

4.16 Utilities and Service Systems

This section evaluates potential effects on utilities related to adoption and implementation of the 2045 General Plan by identifying existing and planned service availability and anticipated demands and determining whether any necessary utility upgrades would result in adverse environmental effects. Potential impacts related to stormwater runoff are evaluated and discussed in Section 4.9, *Hydrology and Water Quality*. Potential impacts related to the use of electricity and natural gas are evaluated and discussed in Section 4.5, *Energy*.

4.16.1 Setting

a. Water Supply and Demand

The City's Water Division of the Utilities Department operates and maintains the City's water supply and distribution facilities and provides potable water for the community. Three water storage tanks, six production water wells, two pump stations, chlorination, and ammonia facilities, and 41 miles of water line are located throughout the City. Surface water supply is provided by the State Water Project, while groundwater is provided by River Wells, and Upland Wells. Backup/emergency water supply is provided through two interconnects with the Santa Ynez River Water Conservation District – Improvement District #1 (ID#1).

Upland Wells

There are four Upland Wells. Well 4, near City Hall, produces approximately 225 gallons per minute (gpm). HCA South Well, located in Hans Christian Andersen Park, produces approximately 125 gpm. Well 21, located next to the City's Reservoir 2, produces approximately 125 gpm, and Well 23, located on the east side of the Creekside residential subdivision, produces approximately 225 gpm. The City estimates a long-term supply of approximately 465 AFY from its Upland Wells (City of Solvang 2019a).

River Wells

There are three existing wells located on the banks of the Santa Ynez River, Well 3, Well 7A, and Well 5. Well 5 is currently inactive and has not produced water since 1993. Well 3 produces approximately 325 gpm and Well 7A produces approximately 275 gpm. The City estimates a long-term supply of approximately 600 AFY from its River Wells (City of Solvang 2019a).

State Water Project

The California Department of Water Resources (DWR) operates the State Water Project, of which the City holds entitlement to 1,500 acre-feet per year (AFY). However, based on the rainfall, Sierra snowpack, and State reservoir levels each year the percentage allocation of State Water varies. In recent years the allocation of State Water has varied from 5 percent (during drought) to as much as 85 percent (City of Solvang 2021). The State Water allocation for 2023, a record wet year, was 100 percent. However, this is considered an anomaly. The City receives State Water through a turnout (service connection) from the Central Coast Water Authority (the regional State Water wholesaler). As mentioned, the City has a contractual entitlement of 1,500 AFY of water from the State Water Project, and annual allocations vary based on rainfall, Sierra snowpack, and State reservoir levels.

For planning purposes, the City forecasts its annual allocation from the State Water Project will average around 40 percent, or 600 AFY.

ID#1 Interconnects

The City has two “on-demand” interconnects with ID#1. The interconnects have a combined maximum capacity of approximately 1,200 gpm (City of Solvang 2019a). The City is charged the high On-Demand water rate for any water received. Because of the high cost, the City only uses the ID#1 interconnects as a backup or emergency water supply source (City of Solvang 2011). The amount of water purchased from ID#1 varies from year to year based on several factors but is forecast to be approximately 20 AFY (City of Solvang 2019a).

Groundwater Basin and Groundwater Levels.

As described further in Section 4.9, *Hydrology and Water Quality*, portions of Solvang overlie the Santa Ynez River Valley Basin, while areas in east Solvang and south of the Santa Ynez River do not overlie a designated groundwater basin. The Santa Ynez River Valley Basin is an approximately 319 square-mile basin that underlies the Santa Ynez Valley. Three Groundwater Sustainability Agencies (GSAs) actively manage the Santa Ynez River Valley Basin: the Western Management Area (WMA) GSA, the Central Management Area (CMA) GSA, and the Eastern Management Area (EMA) GSA. Solvang is located within the EMA. Based on historical groundwater inflow and outflow data from 1982 to 2018, the EMA has an average annual inflow of approximately 18,770 acre-feet per year (AFY) and an average annual outflow of 20,600 AFY, which results in an annual reduction in storage of approximately 1,830 AFY. The sustainable groundwater yield in the EMA was estimated by adding the average change of groundwater in storage (negative 1,830 AFY) to the estimated total average amount of groundwater pumping (14,700 AFY) from 1982 to 2018. The sustainable groundwater yield in the EMA is estimated to be approximately 12,870 AFY (EMA GSA 2023).

Water Quality

The City, Central Coast Water Authority, and ID#1 regularly monitor water quality in accordance with State Division of Drinking Water rules and regulations. Water quality is maintained to meet all applicable standards. The City, Central Coast Water Authority, and ID#1 annually publish water quality reports referred to as Consumer Confidence Reports (City of Solvang 2021).

Water Demand

Although the City has less water storage capacity than recommended, the City has historically had a water demand which has been met by existing supplies. Table 4.16-1 shows the City’s total water production compared to total consumption between 2010-2020.

Table 4.16-1 Historical Water Production and Consumption (AF)

Year	Upland Wells	River Wells	ID#1 Interconnects	State Water Project	Total Production	Total Consumption	Surplus
2010	144	174	101	984	1,403	1,306	97
2011	113	46	64	1,190	1,413	1,284	129
2012	133	154	0	1,146	1,433	1,383	50
2013	246	189	120	1,040	1,595	1,453	142
2014	251	291	41	761	1,344	1,213	131
2015	256	335	11	471	1,073	983	90
2016	328	429	2	338	1,097	990	107
2017	178	183	2	818	1,181	1,107	74
2018	387	318	79	447	1,231	1,159	72
2019	156	125	58	838	1,177	1,114	63
2020	365	200	28	692	1,285	1,223	62

Source: van der Linden 2023

b. Sewer Collection and Wastewater Treatment

The City’s Wastewater Division of the Utilities Department operates and maintains a sewer collection system and wastewater treatment plant (WWTP) under permits issued by the Central Coast Regional Water Quality Control Board (RWQCB).

