



## Annex H Avila Beach Community Services District

### H.1 District Profile

#### H.1.1 Mitigation Planning History and 2019 Process

This annex was updated in 2025 to build upon the previous version created for the 2019 San Luis Obispo Hazard Mitigation Plan update. The General Manager of the Avila Beach Community Services District was the representative on the County HMPC and took the lead for developing the plan and this annex. The Avila Beach Community Services District (CSD) will be responsible for implementation and maintenance of the plan.

**Table H-1 Avila Beach CSD Hazard Mitigation Plan Planning Team**

DEPARTMENT OR STAKEHOLDER	TITLE
District Management	General Manager
Operations	Operations Manager

**Table H-2 Avila Beach CSD Stakeholder Groups, Neighboring Communities, and Local Agencies**

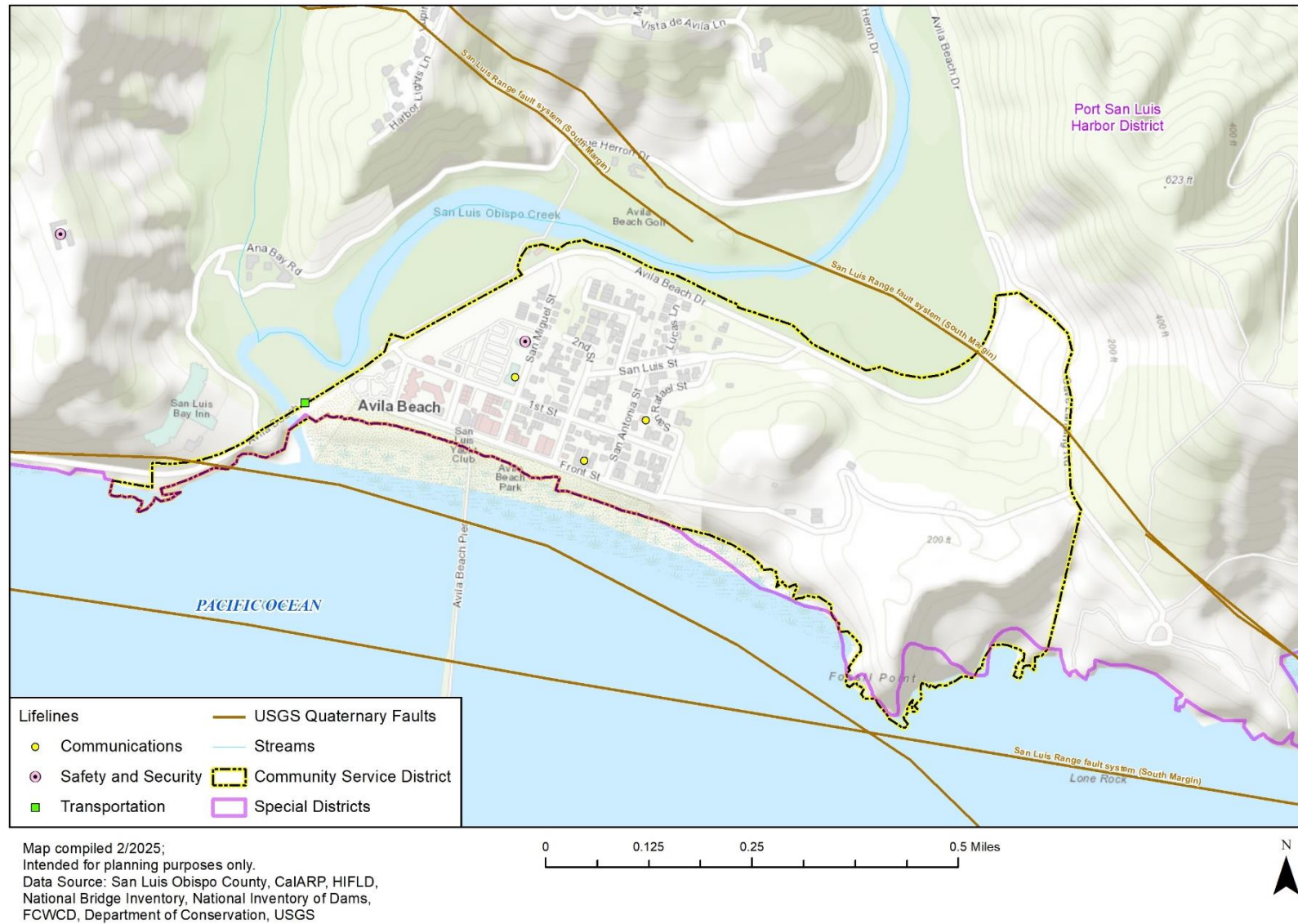
STAKEHOLDER CATEGORY	ORGANIZATION
Agencies involved in hazard mitigation activities:	California State Parks
	Cal OES
Agencies that have the authority to regulate development:	California Coastal Commission
Neighboring Communities:	Pismo Beach
Representatives of business academia, and other private orgs:	Port San Luis Harbor District, South County Chambers of Commerce

More details on the planning process and how the jurisdictions, service districts and stakeholders participated can be found in Section 3 of the Base Plan, as well as how the public was involved during the 2025 update.

Figure H-1 Avila Beach Community Service District below shows the Avila Beach Community Services District boundaries, represented in the dotted yellow line. The pink line represents the Port San Luis Harbor District, with overlap along the coast.



Figure H-1 Avila Beach Community Service District





## H.1.2 District Overview

The Avila Beach Community Services District's (CSD) mission is to provide quality, innovative and cost-effective services that include water, sewer, lighting and fire protection. The District was established in February of 1997 after the Avila Beach County Water District, which provided services such as sanitary and fire protection, and the Avila Lighting District joined together. Today the District encompasses over 150 acres within the County, including all of the Town of Avila Beach.

The Avila Beach CSD is governed by a five-person elected board, each with a four-year term. The Board of Directors is responsible for creating policies for the District and receives recommendations from the District's General Manager and District Counsel. The District's General Manager carries out the policies developed by the Board and serves as the Public Information Officer for the District. The District Engineer is responsible for implementing and developing the engineering plans for all facilities within the District. The Utilities Department provides support to the District operations including Field Crews that handle all sanitary sewer/water emergencies and daily operations. The District's part-time billing clerk is the only District employee, all other management, engineering, operations and maintenance sources are provided through contractors.

In 1976, the Avila Beach County Water District, contracted to purchase water from San Luis Obispo County Service Area #12, which supplies water from the Lopez Reservoir to the District. Currently the Avila Beach Community Services District provides water service to approximately 400 business and residential connections and owns two water storage tanks with the storage capacity of 840,000 gallons and 46 fire hydrants. The Avila Beach CSD is one of five water purveyors in the Avila community area. In addition to County Service Area #12 entitlement from Lopez Lake (68 acre-feet per year AFY), the District is also as sub-contractor to the San Luis Obispo County Flood Control and Water Conservation District Zone 3 and is entitled to 100 AF of "Table A" Water. The CSD added a 100 AF Drought Buffer to their 100 AF Table A allocation in 2017. The District's total water allocation is 168 AF per year.

