (Water Code §10610 et seq.). The Urban Water Management Planning Act was developed to address concerns regarding potential water supply shortages throughout California. It requires information on water supply reliability and water use efficiency measures. Urban water suppliers are required to develop and implement UWMPs to describe their efforts to promote efficient use and management of water resources.

Title 22 of the California Code of Regulations (CCR). The California Water Code requires the California Department of Public Health (CDPH) to promulgate water reclamation criteria. In 1975 the CDPH prepared Title 22 regulations (22 C.C.R. §§ 60303 et seq.) to satisfy this requirement. Title 22 regulates production and use of reclaimed water in California by establishing three categories of reclaimed water: primary effluent, secondary effluent, and tertiary effluent. In addition to defining reclaimed water uses, Title 22 also defines requirements for sampling and analysis of effluent and specifies design requirements for treatment facilities.

Senate Bill (SB) 610. SB 610 (Water Code §§ 10910 et seq.) was adopted in 2001 and reflects the growing awareness of the need to incorporate water supply and demand analysis at the earliest possible stage in the land use planning process. SB 610 amended the Urban Water Management Planning Act (Water Code §§ 10610 et seq.) to add Section 10910 et seq.

Water supply planning under SB 610 requires reviewing and identifying adequate available water supplies necessary to meet the demand generated by a project, as well as the cumulative demand for the general region over the next 20 years, under a broad range of water conditions. This information is typically found in the current UWMP for the project area. SB 610 requires the identification of the public



water supplier. Under SB 610, a Water Supply Assessment (WSA) is needed only if a project exceeds 500 dwelling units thereby relieving smaller projects from the requirements of the bill (Water Code § 10910).

City of Goleta Inland Zoning Ordinance. Section 35-317.7(1)(d) of Article 3, Chapter 35 of the Municipal Code (the City of Goleta Inland Zoning Ordinance) includes a requirement for finding of adequate public services to serve new developments.

Goleta Water District Ordinance No. 91-01, The SAFE Water Supplies Ordinance of 1991. The Safe Water Supplies Ordinance (SAFE) was approved by GWD voters in 1991 and amended in 1994. SAFE sets certain restrictions on GWD use of groundwater, including the creation of a “Drought Buffer” of water that is stored in the Central Basin, which may be pumped and distributed by the GWD to existing customers only in the event that a drought causes a reduction in the District’s annual deliveries from Lake Cachuma. The Drought Buffer supplies may not be used as a source of supplemental water supply to serve new or additional demands for District water. SAFE also restricts deliveries to new developments by limiting the release of water to new customers to one percent of its total potable water supply.

The SAFE Ordinance also contains a prohibition on new service connections until water supplies for existing customers were secured. Those conditions were met in 1997. When new releases are authorized they must be offset by increases to the Drought Buffer equivalent to two-thirds of the amount of the water supplied to new customers. A determination of available water allocation for new uses is made on an annual basis.

Goleta Water District Resolution No. 2014-31 and Resolution No. 2014-32. The GWD Board of Directors adopted a Stage Two Water Shortage Emergency (September 2014) This Resolution outlined ways customers could save water and is to be in effect until .the Safe Ordinance triggers are no longer met. Resolution No.2014-32 established a denial of applications for new and additional water services. This Resolution includes four categories of exemptions:

- 1) *Customers who are currently receiving water from the District and who are not seeking to expand or change the use or development on their property;*
- 2) *Customers with preexisting water use history that is recognized in the District Code and that is equal to or greater than the water use that is needed for the proposed project;*
- 3) *Customers who have already paid a new water supply charge for a proposed project;*
and
- 4) *Customers with a pre-existing water service contract or agreement with the District.*

Goleta Water District Water Conservation Plan (2010). The GWD has adopted an interim Water Conservation Plan (2010) requiring implementation of Best Management Practices (BMPs) to conserve water, which would reduce demand on the GWD’s potable water treatment facility capacity. Proposed developments are required to incorporate feasible BMPs into its water system design, including the use of water conserving fixtures and water efficient landscape and irrigation.

Wastewater Treatment.