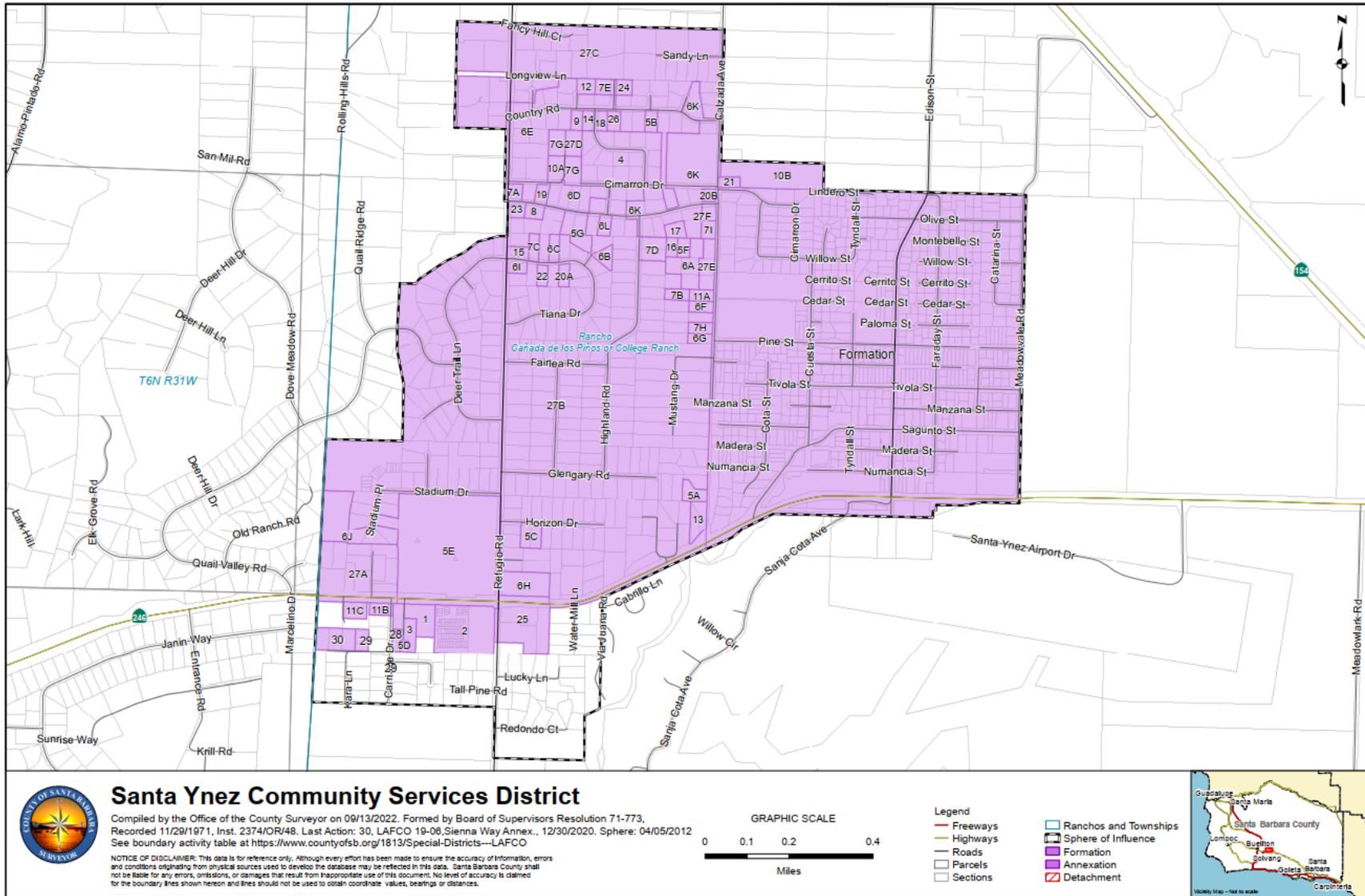
Sewer Collection

The City of Solvang sewer collection system consists of approximately 31 miles of gravity sewer mains, 645 manholes, 85 cleanouts, 0.56 miles of sewer force mains, and two lift stations (City of Solvang 2022). The City’s sewer collection system is operated in accordance with the RWQCB’s General Waste Discharge Requirements Order No. R3-2020-0020 (RWQCB 2020). The Wastewater Division also operates and maintains two sewer lift (pumping) stations. The Wastewater Division implements and periodically updates the Sewer System Management Plan to ensure smooth operation of the sewer collection system (City of Solvang 2021).

Wastewater Treatment

Under a Waste Discharge Permit issued by the RWQCB, the City of Solvang operates a Sequencing Batch Reactor (SBR) type Wastewater Treatment Plant (WWTP) that provides full secondary treatment, located south of the Santa Ynez River, outside of the Planning Area at 101 South Alisal Road. The WWTP had a design capacity of 1.5 MGD. However, as a result of more recent regulatory changes and the treatment process changes required to comply with the new regulations, the Solvang WWTP lost some of its capacity. The WWTP currently has a treatment capacity of 0.9 million gallons per day (MGD). The WWTP’s current average daily wastewater flow is approximately 0.75 MGD. The WWTP currently receives and treats wastewater from the City of Solvang and the Santa Ynez Community Services District (SYCSD) which serves the town of Santa Ynez. The SYCSD owns 0.30 MGD capacity in the Solvang WWTP. The WWTP provides full secondary treatment of the wastewater received and discharges treated wastewater to percolation ponds located adjacent to the WWTP (City of Solvang 2021). The service area of the SYCSD is shown in Figure 4.16-1.

Figure 4.16-1 Santa Ynez Community Services District Boundary



c. Stormwater Facilities

Stormwater within Solvang that does not infiltrate into the ground becomes surface runoff, which either flows into surface waterways or is channeled into the City's stormwater system. The City's stormwater system is comprised of approximately ten miles of storm drain lines (City of Solvang 2019b). Discharges from the City's storm drain system to the Santa Ynez River are permitted under the State Water Resources Control Board's National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4s), Order No. 2013-001-DWQ NPDES No. CAS000004 (State Water Resources Control Board [SWRCB] 2013). Over the last twenty years, new development in the city have been designed to meet State law pertaining to basins and bio swales.

d. Solid Waste

The City of Solvang contracts with Waste Management to provide solid waste collection services to its residents. A portion of the solid waste generated by residents and businesses in Solvang is diverted from landfills through recycling and reuse. All municipal solid waste is transferred to the Tajiguas Landfill of Santa Barbara County. The Tajiguas Landfill has a maximum permitted daily throughput of 1,500 tons per day and a remaining capacity of approximately 4,336,335 cubic yards and is estimated to remain operational through 2038 (California Department of Resources, Recycling, and Recovery [CalRecycle] 2023a). In addition, the Tajiguas Landfill includes the County of Santa Barbara's ReSource Center with a Materials Recovery Facility (MRF) and anaerobic digester. The MRF separates any excess recyclable and organic material delivered to Tajiguas. Organic materials are processed in the anaerobic digester (County of Santa Barbara 2023). All organic material is transferred to the Engle and Gray Composting Facility, a 40-acre composting site located at 745 Betteravia Road, Santa Maria (City of Solvang 2021).