The Avila Beach CSD provides wastewater collection, treatment and disposal services for the Town of Avila Beach and wastewater treatment and disposal for the Port San Luis Harbor District. The District's wastewater treatment plant was originally built in 1969 by the community of Avila. In the early 1990s the District upgraded the treatment facility to provide secondary treatment and disinfection of wastewater discharged into the Pacific Ocean. The treated municipal wastewater is discharged to the ocean through a 2,240 ft outfall, approximately 1,200 feet beyond the end of the Avila Pier. The District also maintains approximately 10,000 feet of gravity sewer, 40 manholes, 1 lift station, approximately 300 residential sewer connections, 53 commercial/industrial sewer connections, and a wastewater treatment plant serving nearly 1,000 customers and seasonal visitors.

Since 2000, the Avila Beach Community Services District has contracted with Cal Fire/San Luis Obispo County Fire Department to cooperatively provide fire protection services for the Avila community. The Fire Department also works on comprehensive vegetation management planning and stays engaged with the Avila community.

The U.S. Census Bureau estimated the Avila Beach Census Designated Place's (CDP) 2023 population as 1,365, an increase from 1,273 in 2018. Table H-3 Avila Beach CDP Demographic and Social Characteristics, 2018-2023 shows an overview of key social and demographic characteristics of the CDP taken from the U.S. Census Bureau's American Community Survey.

**Table H-3 Avila Beach CDP Demographic and Social Characteristics, 2018-2023**

AVILA BEACH CDP	2018	2023	% CHANGE
Population	1,273	1,365	-7.4%
Median Age	63.1	59.7	7.1%
Total Housing Units	1,074	923	8.0%
Housing Occupancy Rate	69%	70%	-5.4%
% of Housing Units with no Vehicles Available	1.2%	1.4%	0.2%
Median Home Value	\$988,200	\$1,314,500	23.7%
Unemployment	0.7%	0%	-1.8%
Mean Travel Time to Work (minutes)	34	12.6	63.5%
Median Household Income d-04	\$128,720	\$185,363	36.5%
Per Capita Income dp03	\$75,939	\$135,316	90.5%
% of Individuals Below Poverty Level s1701	3.5%	9.3%	-3.0%
# of Households s1101	738	643	-0.8%
Average Household Size	1.72	2.12	-6.3%
% of Population Over 25 with High School Diploma s1501	98.7%	97.6%	1.4%
% of Population Over 25 with Bachelor's Degree or Higher	31.7%	36.5%	-17.1%
% with Disability	15.1%	8.7%	-6.3%

Source: U.S. Census Bureau American Community Survey 2018-2023 5-Year Estimates, [www.census.gov/](https://www.census.gov/)

Note: Data is for the Avila Beach Census Designated Place (CDP) which may not have the same boundaries as the Avila Beach Community Service District.

The following tables show how the Avila Beach CDP's labor force breaks down by occupation and industry estimates from the U.S. Census Bureau's 2023 American Community Survey. The industry with the most amount of employees in Avila Beach are professional, scientific, and management, and administrative and waste management services (29.7%) and Educational services, and health care and social assistance (20.4%) as shown in Table H-3 Avila Beach CDP Demographic and Social Characteristics, 2018-2023 below. The most common occupations in Avila Beach are those in management, business, science, and the arts (58.5%) as shown in Table H-4 below.

**Table H-4 Avila Beach CPD Employment by Industry (2023)**

INDUSTRY	# EMPLOYED	% EMPLOYED
Population (16 years and over)	1,330	
In Labor Force	545	41%
Agriculture, forestry, fishing and hunting, and mining	-	-
Armed Forces	-	-
Construction	24	4.4%
Manufacturing	31	5.7%
Wholesale trade	-	-
Retail trade	78	14.3%
Transportation and warehousing, and utilities	-	-
Information	-	-
Finance and insurance, and real estate and rental and leasing	75	13.8%





INDUSTRY	# EMPLOYED	% EMPLOYED
Professional, scientific, and management, and administrative and waste management services	162	29.7%
Educational services, health care and social assistance	11	20.4%
Arts, entertainment, recreation, and accommodation and food services	15	2.8%
Other services, except public administration	-	-
Public administration	49	9%
Unemployed	-	-

Source: U.S. Census Bureau American Community Survey 2018-2023 5-Year Estimates, [www.census.gov/](http://www.census.gov/)

Note: Data is for the Avila Beach Census Designated Place (CDP) which may not have the same boundaries as the Avila Beach Community Service District.

**Table H-5 Avila Beach CPD Employment by Occupation (2023)**

INDUSTRY	# EMPLOYED	% EMPLOYED
Population (16 years and over)	1,330	
In Labor Force	545	41%
Management, business, science, and arts occupations	319	58.5%
Service occupations	42	7.7%
Sales and office occupations	154	28.3%
Natural resources, construction, and maintenance occupations	0	0%
Production, transportation, and material moving occupations	30	5.5%

Source: U.S. Census Bureau American Community Survey 2018-2023 5-Year Estimates, [www.census.gov/](http://www.census.gov/)

### H.1.3 Development Trends

In the late 1990s a significant portion of the Town of Avila Beach was demolished and rebuilt due to significant soil contamination from an oil spill by the Unocal Corporation (Unocal), who was also responsible for the clean-up operations. The rebuilding effort was guided by the Avila Beach Specific Plan, which included the Avila Beach Community Services District. The planning process allowed the Town and the CSD to redesign their community while keeping the Town's eclectic flair. The land uses within the boundaries of the District include commercial retail, residential multi-family, industrial, recreation and residential single-family. Since then the district has remained largely built-out, only experiencing minor residential infill development which doesn't change the district's overall vulnerability to hazards.

In 2015 a push to keep areas in Avila Beach residential instead of developing vacation rentals led to multiple ordinances and caps on rentals in the area. San Luis Obispo County implemented ordinances limiting the number of vacation rentals in areas like Avila Beach, with rules prohibiting vacation rentals within 50 feet of each other in residential areas. (San Luis Obispo Planning and Building, 2025)

As of 2025, approximately 5 percent of the housing units, or 160 properties, within the Town of Avila Beach are permitted vacation rentals. This is down from 17% in 2018 due to stricter regulations and enforcement of county ordinances aimed at preserving the residential character of the neighborhood.

### H.1.4 Other Community Planning Efforts

Coordination and synchronization with other community planning mechanisms and efforts are vital to the success of this plan. To have a thorough evaluation of hazard mitigation practices already in place, appropriate planning procedures should also involve identifying and



reviewing existing plans, policies, regulations, codes, tools, and other actions are designed to reduce a community's risk and vulnerability from natural hazards.

As an unincorporated community Avila and the Avila Beach CSD are referenced in other County planning documents and regulated by County policies and planning mechanisms. Integrating existing planning efforts, mitigation policies, and action strategies into this annex establishes a credible, comprehensive document that weaves the common threads of a community's values together. The development of this jurisdictional annex involved a comprehensive review of existing plans, studies, reports, and initiatives from San Luis Obispo County and the Avila community that relate to hazards or hazard mitigation. A high-level summary of the key plans, studies and reports is summarized in the table below. Information on how they informed the update are noted and incorporated where applicable.