The Subdivision Map Act, Government Code Section 66410 et seq. Division 2 of the Government Code of the State of California (referred to as the Subdivision Map Act) sets forth general provisions,



procedures, and requirements for the division of land including the provision of public services, and roadway and utilities improvements.

City of Goleta Inland Zoning Ordinance. Section 35-317.7(1)(d) of Article 3, Chapter 35 of the Municipal Code (the City of Goleta Inland Zoning Ordinance) includes a requirement for finding of adequate public services to serve new developments as a condition precedent to project approval.

Solid Waste.

The Subdivision Map Act, Government Code Sections 66410 et seq. California Government Code Sections 66410 et seq. (referred to as the Subdivision Map Act) set forth general provisions, procedures, and requirements for the division of land including the provision of public services, and roadway and utilities improvements.

California Integrated Waste Management Act of 1989 (AB 939). This law was enacted to reduce, recycle, and reuse solid waste generated in the State to the maximum extent feasible (Pub. Res. Code §§ 40050-40063). Specifically, the Act required cities and counties to adopt a Source Reduction and Recycling Element of their Waste Management Plans to describe actions to be implemented to achieve waste reduction goals (Pub. Res. Code § 41750).

California Solid Waste Reuse and Recycling Access Act of 1991 (AB 1327). California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires each local jurisdiction to adopt an ordinance requiring commercial, industrial, or institutional building, marina, or residential buildings having five or more living units to provide an adequate storage area for the collection and removal of recyclable materials (Pub. Res. Code Chapter 18). The sizes of these storage areas are to be determined by the appropriate jurisdictions' ordinance. If no such ordinance exists with the jurisdiction, the CalRecycle model ordinance shall take effect (Pub. Res. Code § 42911).

Construction and Demolition Waste Materials Diversion Requirements (SB 1374). Construction and Demolition Waste Materials Diversion Requirements passed in 2002, added Section 42912 to the California Public Resources Code. SB 1374 requires that public agencies include in their annual AB 939 report a summary of the progress made in diverting construction and demolition waste (Pub. Res. Code § 42912). The legislation also requires that CalRecycle adopt a model ordinance for diverting 50 to 75 percent of all construction and demolition waste from landfills (Pub. Res. Code § 42912).

Goleta Municipal Code Chapter 8.10 (Solid Waste Services). Chapter 8.10 establishes authority, rules, and regulations, subject to the approval of the City Council, regarding all aspects of solid waste handling services as necessary for the effective and reasonable administration and enforcement of this chapter. In March 2013, the Chapter was amended to require any project involving the construction of new structures must divert from disposal at least 65 percent of all construction and demolition waste by weight regulates the collection and disposal of solid wastes.

City of Goleta Inland Zoning Ordinance. Section 35-317.7(1)(d) of Article 3, Chapter 35 of the Municipal Code (the City of Goleta Inland Zoning Ordinance) includes a requirement for finding of adequate public services to serve new developments.



4.14.2 Impact Analysis

a. Methodology and Significance Thresholds. To analyze impacts to utilities, the anticipated development potential under the Project was compared to the available capacity of facilities that serve the Project site. Stormwater impacts are addressed in Section 4.8, *Hydrology and Water Quality*.

Water Supply. The Project would have a significant effect on water supplies if demand associated with projected growth would result in any of the following conditions, as listed in Appendix G of the *CEQA Guidelines*:

1. *The Project would require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.*
2. *The Project would fail to have sufficient water supplies available to serve the project from existing entitlements and resources, or require new or expanded entitlements.*

The City of Goleta's *Environmental Thresholds and Guidelines Manual* includes thresholds pertaining to groundwater supply for projects involving groundwater wells. The Project does not involve groundwater wells; therefore, these thresholds are not applicable.