Beyond 2038, it is anticipated Solvang would divert solid waste to the currently proposed Los Flores Ranch landfill in Santa Maria, approximately 25 miles north of Solvang. The Los Flores Ranch landfill is anticipated to be an alternate landfill to dispose of solid waste generated in Solvang once operations cease at the Tajiguas landfill, which is expected to occur in 2038. Los Flores Ranch landfill is anticipated to be an approximately 600-acre landfill that would provide approximately 14 years of landfill capacity (Santa Maria Sun 2020). In the event the Los Flores Ranch landfill is unable to receive solid waste from the City from 2038 to 2045, solid waste would be diverted to the Simi Valley Landfill and Recycling Center. The Simi Valley Landfill and Recycling Center has a maximum permitted throughput of 64,750 tons per week, and a remaining capacity of 82,954,873 cubic yards. The Simi Valley Landfill and Recycling Center has an expected cease operation date of 2063 (CalRecycle 2023b).

e. Electricity, Natural Gas, and Telecommunications

Pacific Gas & Electric

Pacific Gas and Electric (PG&E) provides transmission lines to convey electric power supply to Solvang. PG&E is one of the nation's largest electric and gas utility companies, and it maintains 106,681 circuit miles of electric distribution lines and 18,466 circuit miles of interconnected transmission lines (PG&E 2023a). Central Coast Community Energy (3CE) is a Community Choice Aggregator established by local communities to source clean and renewable electricity and is responsible for procuring power for Solvang. In 2022, 3CE's power mix consisted of 35.8 percent

renewable resources, 5.9 percent large hydroelectric facilities, and 58.3 percent unspecified power (3CE 2023).

Southern California Gas Company

Solvang is in the natural gas service area of the Southern California Gas Company (SoCalGas) which spans central and southern California. SoCalGas' service area is equipped with over 101,000 miles of gas transmission, distribution, and service pipelines (SoCalGas 2013). Natural gas supplied by SoCalGas is sourced from gas fields in several sedimentary basins in the western U.S. and Canada including supply basins located in New Mexico (San Juan Basin), West Texas (Permian Basin), Rocky Mountains, western Canada, and local California supplies (California Gas and Electric Utilities 2022).

Telecommunications

Telecommunication services, including broadband, cellular, and wireless services, are provided to residents and businesses from a variety of private companies, including national retailers Comcast, AT&T, Verizon, and T-Mobile (City of Solvang 2021).

4.16.2 Regulatory Setting

a. Federal Regulations

Title 40 of the Code of Federal Regulations

Title 40 of the Code of Federal Regulations (CFR), Part 258 (Resource Conservation and Recovery Act, Subtitle D), contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the Federal landfill criteria.

b. State Regulations

Water Conservation Act of 2009

The Water Conservation Act of 2009 (Senate Bill [SB] X7-7), effective November 9, 2009, requires each urban retail water supplier to develop urban water use targets and agricultural water suppliers to implement efficient water management practices. Because of the small size of the City of Solvang, it has fewer than 3,000 service connections, and is therefore not considered an "urban" water supplier.

Urban Water Management Planning Act

In 1983, the California Legislature enacted the Urban Water Management Planning Act (Water Code Section 10610 et seq.), which requires urban water suppliers to develop water management plans to actively pursue the efficient use of available supplies. Every 5 years, water suppliers are required to develop Urban Water Management Plans to identify short-term and long-term water demand management measures to meet growing water demands. Because of the small size of the City of Solvang, it has fewer than 3,000 service connections, and is therefore not considered an "urban" water supplier.

Assembly Bill 1881

Assembly Bill (AB) 1881 expanded previous legislation related to landscape water use efficiency. AB 1881, the Water Conservation in Landscaping Act of 2006, enacted landscape efficiency recommendations of the California Urban Water Conservation Council for improving the efficiency of water use in new and existing urban irrigated landscapes in California. AB 1881 required the California Department of Water Resources to update the existing Model Local Water Efficient Landscape Ordinance and local agencies to adopt the updated model ordinance or an equivalent. The law also requires the California Energy Commission to adopt performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

Post-Construction Stormwater Management Requirements

The Central Coast RWQCB adopted the *Post-Construction Stormwater Management Requirements* for Development Projects in the Central Coast Region (Resolution R3-2013-0032) in July 2013, which outlines runoff reduction and treatment requirements. Specifically, Resolution R3-2013-0032 outlines post-construction requirements for development projects in the Central Coast Region. The post-construction requirements mandate that development projects use Low Impact Development to detain, retain, and treat runoff. Low Impact Development incorporates and conserves on-site natural features, together with constructed hydrologic controls to more closely mimic pre-development hydrology and watershed processes.

Phase II Municipal Storm Water Permit

The Municipal Storm Water Permitting Program regulates storm water discharges from Municipal Separate Storm Sewer Systems (MS4s). The NPDES MS4 permits in California are issued in two phases by the SWRCB and RWQCBs. Phase I MS4 permits are issued by the RWQCBs to medium (i.e., serving between 100,000 and 250,000 people) and large (i.e., serving more than 250,000 people) municipalities. Most of these permits are issued to a group of co-permittees encompassing an entire metropolitan area. The Phase II MS4 Permit is issued by the SWRCB and is applicable to smaller municipalities (i.e., populations of less than 100,000 people) and nontraditional small MS4s (e.g., military bases, public campuses, and prison and hospital complexes). The Phase II MS4 Permit (*Waste Discharge Requirements [WDRs] for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems [MS4s] General Permit*, Order No. 2013-0001-DWQ, NPDES No. CAS000004) became effective on July 1, 2013 and covers Phase II permittees statewide, including the City of Solvang. The Phase I and Phase II MS4 Permits require the permittees to develop a storm water management program and individual dischargers to develop and implement Storm Water Management Plans to manage discharges to municipal storm drain systems.