In addition to the development standards within the Avila Beach Specific Plan, there are County planning mechanisms that regulate future and existing development within the Avila Beach CSD planning area. Refer to H.4 Capability Assessment for more information on the plans, policies, regulations and staff that govern the Avila Beach CSD.

**Table H-6 Summary of Review of Key Plans, Studies and Reports**

PLAN, STUDY, REPORT NAME	HOW DOCUMENT INFORMED THE ANNEX
Avila Community Plan, Background Report (2018)	Incorporated background information on the community and CSD including historical and cultural resources, and development and land use trends; Incorporated hazard information and maps (if applicable) and informed the Vulnerability Assessment.
Avila Beach Specific Plan (2001)	Informed history of the Town of Avila Beach, including the Unocal Cleanup efforts; Incorporated information on historical resources
Avila Beach Community Services District Sewer System Management Plan (Revised April 2014)	Incorporated information into the District overview
San Luis Bay Area Plan - Coastal (Revised August 2009)	Incorporated hazard information related to flooding,
County of San Luis Obispo Local Hazard Mitigation Plan (2014)	Informed past hazard event history.
County of San Luis Obispo Safety Element (1999)	Informed past hazard event history and general background information on the planning area
San Luis Obispo County - Tsunami Emergency Response Plan (Revised April 2016)	Informed the Vulnerability Assessment for Tsunami risk
San Luis Obispo County - Community Wildfire Protection Plan (March 2019)	Informed the Vulnerability Assessment for Wildfire risk

## H.2 Hazard Identification and Summary

The Avila Beach CSD planning team identified the hazards that affect the District and summarized their frequency of occurrence, spatial extent, potential magnitude, and significance specific to the Avila Beach CSD (see table below Table H-7. There are no hazards that are unique to Avila Beach.

**Table H-7 Avila Beach CSD Hazard Risk Summary**

HAZARD	GEOGRAPHIC AREA	PROBABILITY OF FUTURE OCCURRENCE	MAGNITUDE/ SEVERITY (EXTENT)	OVERALL SIGNIFICANCE					
Adverse Weather: Thunderstorm/ Heavy Rain/ Lightning/ Freeze/ Hail/ Dense Fog	Significant	Likely	Limited	Low					
Adverse Weather: High Winds/Tornado	Limited	Likely	Negligible	Low					
Adverse Weather: Extreme Heat	Extensive	Occasional	Negligible	Low					
Coastal Storm/Coastal Erosion/Sea Level Rise	Significant	Likely	Limited	Medium					
Drought and Water Shortage	Extensive	Likely	Critical	High					
Earthquake	Extensive	Unlikely	Critical	Medium					
Flood	Significant	Highly Likely	Limited	Medium					
Landslides and Debris Flow	Significant	Occasional	Limited	Medium					
Tsunami and Seiche	Significant	Occasional	Critical	Medium					
Wildfire	Significant	Likely	Limited	High					
Human Caused: Hazardous Materials	Significant	Highly Likely	Negligible	Medium					
<table><tr><td><b>Geographic Area</b> Limited: Less than 10% of planning area Significant: 10-50% of planning area Extensive: 50-100% of planning area <b>Probability of Future Occurrences</b> Highly Likely: Near 100% chance of occurrence in next year or happens every year. Likely: Between 10 and 100% chance of occurrence in next year or has a recurrence interval of 10 years or less. Occasional: Between 1 and 10% chance of occurrence in the next year or has a recurrence interval of 11 to 100 years. Unlikely: Less than 1% chance of occurrence in next 100 years or has a recurrence interval of greater than every 100 years.</td><td colspan="4"><b>Magnitude/Severity (Extent)</b> Catastrophic—More than 50 percent of property severely damaged; shutdown of facilities for more than 30 days; and/or multiple deaths Critical—25-50 percent of property severely damaged; shutdown of facilities for at least two weeks; and/or injuries and/or illnesses result in permanent disability Limited—10-25 percent of property severely damaged; shutdown of facilities for more than a week; and/or injuries/illnesses treatable do not result in permanent disability Negligible—Less than 10 percent of property severely damaged, shutdown of facilities and services for less than 24 hours; and/or injuries/illnesses treatable with first aid <b>Significance</b> Low: minimal potential impact Medium: moderate potential impact High: widespread potential impact</td></tr></table>					<b>Geographic Area</b> Limited: Less than 10% of planning area Significant: 10-50% of planning area Extensive: 50-100% of planning area <b>Probability of Future Occurrences</b> Highly Likely: Near 100% chance of occurrence in next year or happens every year. Likely: Between 10 and 100% chance of occurrence in next year or has a recurrence interval of 10 years or less. Occasional: Between 1 and 10% chance of occurrence in the next year or has a recurrence interval of 11 to 100 years. Unlikely: Less than 1% chance of occurrence in next 100 years or has a recurrence interval of greater than every 100 years.	<b>Magnitude/Severity (Extent)</b> Catastrophic—More than 50 percent of property severely damaged; shutdown of facilities for more than 30 days; and/or multiple deaths Critical—25-50 percent of property severely damaged; shutdown of facilities for at least two weeks; and/or injuries and/or illnesses result in permanent disability Limited—10-25 percent of property severely damaged; shutdown of facilities for more than a week; and/or injuries/illnesses treatable do not result in permanent disability Negligible—Less than 10 percent of property severely damaged, shutdown of facilities and services for less than 24 hours; and/or injuries/illnesses treatable with first aid <b>Significance</b> Low: minimal potential impact Medium: moderate potential impact High: widespread potential impact			
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### H.3 Vulnerability Assessment

The intent of this section is to assess the Avila Beach Community Services District's vulnerability separate from that of the planning area, which has already been assessed in Section 5 Hazard Identification and Risk Assessment in the Base Plan. This vulnerability assessment analyzes the population, property, and other assets at risk to hazards ranked of medium or high significance that may vary from other parts of the planning area.

The information to support the hazard identification and risk assessment for this Annex was collected through a Data Collection Guide, which was distributed to each participating municipality or special district to complete during the planning process. Information collected



was analyzed and summarized in order to identify and rank all the hazards that could impact anywhere within the County, as well as to rank the hazards and identify the related vulnerabilities unique to each jurisdiction. In addition, the Avila Beach CSD planning team members were asked to share information on past hazard events that have affected the Community Services District.

Each participating jurisdiction was in support of the main hazard summary identified in the Base Plan (see Table 5.2). However, the hazard summary rankings for each jurisdictional annex may vary slightly due to specific hazard risk and vulnerabilities unique to that jurisdiction (see Table H-8 below). Identifying these differences helps differentiate the jurisdiction's risk and vulnerabilities from that of the overall County.

Note: The hazard "Significance" reflects overall ranking for each hazard and is based on the Avila Beach CSD planning team input from the Data Collection Guide and the risk assessment developed during the planning process (see Section 5 of the Base Plan), which included a more detailed qualitative analysis with best available data.