Wastewater. The City of Goleta's *Environmental Thresholds and Guidelines Manual* does not provide thresholds for impacts related to sewer service and wastewater treatment. The following thresholds are based on Appendix G of the *CEQA Guidelines*. The Project would have a significant impact related to wastewater if it would result in any of the following conditions:

1. *The Project would exceed the wastewater treatment requirements of the applicable Regional Water Quality Control Board.*
2. *The Project would require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.*
3. *The Project would result in a determination that the wastewater treatment provider does not have adequate capacity to serve projected demand in addition to existing commitments.*

The environmental impacts of the Project with respect to wastewater are determined based on the potential increase in wastewater generation from buildout of the Project and the capacity of existing and proposed wastewater treatment facility and infrastructure. Project-generated wastewater is estimated using GWSD's rate of 184 gallons/day (gpd) per equivalent residential unit (ERU). The Project's estimated wastewater generation was then compared to the utility's existing sewer capacity and wastewater flow.

Solid Waste. The Project would have significant impacts on solid waste collection and disposal if development facilitated by the Project would result in any of the following conditions, as listed in Appendix G of the State *CEQA Guidelines*:

1. *The Project would be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.*



2. *The Project would fail to comply with federal, state, and local statutes and regulations related to solid waste.*

The City of Goleta's *Environmental Thresholds and Guidelines Manual* also provides both project-specific and cumulative thresholds for solid waste generation from discretionary development. A project would result in a significant impact on the City's landfill capacity if it would generate more than 196 tons of solid waste per year, after a 50 percent reduction credit is given due to recycling efforts.

The generation of solid waste from construction of the Project is estimated based on a generation factor for residential construction of 4.38 pounds per square foot, derived from the U.S. EPA report *Characterization of Building-Related Construction and Demolition Debris in the United States*. The generation of solid waste from operation of the Project is calculated using the City's *Environmental Thresholds and Guidelines Manual* estimate for multi-family residential developments: [(2.76 people/workforce unit x # of units x 0.95 tons/year)+(1.11 people/senior unit x # of units x 0.95 tons/year)].

The City's *Environmental Thresholds and Guidelines Manual* also provides a cumulative threshold for solid waste. Projects with a project-specific impact as identified above (196 tons/year or more) are also considered to have a cumulatively significant contribution, as the project specific threshold of significance is based on a cumulative growth scenario. However, because landfill space is already limited, any increase in solid waste of one percent or more of the estimated increase accounted for in the SRRE would be considered a less than significant but adverse contribution (Class III) to regional solid waste impacts. One percent of the SRRE projected increase in solid waste equates to 40 tons per year. To reduce adverse cumulative impacts and to be consistent with the SRRE, mitigation should be recommended for projects that generate between 40 and 195 tons of solid waste.

b. Project Impacts and Mitigation Measures.

Impact UTL-1 The Project would generate water demand of approximately 44.812 AFY. This level of demand is within the GWD's current 1,376 AFY surplus. Therefore, impacts to water supply would be Class III, less than significant [Thresholds 1 and 2].

At present, the 17.36-gross acre Project site is vacant and generates no water demand. However, Willow Springs I, Willow Springs II, and the Project are entitled to a combined 100.89 AFY in accordance with the Court judgement described above. Water service to the Project site would be provided by the GWD.

In July 2015, MAC Design Associates prepared an Annual Demand Water Report for Willow Springs I, Willow Springs II, and the Project. The calculations for water usage were derived from the actual water use data from 2007 to 2015 for Willow Springs I and Willow Springs II, provided by GWD. For the most current Project domestic water use, a 24 month period (January 2012 through December 2013) was used as the base period. The water meters were categorized as either domestic, landscape, or commercial meters. As domestic water use varies substantially based on the type of unit, the domestic meters were further separated by the following unit types: 1BR/1BA, 2BR/1BA, 2BR/2BA, and 3BR/2BA. To determine the average water consumption rate by unit type, the water usage for each month of the base period was totaled and then converted to a monthly average based on the data for the 24 month period. The monthly average was then converted to AFY per month. The total AFY was divided by the



number of a single unit type. This method was then replicated for all unit types in the development. There was insufficient water use history to utilize actual figures for the Project. Therefore, the actual water usage for Willow Springs I was utilized to project water usage at the Project site. The Project units are smaller than Willow Springs I, so actual water usage would be expected to be lower. The GWD has reviewed and approved the MAC Design Associates water demand for the project. (Appendix J).