Senate Bills 350 and 100

The Clean Energy and Pollution Reduction Act of 2015 (SB 350) requires the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources to be increased to 50 percent by December 31, 2030. This act also requires doubling of the energy efficiency in existing buildings by 2030.

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the State's Renewables Portfolio Standard Program, last updated

by SB 350. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 44 percent by 2024, 60 percent by 2030, and 100 percent by 2045.

Senate Bill 1374

SB 1374 states that the California Integrated Waste Management Board (CIWMB) must receive an annual report, including progress made by jurisdictions in regard to their advances on diverting construction and demolition waste material. The CIWMB specified that CalRecycle was required to adopt a model ordinance that would divert 50 percent to 75 percent of construction and demolition waste materials from landfills.

Assembly Bills 939 and 341

The California Integrated Waste Management Act of 1989, also known as AB 939, implemented a specific plan for cities to submit a Source Reduction and Recycling Element to their corresponding county. The Source Reduction and Recycling Element includes measures of 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. AB 939 requires cities to meet the Waste Diversion Mandates, which proposed a goal of reducing 25 percent of solid waste from landfills by January 1995, and a 50 percent reduction by January 2000. AB 341 was later passed with a goal of achieving a 75 percent solid waste reduction by January 2020. Waste Management is responsible for meeting these diversion goals.

Senate Bill 1383

SB 1383, which went into effect January 1, 2022, requires every jurisdiction to provide organic waste collection services to all residences and businesses. Multifamily complexes of five or more units are required to provide organic waste collection services for employees and tenants, and must annually educate employees and tenants on how to properly sort organic waste into the correct bins and provide information to new tenants within 14 days of occupation of the premises.

California Green Building Standards

The California Green Building Standards Code, commonly referred to as “CALGreen” originally went into effect on August 1, 2009 and outlines architectural design and engineering principles that are in synergy with environmental resources and public welfare. CALGreen sets minimum standards for buildings, and since 2016, applies to new building construction and some alterations/additions within certain parameters. CALGreen establishes planning and design standards for sustainable site development, including water conservation measures and requirements that new buildings reduce water consumption by 20 percent below a specified baseline. CALGreen requires installations of 1.28 gallons-per-flush toilets and 0.5-gallon-per flush urinals for all non-residential projects as part of the prescriptive method of reducing indoor water use by the required 20 percent.

CALGreen lays out the minimum requirements for newly constructed residential and non-residential buildings to reduce GHG emissions through improved efficiency and process improvements. It also includes voluntary tiers to encourage building practices that improve public health, safety, and general welfare by promoting a more sustainable design. In addition, CALGreen includes several requirements related to solid waste diversion. Importantly, new non-residential construction is required to achieve at least 65 percent construction and demolition waste diversion and provide recycling areas for paper, cardboard, glass, plastics, metal, and organic waste. The 2022 CALGreen

update primarily includes new requirements for the inclusion of electric vehicle charging stations and carbon dioxide monitoring and controls in classrooms. These requirements went into effect January 1, 2023.

c. Local Regulations

Solvang Water System Master Plan

The Solvang Water System Master Plan evaluates water supply and demand conditions in Solvang, forecasts future water supply and demand conditions, identifies water supply and water distribution system deficiencies, and provides recommendations and a capital improvement program to address deficiencies (City of Solvang 2011).

Integrated Water Supply Management Plan (2018)

The City's Integrated Water Supply Management Plan is intended to provide framework to enable the City to optimize the use of its available water supply sources through a balance of maximizing supply reliability, maintaining wastewater stream quality, and minimizing capital and operational costs. The Integrated Water Supply Management Plan provides water supply and demand estimates for the City.

Sewer Master Plan Update (2021)

The City's Sewer Master Plan Update is an update to the City's 1988 Sewer Adequacy Study. The Sewer Master Plan Update is intended to assist the City with maintaining the integrity and capacity of existing and future wastewater collection facilities. The Sewer Master Plan Update provides an overview of the City's sewer collection system capacity and identifies potential improvements to maintain reliability of the sewer collection system.

Solvang Municipal Code

Title 5, Chapter 2

Title 5, Chapter 2 of the City's Municipal Code sets forth regulations for solid waste, including requirements for single-family, multi-family, and commercial business generators pertaining to the provision of trash cans, subscription to the City's trash collection service, and separation of recyclables and organics.

Title 9, Chapter 3

Title 9, Chapter 3 of the City's Municipal Code sets forth the City's water code, including regulations for the installation of water infrastructure, water rates, water use, and water conservation. Article D provides specific measures that are enforced to conserve water at all times, with additional measures that can be enforced by the City Council during periods of drought.

Title 1, Chapter 1

The City enforces the waste diversion and recycling requirements of the California Green Building Standards in the Municipal Code Section 10-1-1 as a condition of approval for projects which must be agreed upon prior to issuance of permits.

Title 14, Chapter 3

Title 14, Chapter 3 of the City's Municipal Code states development in Solvang must control stormwater flows from new development or redevelopment. Title 14, Chapter 3 provides the City with the authority to mandate post-construction requirements for new development and redevelopment. These post construction requirements are intended to control the volume and rate of stormwater and must comply with the Central Coast RWQCB Resolution No. R3-2013-0032, *Post-Construction Storm Water Management Requirements for Developmental Projects in the Central Coast Region*.

4.16.3 Impact Analysis

a. Methodology and Significance Thresholds

Methodology

Impacts related to utilities and service systems were evaluated by forecasting utility demands associated with the 2045 General Plan and comparing estimated utility demands to current and planned service system capacity and availability. Utilities and service system demands of the 2045 General Plan have been quantified where possible, based on readily available information. Where insufficient data was able to quantify demands, such demands are discussed qualitatively in order to inform the impact analysis.