### H.3.1 Other Hazards

The following hazards identified in the base plan HIRA are not identified within this jurisdictional annex due to no risk or insignificant anticipated impacts and are not considered further for mitigation actions:

- Agricultural Pest Infestation and Disease
- Biological Agents (naturally occurring)
- Dam Incidents
- Subsidence

### H.3.2 Assets at Risk

This section considers the District's assets at risk, including an inventory of improved properties and critical facilities and Community Lifelines, and historic, economic, cultural, and environmental assets. Please refer to Section 5.2.2 of the base plan for a detailed description of the methodology used.

#### H.3.2.1 Property Inventory

Table H-8 shows the total exposure of properties (e.g., the values at risk) broken down by property type for the Avila Beach Community Services District.

**Table H-8 Avila Beach CSD Total Exposure by Property Type**

PROPERTY TYPE	STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE
Commercial	20	\$36,733,751	\$36,733,751	\$73,467,502
Exempt	1	\$68,930	\$68,930	\$137,860
Mixed Use	33	\$22,493,891	\$22,493,891	\$44,987,782
Multi-Family Residential	28	\$19,446,578	\$9,723,289	\$29,169,867
Residential	132	\$58,487,514	\$29,243,757	\$87,731,271
Vacant Improved	13	\$6,125,350	\$6,125,350	\$12,250,700
Total	227	\$143,356,014	\$104,388,968	\$247,744,982

Source: San Luis Obispo County Assessor Data November 15, 2024, WSP GIS Analysis



### H.3.2.2 Critical Facilities and Infrastructure

A critical facility is defined as one that is essential in providing utility or direction either during the response to an emergency or during the recovery operation.

An inventory of critical facilities in the district is provided in Table H-9 as well as illustrated in Figure H-1. Refer to Section 5.2 of the Base Plan for more information on the Assets used throughout this annex, including the definitions and categories of critical facilities, and the County-wide analyses.

**Table H-9 Avila Beach CSD Critical Facility Assets Summary by FEMA Lifeline**

FEMA LIFELINE CATEGORY	COUNTS
Communications	3
Energy	-
Food, Hydration, Shelter	-
Hazardous Material	-
Health and Medical	-
Safety and Security	1
Transportation	-
Water Systems	-
Total	4

Source: San Luis Obispo County, CalARP, HIFLD, National Bridge Inventory, National Inventory of Dams, FCWCD, WSP Analysis

### H.3.2.3 Essential Facilities

Essential facilities as identified by the Avila Beach CSD Planning Team are as follows:

- Wastewater Treatment Plan - \$20 million replacement value
- Water Storage and Distribution - \$4 million replacement value

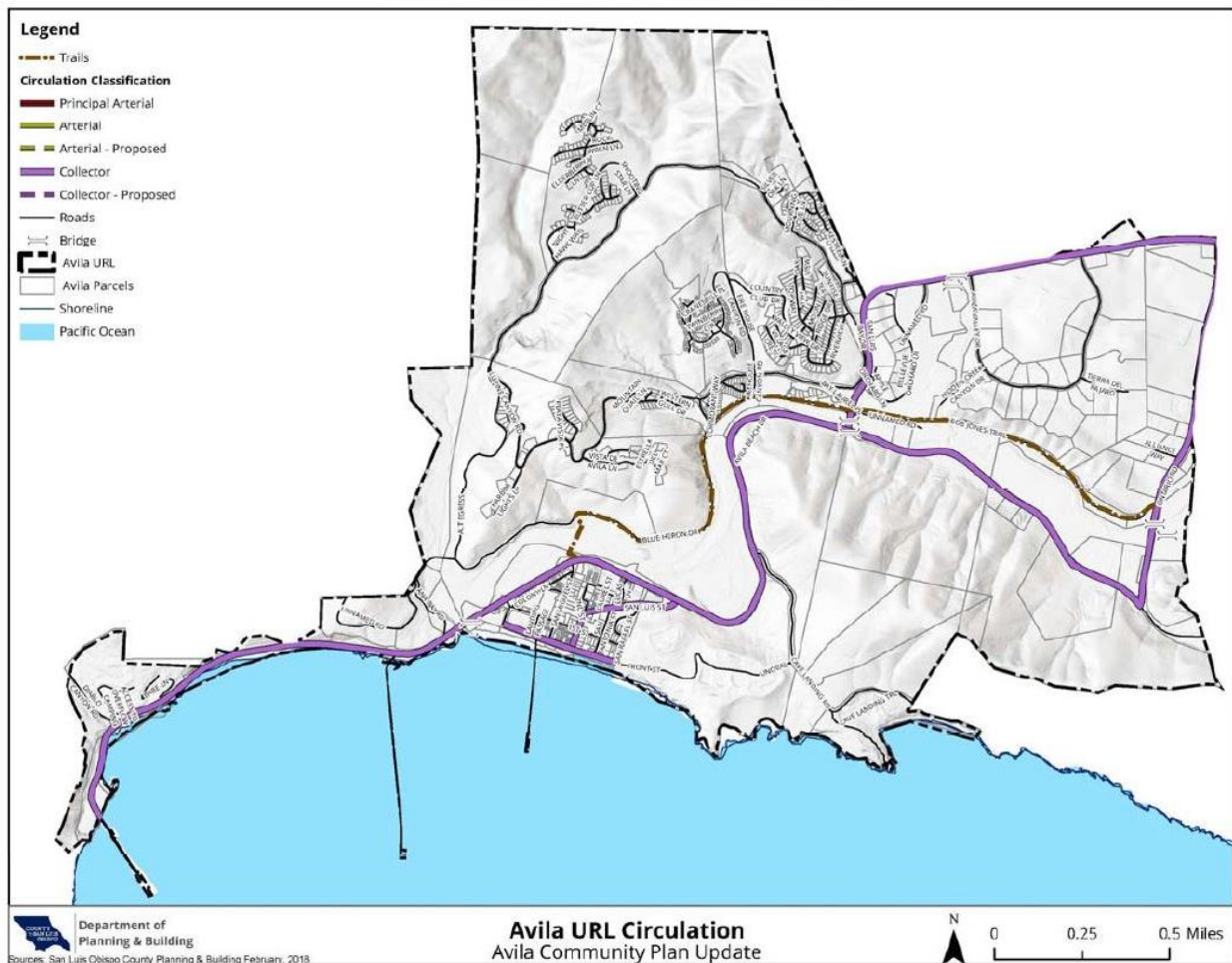
### H.3.2.4 Transportation and Lifeline Facilities

According to the GIS analysis there is one lifeline utility system, a FM Transmission Tower, located in the Avila Beach CSD jurisdiction.

Highway 101 from San Luis Bay and Avila Beach Drive area is the only way to access the Avila Beach planning area. There is no secondary access into or out of the community. According to the Avila Beach Community Plan (2018) traffic through Avila is made of three main users: PG&E employment, recreation use and residential use. Avila Beach Drive serves as the main access point to the Diablo Canyon Power Plant. The County of San Luis Obispo Public Works Department recently completed a seismic retrofit of the Avila Beach Drive Bridge, the only method of accessing Port San Luis, and the Diablo Canyon Power Plant. The following figure from the Avila Beach Community Plan shows transportation facilities in the Avila Beach area.