Based on the water use study, the Project’s domestic water demand, landscaping water demand, and commercial water demand are estimated at 30.657 AFY, 12.540 AFY, and 1.616 AFY, respectively. The calculations for Project-generated water demand are shown in Table 4.14-2. The total water demand generated by the Project would be 44.812 AFY (not accounting for recycling and other water savings). This represents approximately 0.04 percent of the 10,650 AFY of water available from GWD (not accounting for unused recycled water). As the Project is part of the Willow Springs project (Willow Springs I, Willow Springs II, and Heritage Ridge [formerly North Willow Springs]), it is considered an existing customer of GWD and would meet the criteria for an exemption as outlined in Resolution No. 2014-32.

**Table 4.14-2
 Project-Generated Water Demand**

| Proposed Use | Amount | Water Use Rate | Total Use (AFY) |
|---|-------------|----------------|-------------------|
| Workforce Domestic Water Use | | | |
| 1BR/1BA | 149 units | 0.079 AFY/unit | 11.850 |
| 2BR/1BA | 33 units | 0.114 AFY/unit | 3.761 |
| 2BR/2BA | 22 units | 0.110 AFY/unit | 2.425 |
| 3BR/2BA | 24 units | 0.163 AFY/unit | 3.907 |
| Senior Apartments Domestic Water Use | | | |
| 1BR/1BA | 108 units | 0.063 AFY/unit | 6.786 |
| 2BR/1BA | 18 units | 0.083 AFY/unit | 1.497 |
| 2BR/2BA | 6 units | 0.072 AFY/unit | 0.430 |
| Landscape Water Use¹ | | | |
| Site landscape and public park | 7.264 acres | | 12.540 |
| Commercial Water Use² | | | |
| | | | 1.616 |
| TOTAL | | | 44.812 AFY |

1. Landscape water was calculated by the landscape architect in a preliminary water calculation study dated September 28, 2015.

2. The commercial water usage was calculated by using the total actual commercial usage from Willow Springs I and Willow Springs II of 1.504 AFY, and multiplying by a factor of 360 units/335 units or 1.0746.

Source: MAC Design Associates, July 7, 2015.

Water for domestic uses and landscaping on the Project site could potentially be supplied by different sources. However, the recycled water system is not in the vicinity of the Project site. The nearest water main for recycled water, located at the corner of Storke Road and Hollister Avenue, will extend to Cortona Drive and Hollister Avenue in the future, but will remain out of vicinity for use at the Project site (Jim Heaton, Senior Water Resource Analyst, personal communication, June 4, 2015).

The 44.812 AFY of water demand generated by the Project represents 3.3 percent of GWD’s projected surplus of 1,376 AFY in water supply above current demand levels (GWD UWMP, 2011). Accordingly, the GWD currently has sufficient water supply to provide potable water to the Project and Project impacts



to water supply would be less than significant. The GWD's Stage III declaration would not change the water availability to Heritage Ridge because the Stage II exemptions would apply to the Project. Based on the total allocation of 100.89 AFY for Willow Springs I, Willow Springs II, and the Project, and water use by the Willow Springs properties of 55.983 AFY, there is 44.907 AFY available to serve the Project. Therefore, the Projects use of 44.812 AFY would be within the allocated water supply.

In accordance with GWD's Water Conservation Plan from 2010, the Project also would be required to incorporate feasible Best Management Practices (BMPs) into its water system design. Such practices include the use of water conserving fixtures and water efficient landscape and irrigation.

Mitigation Measures. Impacts related to water supply would be less than significant. Therefore, mitigation is not required.

Residual Impact. Impacts would be less than significant without mitigation since the Project's water demand is within the current GWD surplus. Nevertheless, the City recommends the following conditions of approval to further reduce impacts on water supplies.