Significance Thresholds

CEQA Guidelines Appendix G provides the following significance thresholds to determine if a project would have a potentially significant impact on utilities and service systems. For the purposes of this EIR, implementation of the proposed project may have a significant adverse impact if it would:

1. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
2. Not have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;
3. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
4. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or
5. Fail to comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

b. Project Impacts and Mitigation Measures

<p>Threshold 1: Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?</p>
<p>Threshold 3: Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?</p>

Impact UTIL-1 DEVELOPMENT FACILITATED BY THE 2045 GENERAL PLAN WOULD INCREASE DEMAND FOR ADDITIONAL UTILITY INFRASTRUCTURE; HOWEVER, NO SUBSTANTIAL RELOCATION OR CONSTRUCTION OF UTILITY FACILITIES OR SERVICES WOULD BE REQUIRED TO SERVE 2045 GENERAL PLAN BUILDOUT BEYOND EXISTING CONDITIONS. THE WASTEWATER TREATMENT PLANT WOULD HAVE ENOUGH CAPACITY TO SERVE 2045 GENERAL PLAN BUILDOUT. THEREFORE, IMPACTS WOULD BE LESS THAN SIGNIFICANT.

Water

Growth and development facilitated by the 2045 General Plan would generally occur in developed areas of Solvang with existing water infrastructure; however, increased density in developed areas could require additional water infrastructure and upgrades to existing infrastructure. Potential environmental impacts associated with developing new water supply connections would be evaluated and mitigated as necessary as part of the City's review of individual development applications for consistency with applicable policies of the 2045 General Plan and City Municipal Code requirements. Water utility mains are often located beneath existing roadways, which are typically paved and previously disturbed. The 2045 General Plan encourages infill development and includes multiple policies intended to preserve existing open space areas, including Policy CD-1.36 which encourages cluster-style development to maximize open space preservation, and Policy ENV-1.1 which requires the City manage City-owned open space as a preserve. Therefore, the 2045 General Plan would not result in the relocation or construction of water facilities such that significant environmental impacts would occur. Impacts would be less than significant.

Wastewater

Development facilitated by the 2045 General Plan would occur on sites that are generally developed or surrounded by existing wastewater facilities. The potential environmental impacts of implementing new wastewater, such as sewer infrastructure, would be evaluated and mitigated as necessary as part of the City's review of individual development applications for consistency with applicable policies of the 2045 General Plan and City Municipal Code requirements. The 2045 General Plan includes the following policy to ensure wastewater infrastructure would serve to protect groundwater quality:

- **Policy PFS-2.4: Protect Groundwater Quality.** The City shall preserve and protect groundwater quality through the implementation of best practices and innovative methods for modern wastewater disposal.

The development envisioned in the 2045 General Plan would generate wastewater that requires treatment before discharge or reuse. For example, the 2045 General Plan envisions development that would have bathrooms with toilets and showers that generate wastewater. The estimate of

additional wastewater that would be generated by development facilitated by the 2045 General Plan is based on 90 percent of the anticipated water demand. Based on an anticipated water demand of 363 AFY, calculated in Impact UTIL-2, wastewater generation from development facilitated by the 2045 General Plan would be 0.29 MGD¹. Sewage generation would increase by approximately 0.29 MGD per day. The WWTP previously had a design capacity of 1.5 MGD. However, as a result of more recent regulatory changes and the treatment process changes required to comply with the new regulations, the Solvang WWTP lost some of its capacity. Currently, the WWTP has an estimated capacity of 0.90 MGD. The WWTP's current average daily wastewater flow is approximately 0.75 MGD. Buildout of the 2045 General Plan would increase wastewater flows to the WWTP to 1.04 MGD (City of Solvang 2019c), which would exceed the existing available capacity of the WWTP of 0.90 MGD. However, this wastewater flow is anticipated at full buildout in 2045. The City has already begun to make capacity improvements to the plant to restore the original 1.5 MGD capacity. The WWTP Water Quality Improvement Project, which is anticipated to be completed by October 2028, would restore the WWTP's design capacity to 1.5 MGD, thereby providing additional wastewater treatment capacity for anticipated future growth. Therefore, the 2045 General Plan would not result in the relocation or construction of wastewater facilities such that significant environmental impacts would occur, and with the in-process improvements to the WWTP, the WWTP would have adequate capacity to serve the 2045 General Plan's projected demand in addition to the provider's existing commitments. Impacts would be less than significant.

Stormwater

Development facilitated by the 2045 General Plan would not result in a substantial increase in stormwater infrastructure because Solvang is developed and equipped with an existing stormwater drainage system. Potential environmental impacts of developing new connections to storm drains would be evaluated and mitigated as necessary as part of the City's review of individual development applications.

Development facilitated by the 2045 General Plan could introduce new impervious surfaces through the construction of paved areas which could increase stormwater discharge to existing stormwater drainage facilities; however, as described in Section 4.9, *Hydrology and Water Quality*, development would be required to comply with the provisions of California's Phase II MS4 Permit, Title 14, Chapter 3 of the City's Municipal Code, and RWQCB Central Coast Region Resolution No. R3-2013-0032, which are designed to control the volume and rate of stormwater runoff from new development and redevelopment projects. Existing regulations would ensure development facilitated by the proposed project would not result in substantial additional runoff, necessitating the expansion of stormwater infrastructure.

Therefore, the 2045 General Plan would not result in the relocation or construction of stormwater facilities such that significant environmental impacts would occur. Impacts would be less than significant.

Natural Gas, Electricity, and Telecommunications/Broadband

Development facilitated by the 2045 General Plan would occur on sites that are generally developed or surrounded by existing development served by existing natural gas and electrical infrastructure, and development facilitated by the 2045 General Plan would generally have access to utility infrastructure and not require the installation of substantial electric or natural gas infrastructure to

¹ 324,336 gallons of water per person per day*0.90 = 291,902 gallons of wastewater per person per day

meet demands. Similar to electric and natural gas infrastructure, Solvang has existing infrastructure for cable television, landline services, internet, and cellular phone service.

Development facilitated by the 2045 General Plan would not require substantial telecommunications infrastructure to be constructed. The potential environmental impacts of implementing new electric, natural gas, and telecommunications connections to development facilitated by the 2045 General Plan would be evaluated and mitigated as necessary as part of the City's review of individual development applications for consistency with applicable policies of the 2045 General Plan and City Municipal Code requirements.