**Figure H-2 Avila Beach Circulation Map**



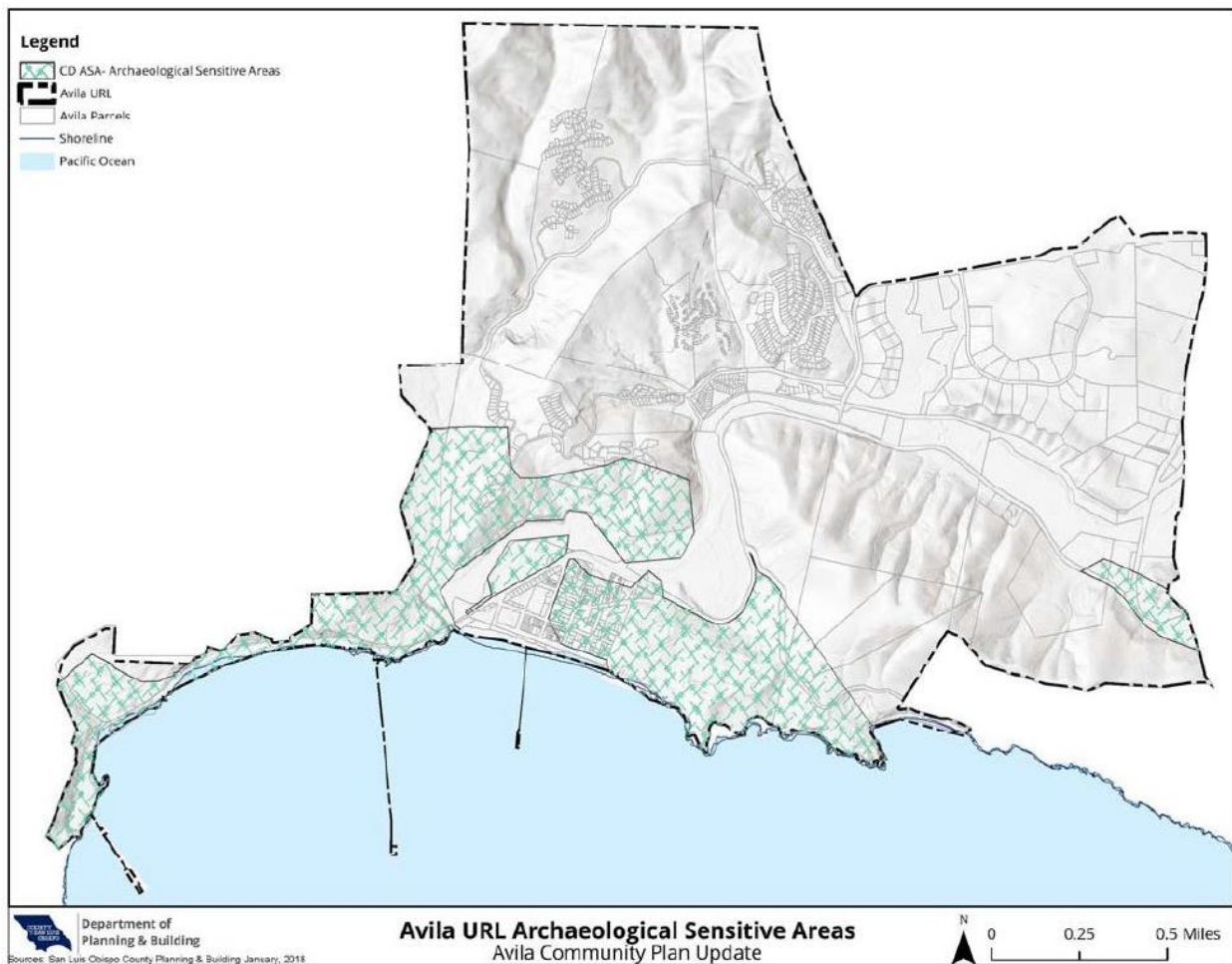
Source: Avila Community Plan, Background Report, August 2018

### H.3.2.5 Historic and Cultural Resources

The Avila Beach Specific Plan notes four structures of historical significance within the Town of Avila Beach, these structures include: The Custom House, The Sea Barn, The Yacht Club and Avila Grocery. All of these historic structures were removed, replaced and restored in their original locations after the Unocal cleanup process.

The Town of Avila Beach is also the former home of the Chumash Indian Community (Avila Community Plan, Background Report 2018). Due to this historic and archaeological connection, the Town of Avila Beach and much of the land within boundaries of the District, are designated by the County as archeologically sensitive areas. To develop within an archeologically sensitive area in the County, a landowner is required to hire a qualified archaeologist with knowledge of local Native American culture to perform a preliminary site survey that must be approved by the County Environmental Coordinator. Figure H-3 below from the 2018 Avila Community Plan Background Report depicts the Archaeologically Sensitive Areas within the Avila community as defined by the combining designation in the County's Coastal Zone Land Use Ordinance.

**Figure H-3 Archaeologically Sensitive Areas**



Source: Avila Community Plan, Background Report, August 2018

### **H.3.2.6 Natural Resources**

Natural resources are important to include in benefit-cost analyses for future projects and may be used to leverage additional funding for projects that also contribute to community goals for protecting sensitive natural resources. Awareness of natural assets can lead to opportunities for meeting multiple objectives. For instance, protecting wetlands areas protects sensitive habitat as well as attenuates and stores floodwaters. The San Luis Bay Area Plan (Coastal) (2009) designated the following combining designations that apply to the protection of special resources in the Avila Beach community:

- Ontario Ridge (SRA) – The major ridge forms an important scenic backdrop for the coastal areas of Avila Beach and Pismo Beach, as well as for Avila Valley. Open space agreements on the slopes should be obtained at the time of development proposals.
- San Luis Creek Estuary (SRA) – This small estuary west of the community of Avila beach is an important feeding and resting area for migratory waterfowl. San Luis Creek may be the southernmost stream supporting steelhead rainbow trout runs in the State [Note, steelhead rainbow trout were designated as a Threatened Species in 2006]
- San Luis Obispo Creek (FH) – Drainage course should be maintained in their natural state and native vegetation and habitats retained.



### *H.3.2.7 Economic Assets*

Tourism is the largest economic driver for the Avila Beach community. According to the Avila Community Plan (2018), the top employment sectors in Avila are primarily “visitor-serving” and include the following sectors: educational services, accommodation and food services, arts and entertainment, and recreation sectors.

## **H.3.3 Estimating Potential Losses**

This section details vulnerability to specific hazards of high or medium significance, where quantifiable, and/or where (according to LPT member input) it differs from that of the County overall.