- **Outdoor Water Conservation.** Minimize outdoor water use through the following:
 - a. Use of native and/or drought tolerant species in the final landscaping;
 - b. Installation of drip irrigation or other water-conserving irrigation;
 - c. Grouping of plant material by water needs;
 - d. Limiting turf to less than 20% of the total landscaped area if proposed under the final landscape plan or use of artificial turf in place of living grass (this may exceed the 20% maximum);
 - e. No turf is allowed on slopes of over 4%;
 - f. Use of extensive mulching (2" minimum) in all landscaped areas to improve the water holding capacity of the soil by reducing evaporation and soil compaction;
 - g. Installation of soil moisture sensing devices to prevent unnecessary irrigation;
 - h. Use of only recycled water for landscape irrigation if the Project site is connected to a recycled water line;
 - i. Use of plant materials that can withstand high salinity levels, if recycled water is used for irrigation; and
 - j. Use of plant materials that are compatible with the Goleta climate pursuant to Sunset Western Garden Book's Zone 24, published by Sunset Books, Inc., Revised and Updated 2001 edition.

- **Indoor Water Conservation.** Minimize indoor water use through the following:
 - a. Insulation of all hot water lines;
 - b. Installation of re-circulating, point-of-use, or on-demand water heaters;
 - c. Prohibition of self-regenerating water softening in all structures;
 - d. Use of lavatories and drinking fountains with self-closing valves; and
 - e. Installation of water sense specification toilets in each unit.

Impact UTL-2 Wastewater generated by future residents on the Project site would flow through GWSD's conveyance system and into GSD's wastewater treatment plant. Existing wastewater conveyance and treatment facilities have sufficient capacity to accommodate Project-related



flows. Therefore, impacts would be Class III, less than significant [Thresholds 3, 4, and 5].

Future Project site residents would generate wastewater that would feed into GWSD’s conveyance system and ultimately flow to GSD’s treatment plant. As discussed in Section 4.14.1(b), GWSD owns 40.78 percent of the capacity rights at the GSD treatment plant, which gives GWSD an allotment of 3.12 mgd of treatment capacity. GWSD currently collects approximately 1.7 mgd of sewage and its system has a remaining allocated capacity of 1.42 mgd pursuant to its contract with GSD. Applying GWSD’s wastewater generation rate of 184 gpd per equivalent residential unit (ERU), the proposed 360 housing units would generate 66,240 gpd of wastewater. Project-generated wastewater represents approximately two percent of the GWSD’s allocated capacity of 3.12 mgd. As shown in Table 4.14-3, the combination of existing wastewater flow in GWSD’s service area and Project-generated flow would represent 56.7 percent of total allocated capacity. Thus, GWSD’s treatment plant would have sufficient capacity to treat Project-generated wastewater. The Project would have a less than significant impact with respect to wastewater service.

**Table 4.14-3
 Existing + Project Wastewater
 Generation and Allocated Capacity**

| Wastewater Generation | Allocated Capacity | % of Capacity |
|--|---------------------------|----------------------|
| Existing in GWSD Service Area 1.7 mgd | - | 54.5% |
| Project 0.07 mgd | - | 2.2% |
| Existing + Project 1.77 mgd | 3.12 mgd | 56.7% |

In order for the Project to connect to the wastewater system, payment of fees to reserve capacity and contribute to costs of plant upgrades would be required. A Sewer Service Connection Permit from the GWSD also would be necessary to ensure that the District’s excess capacity can be utilized to serve this Project (Nation, 2015). The Project would be required to obtain a District Sewer Service Connection Permit from GWSD and pay applicable fees.

Mitigation Measures. Impacts would be less than significant, and no mitigation is required.

Residual Impact. Impacts would be less than significant without mitigation.

Impact UTL-3 Construction of the proposed structures is anticipated to take approximately 30 months and result in approximately 724 tons of construction waste or 101 tons per year. Construction waste would not exceed the City’s threshold of 196 tons per year. Therefore, impacts would be Class III, less than significant [Thresholds 6 and 7].

During the construction phase of development, a project can generate solid waste from the demolition of existing structures and the erection of new buildings. The Project would not involve demolition, but construction of new residential structures would generate solid waste. The proposed structures on-site,



including 360 residential units in eight buildings, two recreational facilities, a maintenance building, and a maintenance/storage building, would total 330,777 gross square feet. According to the U.S. EPA report *Characterization of Building-Related Construction and Demolition Debris in the United States*, residential construction has a solid waste generation factor of 4.38 pounds per square foot (U.S. EPA, 1998). Based on this estimate, Project construction would generate a total of about 1.45 million pounds of debris (approximately 724 tons). The construction period (excluding pre-construction soil hauling, which is not expected to generate substantial waste) is estimated at 30 months. Therefore, construction activity would result in an average waste generation rate of approximately 290 tons/year.