Although development facilitated by the 2045 General Plan would require new or expanded electric, natural gas, and telecommunications connections, substantial new or expanded connections would not be required.

Therefore, the 2045 General Plan would not result in the relocation or construction of natural gas, electricity, and telecommunications facilities such that significant environmental impacts would occur. Impacts would be less than significant.

Mitigation Measures

No mitigation measures are required because this impact would be less than significant.

Threshold 2: Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Impact UTIL-2 THE OVERALL GROWTH ANTICIPATED BY THE 2045 GENERAL PLAN WOULD GENERATE ADDITIONAL WATER DEMAND IN SOLVANG THAT COULD EXCEED PROJECTED WATER SUPPLIES. WITH THE IMPLEMENTATION OF 2045 GENERAL PLAN POLICIES, WHICH REQUIRE THE CITY TO RESTRICT DEVELOPMENT UNTIL ADEQUATE WATER SUPPLIES ARE AVAILABLE TO SERVE ADDITIONAL DEVELOPMENT, THIS IMPACT WOULD BE LESS THAN SIGNIFICANT.

Development facilitated by the 2045 General Plan would increase the population of Solvang, resulting in a corresponding increase in overall citywide water demand. As discussed in Section 2, *Project Description*, and Section 4.12, *Population and Housing*, the 2045 General Plan could facilitate the growth of up to 497 residential units and 211 employees, which would result in a total overall growth of 1,398 people. The City relies on a water demand factor of 232 gallons per person per day, stated in the City's 2018 Integrated Water Supply Management Plan, as a basis for projecting water demand in Solvang (City of Solvang 2018). Accordingly, the addition of 1,398 people would lead to a water demand of approximately 324,336 gallons per person per day, or 363 AFY². Based on an average historical citywide consumption of 1,344 AFY, with full buildout of the 2045 General Plan, the City's anticipated water consumption would be approximately 1,707 AFY in 2045.

Based on the City's Water System Master Plan, the City anticipates its long-term average water supply in normal years (i.e. no drought) to be 4,374 AFY (City of Solvang 2018). The average water supply in drought years due to low SWP allocations is anticipated to be 3,378 AFY. The average water supply in drought years due to low local water supplies is anticipated to be 3,975 AFY. The average water supply in drought years with both low state and low local water supplies is

² 1,398 people * 232 gallons per person per day = 324,336 gallons per day * 365 days per year = 118,382,640 gallons per year / (325,851.43 gallons per 1 acre-foot) = 363 AFY.

anticipated to be 3,378 AFY. Accordingly, the anticipated water consumption of 1,707 AFY with full 2045 General Plan buildout would be adequately met by the City's long-term water supply.

Future development facilitated by the 2045 General Plan would adhere to Municipal Code Title 9, Chapter 3, Article D, which provides permanent water conservation requirements, such as limits on watering durations, limits on washing of hard surfaces, and requirements to remediate breaks or leaks in water pipes. Additional water conservation requirements in times of drought are applicable to development in Solvang if the City Council declares a drought emergency and implements additional mandatory restrictions. These include, but are not limited to, posting notice of drought conditions in commercial establishments, prohibiting vehicle washing unless done at a commercial car washing facility, and allotment of water use quantity (rationing) if necessary. Additionally, CALGreen requires a 20 percent reduction in residential indoor water use that would lower potential water demand. The following policies included in the 2045 General Plan would also assist to maintain water supply and encourage efficient water use:

- **Policy PFS-1.1: Water Supply Sources.** The City shall continue to maintain a water supply program consisting of multiple sources of water, water conservation and groundwater management to accommodate projected water demand and provide for reliable water supply.
- **Policy PFS-1.3: Water Supply and Infrastructure.** The City shall ensure there is adequate water supply and infrastructure in place or that will be available in place and prior to approving any new development. The City will consider existing and future water supply and demand prior to project approval.
- **Policy PFS-1.6: Water Efficient Landscaping.** The City shall require new development to comply with the State water efficient landscaping requirements.
- **Policy ENV-7.3: Water Conservation Measures.** The City shall require new development and redevelopment projects to incorporate water conservation measures to reduce water demand through the Water Efficient Landscape Ordinance (MWELo), relevant sections of Title 24 and LEED certification, and other conservation policies and programs.

Future development facilitated by the 2045 General Plan would adhere to the water reduction policies and requirements described above. As described above, the water demand anticipated through buildout of the 2045 General Plan would be adequately met by the City's long-term water supplies. During drought years, the City is able to maximize production from the Upland and River wells, and, if necessary, is able to supplement the remaining water demand through purchase of up to 1,900 AFY water from ID #1 interconnects. Therefore, 2045 General Plan implementation would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. Impacts would be less than significant.

Mitigation Measures

No mitigation measures are required because this impact would be less than significant.

Threshold 4:	Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
Threshold 5:	Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Impact UTIL-3 THE 2045 GENERAL PLAN WOULD NOT GENERATE SOLID WASTE IN EXCESS OF STATE OR LOCAL STANDARDS OR IN EXCESS OF THE CAPACITY OF LOCAL INFRASTRUCTURE. GROWTH AND DEVELOPMENT FACILITATED BY THE 2045 GENERAL PLAN WOULD BE DEVELOPED IN ACCORDANCE WITH SOLID WASTE REDUCTION STATUTES AND REGULATIONS. IMPACTS WOULD BE LESS THAN SIGNIFICANT.

As discussed in Section 2, *Project Description*, and Section 4.12, *Population and Housing*, development facilitated by the 2045 General Plan would result in an additional 1,187 residents and 211 employees, which would result in a total overall growth of 1,398 people. As described in Chapter 2, *Project Description*, the 211 employees in Solvang are anticipated to work in commercial, professional/office, and public/institutional settings. As shown in Table 4.16-2, development facilitated by the 2045 General Plan is anticipated to generate approximately 2,371 tons of solid waste per year.