Table H-7 above shows Avila Beach’s exposure to hazards in terms of number and value of structures. San Luis Obispo County’s parcel and assessor data was used to calculate the improved value of parcels. The most vulnerable structures are those in the floodplain (especially those that have been flooded in the past), unreinforced masonry buildings, and buildings built prior to the introduction of modern-day building codes. Impacts of past events and vulnerability to specific hazards are further discussed below (see Section 5 of the Base Plan.)

### *H.3.3.1 Adverse Weather: Thunderstorm/ Heavy Rain/ Lightning/ Dense Fog/ Freeze*

Avila Beach CSD’s risk and vulnerability to adverse weather conditions does not differ significantly from that of San Luis Obispo County. The overall significance rating of the planning area is **low**. As a coastal district, Avila Beach is subject to many of the same regional weather patterns during storm seasons and transitional weather periods.

Similar to the county, Avila Beach CSD is susceptible to the impacts of heavy rainfall. While thunderstorms and lightning are relatively rare, they can still pose safety risks to residents and strain electrical infrastructure when they occur. Dense fog is a common concern along the coast, particularly in the cooler months, often reducing visibility along roadways

### *H.3.3.2 Adverse Weather: High Wind/ Tornado*

Avila Beach’s risk and vulnerability to this hazard does not differ significantly from that of the county overall significance rating for high wind and tornadoes being **low**. Although the area is subject to adverse weather conditions like high winds, it rarely experiences tornadoes. Due to the coastal location of Avila Beach, may experience gusty winds capable of causing minor damage and tornado activity is extremely rare across the county. As such, while the potential for high wind events exists, the likelihood of significant damage or disruption remains low and tornado risk is considered minimal.

### *H.3.3.3 Adverse Weather: Extreme Heat*

Extreme heat is a **low** significance hazard for the Avila Beach CSD. The monthly mean maximum temperature for Pismo Beach, the closest NOAA weather station with recent data, is 69.5 °F; however, temperatures up to 103°F have been recorded. Additionally, rising temperatures and more frequent heat waves are increasing the likelihood of more extreme heat events in the future. Projections by the Scripps Institute suggest that the Central Coast region could see as many as five times as many days of extreme heat by the end of the century (Thorton 2024).

While Avila Beach may have a lower overall social vulnerability index compared to other regions in the county, certain populations still face increased risk during extreme heat events. Low-income residents, individuals without access to air conditioning, and those with limited mobility are especially vulnerable, along with the elderly, young children, people with chronic



health conditions, and outdoor workers. Extreme heat can lead to a range of serious public health impacts, from heat related illness to the worsening of preexisting medical issues.

Services provided by the CSD are also vulnerable to the impacts of extreme heat. Rising temperatures can drive up water demand while simultaneously reducing supply reliability, placing stress on the CSD's water resources. High energy consumption for cooling during heatwaves can strain electrical systems, increasing the risk of power outages that may disrupt critical operations. Prolonged heat also contributes to drier conditions, which in turn elevate the risk of wildfire, posing a direct threat to infrastructure.

#### *H.3.3.4 Drought and Water Shortage*

The primary sources of water supply for the Avila Beach CSD are the Lopez Lake Reservoir and the State Water Project. The Avila Beach CSD has a total entitlement of 168 acre-feet per year (AFY) of water allocations-68 AFY from the Lopez Lake Reservoir and 100 AFY from the State Water Project along with a 100 AFY Drought Buffer. The District typically uses approximately 80 AFY and anticipates build-out demand will be approximately 125 AFY.

The State Water Project is a major source of water for the Central Coast, but is also considered a supplementary source of water due to hydrologic variability, as well as maintenance and repair requirements that can cause reduced deliveries or a complete shutdown of the delivery system.

The CSD is included in the San Luis Obispo County Flood Control and Water Conservation District's Zone 3 Urban Water Management Plan (2010). Current water demand in the Avila Beach CSD remains within its available allocations, however projected growth and potential drought conditions could put increased pressure on supply. Seasonal fluctuations, particularly due to tourism and commercial activity, create periods of higher water use.

Several areas for improvement were identified in the Avila Beach CSD Water Resources Analysis Technical Memorandum (2017). Given the variable nature of State Water Project allocations, the CSD may benefit from additional water storage solutions or backup water sources. The potential for indirect potable reuse or expanded recycled water use could also be explored as a future supply strategy. Additionally, as the CSD's water distribution infrastructure ages, investments in pipe replacement and monitoring systems would help reduce losses and improve system efficiency. Water conservation efforts can also be strengthened through public outreach and incentives for low-water landscaping and efficiency retrofits. Smart metering and automated leak detection systems would further increase resilience.

Drought impacts are wide-reaching and may be economic, environmental, and/or societal. The most significant impacts associated with drought in the planning area are those related to water intensive activities such as wildfire protection, jurisdictional usage, commerce, tourism and recreation. During past drought events in the planning area, water restrictions have been imposed. Drought conditions can also cause soil to compact and not absorb water well, potentially making an area more susceptible to flooding.

#### *H.3.3.5 Earthquake and Liquefaction*

According to the Avila Community Plan, there are two fault lines that run through the southern portion of the Avila Community, neither of which are considered active. As a coastal community, there is also a risk of earthquakes offshore and resulting tsunami events (refer to the Tsunami Section below). In 1916 a magnitude 5.1 earthquake occurred offshore of Avila Beach in the San Luis Bay. There is limited data on the event such as if ground shaking was felt and at what intensity. The earthquake reportedly caused smokestacks at the Port San Luis Union Oil Refinery to fall and created a landslide that blocked railroad tracks.

The Diablo Canyon Power Plant is located just north of Avila Beach and is within the proximity of the Hosgri fault line just offshore. The Power Plant was originally designed to withstand a