As described under the Regulatory Framework, the Goleta Municipal Code was updated in March 2013 to increase the required diversion rate for construction and demolition waste. Pursuant to Chapter 8.10 of the Goleta Municipal Code, any project involving the construction of new structures must divert from disposal at least 65 percent of all construction and demolition waste by weight. To attain this diversion rate, the applicant would be required to submit a Pre-Construction Waste Reduction and Recycling Plan as part of the application for a building permit. By complying with the City's requirement for diversion of solid waste, construction of the Project would generate an estimated 253 tons of non-recyclable waste during the 30-month construction period, or approximately 101 tons/year. This amount of non-recyclable construction waste would not exceed the City's Project-specific threshold of 196 tons per year. Therefore, impacts would be less than significant.

Mitigation Measure. With compliance with the City's construction waste reduction and recycling requirements, impacts related to solid waste would be less than significant. No mitigation is necessary to further reduce impacts.

Residual Impact. Impacts would be less than significant without mitigation.

Impact UTL-4 **The Project would generate an estimated 199 tons of non-recyclable solid waste per year during operation. This amount exceeds the City's Project-specific threshold of 196 tons per year. Implementation of a Solid Waste Management Plan would be required to implement waste diversion in order to reduce the amount of solid waste generated. However, impacts would remain Class I, significant and unavoidable [Threshold 6].**

As discussed in Section 4.14.3, *Methodology and Significance Thresholds*, the City's CEQA thresholds manual includes a formula to estimate solid waste generation from multi-family residential development. Using this formula $[(2.76 \text{ people/workforce unit} \times 228 \text{ units} \times 0.95 \text{ tons/year}) + (1.11 \text{ people/senior unit} \times 132 \text{ units} \times 0.95 \text{ tons/year})]$, the Project would generate approximately 737 tons of solid waste per year. According to the City's *Environmental Thresholds and Guidelines Manual*, the quantity of solid waste to be disposed of at landfills (non-recycled waste) is estimated at 50 percent of the total volume of solid waste generated. Based on a 50 percent diversion rate, the non-recycled waste from the Project would be estimated at 369 tons per year. This amount exceeds the City's Project-specific threshold of 196 tons per year. The current diversion rate for Santa Barbara County, including the City of Goleta was most recently identified as 73 percent (County of Santa Barbara Public Works, 2013). Assuming that the Project would divert recyclable waste at a rate consistent with the City's current average, 27 percent of the Project's estimated 737 tons of solid waste per year would be disposed of at landfills. Thus, based on this assumption, the Project would generate an estimated 199 tons per year of non-recyclable waste. This amount would exceed the City's project-specific threshold of



196 tons per year. Therefore, impacts on solid waste disposal capacity at the Tajiguas Landfill would be significant and unavoidable.

Mitigation Measures. The City's *Environmental Thresholds and Guidelines Manual* includes example mitigation measures for projects which would exceed City solid waste thresholds.

UTL-4 Solid Waste Management Plan. The Project applicant must develop and implement a Solid Waste Management Plan (SWMP) to be reviewed and approved by Public Works Director, or designee, and include one or more of the following measures:

- *Provision of space and/or bins for storage of recyclable materials within the Project site.*
- *Establishment of a recyclable material pickup area for commercial/industrial projects (i.e., loading docks, etc.).*
- *Implementation of a curbside recycling program to serve the new development.*
- *Development of a plan for accessible collection of materials on a regular basis (may require establishment of private pick-up depending on availability of County-sponsored programs).*
- *Implementation of a monitoring program (quarterly, bi-annually) to ensure a 33 percent to 50 percent minimum participation in recycling efforts.*
- *Development of Source Reduction measures, indicating method and amount of expected reduction.*
- *Implementation of a program to purchase recycled materials used in association with the Project (paper, newsprint, etc.). This should include requesting suppliers to show recycled material content.*
- *Implementation of a backyard composting yard waste reduction program.*

Plan Requirements and Timing: The applicant must coordinate with the Planning and Environmental Review Director, or designee, and prepare SWMP as specified in the measure.