Table 4.16-2 Anticipated Solid Waste Generation

Estimated Growth	Solid Waste Generation Factor	Projected Annual Solid Waste Generation (tons)
1,187 Residents	12 pounds/person/day	2,599.53
139 Employees – Commercial	10.53 pounds/employee/day	267.12
71 Employees – Professional/Office	1.24 pounds/employee/day	16.07
1 Employee – Public/Institutional	0.59 tons/employee/year	0.59
Total		2,883.31

Source: CalRecycle 2023c

In accordance with the requirements of AB 939 and AB 341, at least 75 percent of the solid waste generated would be diverted, leaving a remaining 1,442 tons of solid waste per year, or 0.72 tons per day, requiring a landfill. Solid waste generated by development facilitated by the 2045 General Plan would be disposed of at the Tajiguas Landfill until it ceases operation. The County of Santa Barbara has proposed the Tajiguas Landfill Capacity Increase Project, which is currently undergoing the process of environmental review. When completed, the Tajiguas Landfill would have an increased landfill capacity to reach a projected refuse disposal filling date of approximately 2038 (Santa Barbara County Resource Recovery & Waste Management Division 2023; Noozhawk 2023). Following closure of the Tajiguas Landfill anticipated in 2038, solid waste generated by development facilitated by the 2045 General Plan is anticipated to be disposed of at Los Flores Ranch landfill in Santa Maria. As described in Section 4.16.1, Solid Waste, Tajiguas Landfill is permitted to accept 1,500 tons of solid waste per day and has a remaining capacity of approximately 4.3 million cubic yards. The solid waste generation from development facilitated by the 2045 General Plan would represent less than one percent of the Tajiguas Landfill’s permitted daily throughput. The remaining capacity of the Tajiguas Landfill and construction of Los Flores Ranch Landfill are anticipated to be able to accommodate this increase in solid waste generation. In the event the Los Flores Ranch landfill is unable to receive solid waste from the City from 2038 to 2045 following closure of the

Tajiguas Landfill, solid waste would be diverted to the Simi Valley Landfill and Recycling Center. The Simi Valley Landfill and Recycling Center and a maximum permitted throughput of 64,750 tons per week, and a remaining capacity of 82,954,873 cubic yards. The solid waste generation from development facilitated by the 2045 General Plan would represent less than one percent of the Simi Valley Landfill and Recycling Center's permitted daily throughput. Furthermore, the 2045 General Plan includes the following policy to reduce solid waste generation:

- **Policy ENV-14.1: Zero Waste.** The City shall promote activities that reduce waste and increase waste diversion, including sourcing products with reusable, recyclable, or compostable packaging; establishing food diversion programs; and promoting and educating on waste diversion and its importance.

For the reasons described above, the 2045 General Plan would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals, and would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. Impacts would be less than significant.

Mitigation Measures

No mitigation measures are required because these impacts would be less than significant.

4.16.4 Cumulative Impacts

This cumulative impact analysis examines potential cumulative impacts in the service areas of water, wastewater, stormwater, electric, natural gas, telecommunications, and solid waste utilities. These service areas vary depending on the utility; for example, water is provided to the residents and occupants of Solvang by the City while the service area for wastewater treatment includes Solvang and Santa Ynez. Cumulative development throughout the cumulative impact analysis area, in combination with the proposed 2045 General Plan, would gradually increase development and population growth and would therefore gradually increase the need for additional utilities and service systems. The general approach to cumulative impact analysis used in this EIR, as well as the cumulative impact analysis area, is discussed in Section 3, *Environmental Setting*, Subsection 3.3, *Baseline and Cumulative Project Setting*.

Water

Cumulative growth would increase the demand for water in Solvang. Based on the analysis in Impact UTIL-2, the City's long-term water supplies would be able to meet the demands of cumulative development in Solvang in normal and drought years. If necessary, the City is able to supplement the water demand during extended drought through purchase of up to 1,900 AFY water from ID #1 interconnects. Accordingly cumulative development would be adequately served by the City's long-term water supplies.

Therefore, cumulative impacts to water would be less than significant.

Wastewater

Cumulative growth in Solvang and Santa Ynez would increase wastewater generation and demand on the WWTP. However, the WWTP Water Quality Improvement Project, which is anticipated to be

completed by October 2028, would restore the WWTP's design capacity to 1.5 MGD, thereby providing additional wastewater treatment capacity for future cumulative growth.

As discussed in Impact UTIL-1, at full buildout, development facilitated by the 2045 General Plan is anticipated to result in 0.29 MGD additional wastewater flows, which would bring the average daily wastewater flows at the WWTP to 1.04 MGD. Based on the Santa Barbara County Association of Governments' 2050 Regional Growth Forecast, the population of Santa Ynez is anticipated to increase by approximately 900 people in 2050 (Santa Barbara County Association of Governments 2019). According to the United States Census Bureau, Santa Ynez's average household size is approximately 2.46 persons per household (United States Census Bureau 2021). Accordingly, the number of households in Santa Ynez that would be served by SYSCD, as shown in Figure 4.16-2, are expected to increase by 366 in 2050, which would result in an additional 65,880 gallons per day of wastewater generation, or approximately 0.07 MGD.

The addition of 0.07 MGD wastewater flows and the anticipated 0.29 MGD wastewater flows from 2045 General Plan buildout would put daily wastewater flows to the WWTP at approximately 1.11, which would not exceed the capacity of the WWTP of 1.5 MGD.

Therefore, cumulative wastewater impacts would be less than significant.

Stormwater

The City maintains an extensive stormwater drainage system permitted by the Phase II MS4 permit. Cumulative development would introduce incremental increases in needs for stormwater conveyance; however, due to the existing built-out nature of Solvang, new residential development is not anticipated to introduce substantial new areas of impervious surfaces such that expansion of existing stormwater conveyance infrastructure would be necessary. Implementation of minor additions to stormwater conveyance infrastructure are reviewed by the City on a project-by-project basis in order to ensure consistency with the MS4 permit, Title 14, Chapter 3 of the City's Municipal Code, and RWQCB Central Coast Region Resolution No. R3-2013-0032.