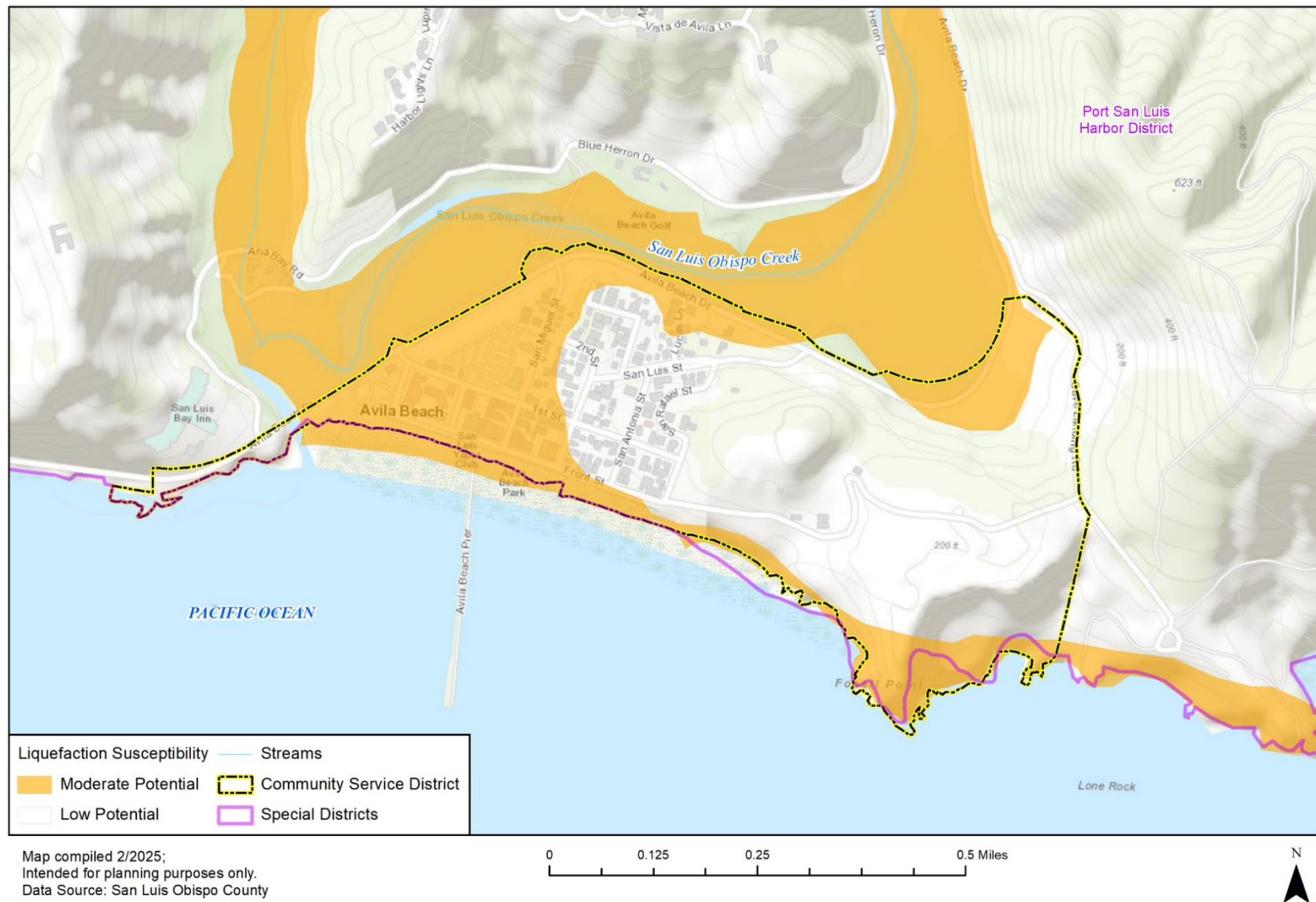
6.75 magnitude earthquake and has been upgraded to withstand a 7.5 magnitude earthquake. The Power Plant has in place extensive seismic monitoring and safety systems to shut down quickly in a significant ground shaking event.

As a coastal community, liquefaction – the result of ground shaking causing fine grained, saturate soils to liquefy and act as a fluid – poses a risk to the Avila Beach CSD. Table H-10 shows the types, number, and values of properties at risk of liquefaction, and Figure H-4 displays the extent of liquefaction risk. Based on this analysis there are 227 properties at risk of liquefaction with a total value of over \$241.6 million. Residential properties are the most vulnerable property type to liquefaction in Avila Beach, with a combined total of 160 properties with liquefaction risk and a total value of over \$116.9 million.





Figure H-4 Areas of Potential Liquefaction Risk



**Table H-10 Avila Beach Improved Properties Exposed to Liquefaction Potential by Property Type**

PROPERTY TYPE	STRUCTURE COUNT HIGH	STRUCTURE COUNT MODERATE	STRUCTURE COUNT LOW	TOTAL STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATION
Commercial	-	19	1	20	\$36,733,751	\$36,733,751	\$73,467,502	-
Exempt	-	1	-	1	\$68,930	\$68,930	\$137,860	-
Mixed Use	-	21	12	33	\$22,493,891	\$22,493,891	\$44,987,782	-
Multi-Family Residential	-	8	20	28	\$19,446,578	\$9,723,289	\$29,169,867	69
Residential	-	71	61	132	\$58,487,514	\$29,243,757	\$87,731,271	326
Vacant Improved	-	9	4	13	\$6,125,350	\$0	\$6,125,350	-
Total	0	129	98	227	\$143,356,014	\$98,263,618	\$241,619,632	395

Source: San Luis Obispo Assessor Data November 15, 2024, WSP GIS Analysis



#### H.3.3.6 Flood

The Avila Beach community remains at risk from both coastal and riverine flooding and is currently ranked as a **medium** significance hazard threat. San Luis Obispo Creek, which runs 18 miles to its mouth to the Pacific Ocean at Avila Beach, presents the greatest riverine flood risk. Areas adjacent to the creek are designated as Flood Hazard (FH) zones and are subject to County standards outlined in Title 23 and the San Luis Bay Coastal Area Plan. The Area Plan notes that major flooding would occur throughout the creek corridor during a 1% annual chance flood event. Historic flooding in 1969 and 1973 caused significant damage along the creek.

Due to the risk along San Luis Obispo Creek, the Area Plan recommends preserving adjacent lands as open space. Road infrastructure remains particularly vulnerable. Recurrent flood-impacted locations include:

- Avila Beach Drive
- San Luis Bay Drive
- Ontario Road
- Intersection of First Street and San Francisco Street
- Public parking lot under Port San Luis jurisdiction

The public parking lot floods consistently during the rainy season. In 2016, the County Public Works Department spent \$60,000 pumping water from the lot. A 2017 Conceptual Design Report recommended installing a permanent pumping system, estimated at \$375,000, with annual maintenance costs of \$25,000. The County's 2017-2018 Capital Improvement Program identified this project as a long-term priority beyond the five-year plan horizon.

Avila Beach does not participate separately in the National Flood Insurance Program (NFIP) and continues to support San Luis Obispo County's NFIP participation and compliance.

Recent storm events during winter 2024 and early 2025 further highlight the community's flood exposure:

In late December 2024, high surf caused temporary flooding at the intersection of First Street and San Francisco Street. Due to the area's low elevation and drainage limitations during high tide, water pooled until tide levels receded.

In February 2025, an Atmospheric River (AR) storm flooded Front Street, with water pooling near high tide and draining slowly. Local property managers reported repeated flooding concerns, citing debris-clogged drains and the need for improved maintenance. Visitors noted rapid water rise during the storm event.

Additional countywide impacts during these storms included road closures, vehicle rescues, a 4,000-gallon wastewater spill from the City of San Luis Obispo WW collection system, prompted beach closure advisories near Avila Beach, and sustained winds exceeding 70 mph. Although no major infrastructure damage was reported in Avila Beach, localized street flooding continues to present annual challenges.

Ongoing maintenance of drainage infrastructure and adaptation to coastal hazards, including sea level rise, remain priorities to reduce flood risk in Avila Beach.

A flood vulnerability assessment was completed during this plan update, following the methodology described in Section 5 of the Base Plan. Table H-11 summarizes the values at risk in the City's 0.2% annual chance (500-year) floodplain, respectively. Note: there are no structures within the 1% annual chance (100-year) floodplain.