Monitoring: The Planning and Environmental Review Director, or designee, must inspect the Project site periodically for the first five (5) years after completion of Project occupancy to verify compliance with the SWMP.

Residual Impact. County waste characterization studies estimate that implementation of the measures included in the required SWMP can reduce the 737 tons per year of waste generation by 50 percent. The actual reduction in waste generation cannot be fully determined until implementation of the SWMP. Therefore, impacts would remain significant and unavoidable.

c. Cumulative Impacts.

Water Supply. Cumulative development in the City would add 1,344 residential units and more than 1.8 million square feet of commercial and industrial space (City of Goleta, Cumulative Project List,



February 2015). Using conservative water demand rates for single-family residences, multi-family residences, and non-residential development, as identified in the City’s *Environmental Thresholds and Guidelines Manual*, the total additional water demanded (should all pending projects in the City of Goleta be approved) is estimated at 1,344 AFY, as shown in Table 4.14-4.

**Table 4.14-4
 Estimated Water Demand from Cumulative Projects in the City of Goleta**

| Land Use | Size | Demand Rate | Water Demand (AFY) |
|---------------------------|-----------------------|---|---------------------------|
| Single-family residential | 194 dwelling units | 0.70 AFY/unit | 136 |
| Multi-family residential | 1,150 dwelling units | 0.50 AFY/unit | 575 |
| Commercial | 1,822,767 square feet | 0.30 AFY/1,000 square feet ¹ | 547 |
| Proposed Project | 360 dwelling units | Refer to Table 4.14-2 | 45 |
| Total | | | 1,303 |

1. The general commercial rate was conservatively applied to all non-residential development.

The total estimated water demand of 1,303 AFY would be approximately 95 percent of the current surplus of 1,376 AFY and 12 percent of the 10,650 AF of water available to the GWD annually through the year 2030 (not including GWD’s unused recycled water capacity or other potential sources). Therefore, the cumulative water supply impact associated with planned and pending development in Goleta would be less than significant.

Wastewater. As discussed under Impact UTL-2 above, cumulative development within the City of Goleta would add 1,344 residential units and more than 1.8 million square feet of commercial and industrial space, resulting in increased generation of wastewater. Assuming that wastewater generation is 90 percent of water demand, cumulative development would generate about 1,132 AFY or 1.01 million gallons of wastewater per day. This is about 71 percent of the 1.42 mgd of wastewater treatment capacity that GWSD maintains. Wastewater generated by cumulative development would therefore be within GWSD’s available capacity. In addition, ongoing upgrades to wastewater treatment facilities would improve treatment capacity. As discussed in Section 4.14.1(b), in September of 2013, the GSD completed a major up-grade of its treatment facility and is now a Full Secondary Treatment Plant. Two 5-year NPDES permit extensions were to be granted to GWSD given satisfactory progress made in completing the design and construction of the wastewater treatment facility upgrades to full secondary treatment standards. These upgrades were designed to eliminate constraints on the growing wastewater treatment demand of the City. In order for the Project and other related developments to connect to the wastewater system, payment of fees to reserve capacity and contribute to costs of plant upgrades would be required. With the payment of fees toward the construction of improvements to wastewater infrastructure, as discussed under Impact UTL-2, the Project would not contribute to a cumulative impact on wastewater infrastructure. Therefore, cumulative impacts would be less than significant.

Solid Waste. The Project’s solid waste generation, assuming 73 percent waste diversion as discussed under Impact UTL-4, is estimated at 199 tons/year. According to the City’s *Environmental Thresholds and Guidelines Manual*, if solid waste generation exceeds 40 tons/year, it is considered an adverse contribution to cumulative impacts to solid waste facilities. Despite implementation of a required SWMP as discussed under Impact UTL-4, the Project would have a significant and unavoidable contribution to cumulative solid waste impacts.



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