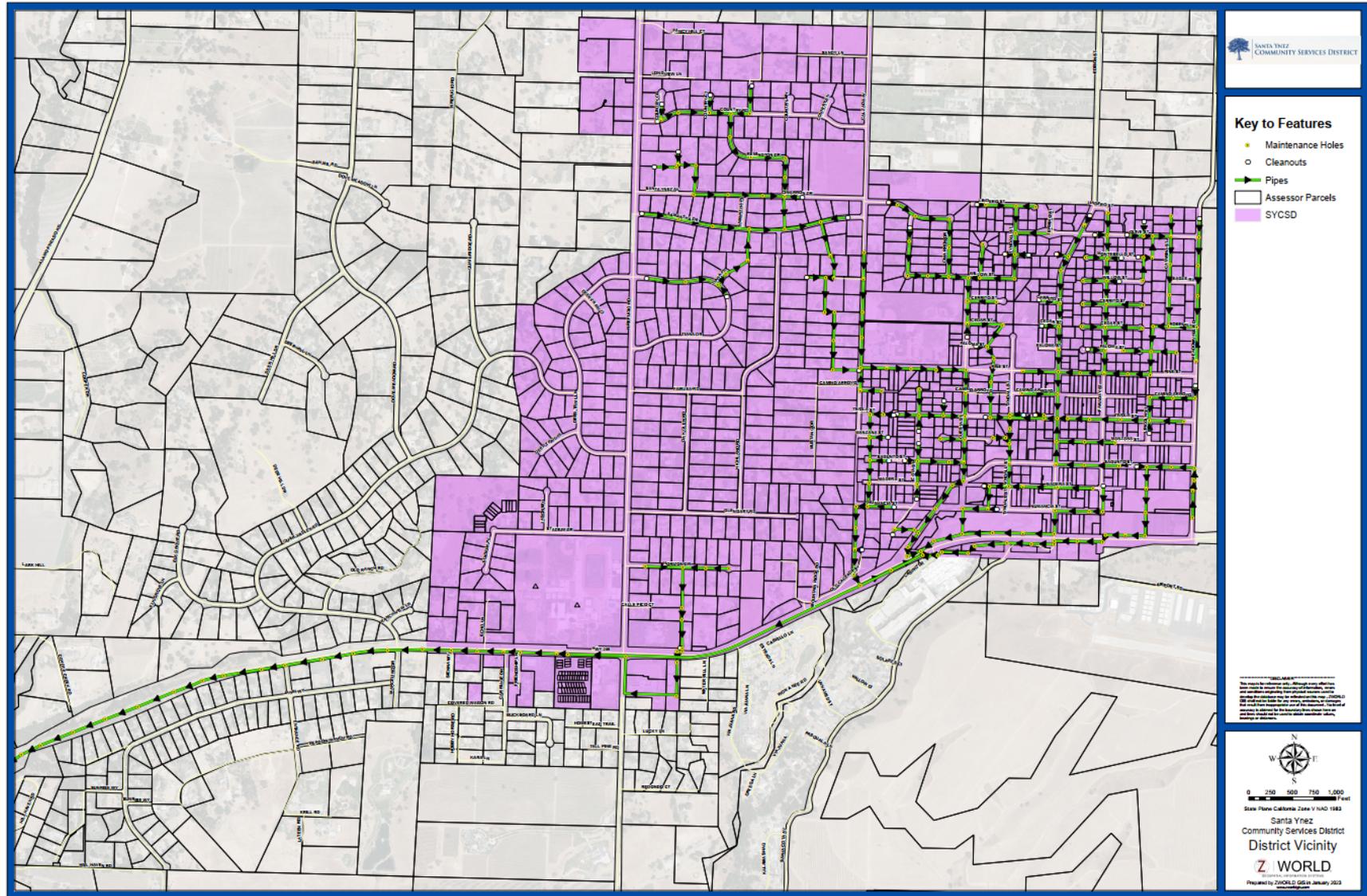
Therefore, potential cumulative stormwater infrastructure impacts would be less than significant.

Telecommunications/ Broadband, Electricity, and Natural Gas

Telecommunications services in the cumulative impact analysis area are provided by private vendors, and telecommunications facilities are available throughout the cumulative impact analysis area. Connections for new telecommunications services are implemented on an as-needed basis, in accordance with applicable local, State, and federal regulations. Due to the developed nature of the cumulative impact analysis area, there are no anticipated limitations to the availability of telecommunications services that would require the development of substantial telecommunications infrastructure. Similar to telecommunications, electric and natural gas distribution systems provided by PG&E, 3CE, and SoCalGas, respectively, are available throughout the cumulative impact analysis area. Cumulative development would be required to adhere to energy efficiency standards established in Title 24 of the CCR, the California Energy Code, and applicable local building ordinances. Adherence to these requirements would further reduce the need for new electrical or natural gas infrastructure to accommodate cumulative demand.

Therefore, potential cumulative impacts concerning telecommunications, electric, and natural gas infrastructure would be less than significant.

Figure 4.16-2 Santa Ynez Community Services District Future Service Zone Boundary



Solid Waste

Cumulative growth would increase solid waste generation and increase the demand for landfill disposal, which could result in a potential cumulative impact on waste disposal services and facilities in the region. The County of Santa Barbara has proposed the Tajiguas Landfill Capacity Increase Project, which is currently undergoing the process of environmental review. When completed, the Tajiguas Landfill would have an increased landfill capacity to reach a projected refuse disposal filling date of approximately 2038 (Santa Barbara County Resource Recovery & Waste Management Division 2023; Noozhawk 2023). Following 2038, it is anticipated cumulative solid waste would be processed at Los Flores Ranch landfill in Santa Maria. In the event the Los Flores Ranch landfill is unable to receive cumulative solid waste from 2038 to 2045, solid waste would be diverted to the Simi Valley Landfill and Recycling Center. The Simi Valley Landfill and Recycling Center and a maximum permitted throughput of 64,750 tons per week, a remaining capacity of 82,954,873 cubic yards, and an expected closure date of 2063 (CalRecycle 2023b).

Buildout of the 2045 General Plan would result in an increase of solid waste disposal of approximately 0.72 tons per day, which would not substantially increase daily or annual waste disposal, or result in an exceedance of capacity at the Tajiguas Landfill. Solid waste is anticipated to be adequately served by Los Flores Ranch landfill. Therefore, the 2045 General Plan would not result in a considerable contribution to cumulative impacts to waste disposal services and facilities in the region.

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