**Table H-11 Avila Beach CSD's Improved Properties Exposed to FEMA Riverine 0.2% Flood Hazard by Property Type**

PROPERTY TYPE	PROPERTY COUNT	IMPROVED VALUE	CONTENT VALUE	TOTAL VALUE	LOSS ESTIMATE
Commercial	16	\$31,175,271	\$31,175,271	\$62,350,542	\$15,587,636
Exempt	1	\$68,930	\$68,930	\$137,860	\$34,465
Mixed Use	19	\$14,213,417	\$14,213,417	\$28,426,834	\$7,106,709
Multi-Family Residential	4	\$3,063,371	\$1,531,686	\$4,595,057	\$1,148,764
Residential	52	\$25,488,680	\$12,744,340	\$38,233,020	\$9,558,255
Vacant Improved	5	\$5,085,453	\$0	\$5,085,453	\$1,271,363
Total	97	\$79,095,122	\$59,733,644	\$138,828,766	\$34,707,191

Analysis Source: San Luis Obispo Assessor Data November 15, 2024, FEMA NFHL Effective Date 6/6/2024, WSP GIS Analysis

### Values at Risk

In Avila Beach, 97 structures are exposed to 0.2% annual chance flooding hazards, with a combined total value of approximately \$138.8 million. Estimated potential flood losses are \$34.7 million. The structures at risk include 52 residential properties, 16 commercial buildings, and 19 mixed-use structures. High-value commercial and residential properties located near the waterfront and San Luis Obispo Creek face the greatest risk of damage during major flood events. Continued maintenance of drainage infrastructure and implementation of flood risk reduction projects remain essential to protect property values in the community. While no properties are currently identified within the 1% annual chance (100-year) floodplain, flooding remains a potential risk and can still occur under certain conditions.

### Population at Risk

An estimated 138 residents live in areas of Avila Beach vulnerable to flooding. Of these, 128 residents are associated with single-family residential properties, and 10 residents reside in multi-family housing units. Flooding along Front Street, San Luis Obispo Creek, and surrounding low-lying areas could impact access, emergency response, and essential services for these residents. Protecting residential areas from future flood events is a key priority for preserving public safety and community resilience in Avila Beach.

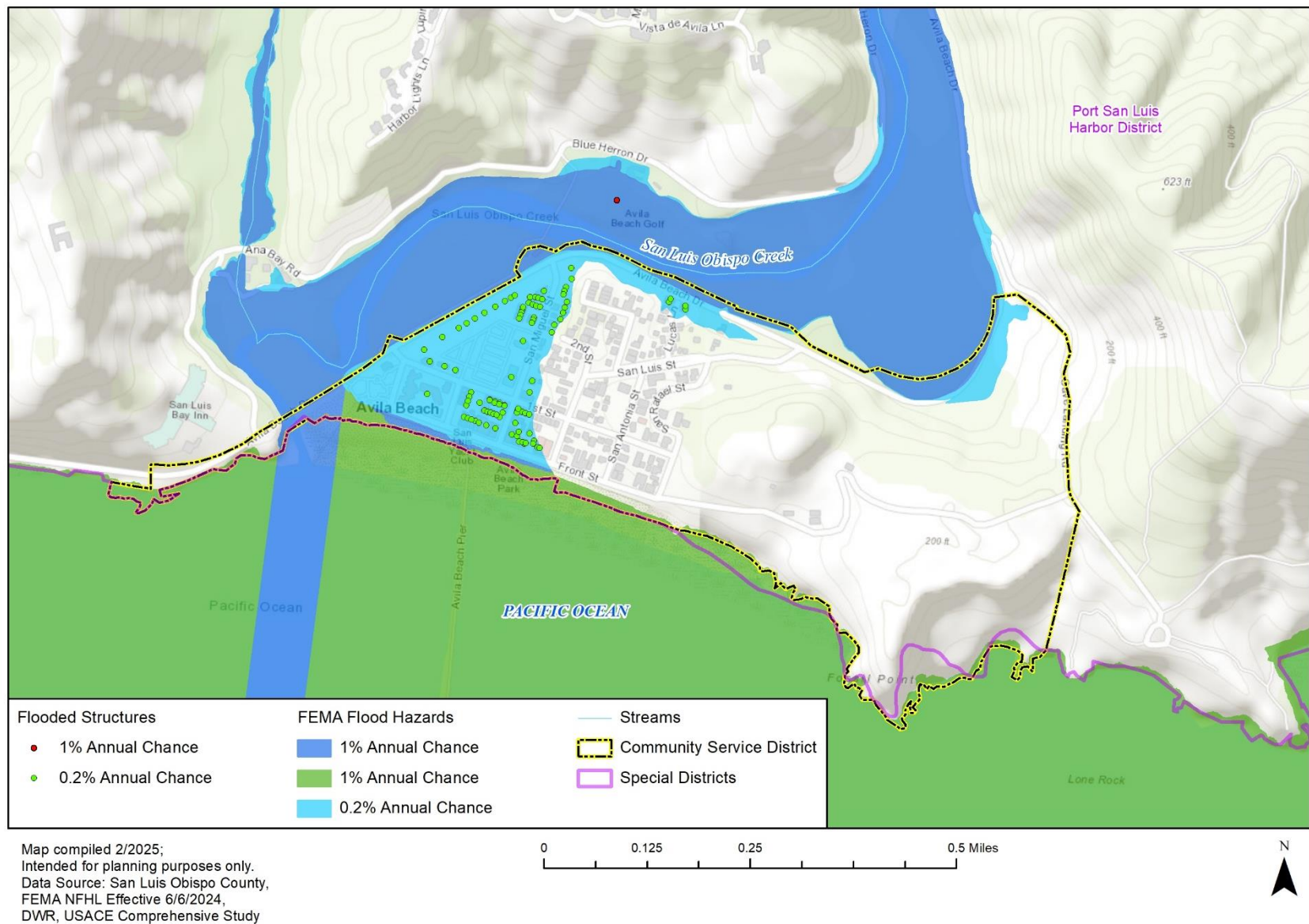
### Critical Facilities at Risk

Based on GIS analysis there are no critical facilities located in the 1% annual chance (100-year) or 0.2% annual chance (500-year) flood zones. Road infrastructure inundation as previously noted is an issue. A 1% annual chance flood could inundate Avila Beach Drive and isolate access to the community.

Figure H-5 shows Avila Beach CSD flood hazards with flooded structures. As shown, the 0.2% annual chance flood boundary extends from the San Luis Obispo Creek covering the western portion of the community.



**Figure H-5 Avila Beach CSD DWR & FEMA Flood Hazards with Flooded Structures**







### H.3.3.7 Landslides and Debris Flow

The LPT gave Avila Beach a medium overall significance rating for landslide risk. As shown in Figure H-6 below, the risk of landslides is concentrated on the eastern portion of the Avila Beach CSD limits. The land uses at moderate to high risk of a landslide event include residential multi-family, the only industrial lot in the community, where the former Union Oil Company tank farm is located as well as the only single-family homes in the jurisdiction, are at moderate to high risk of a landslide event.

Within Avila Beach there are 108 structures with a value of over \$100 million exposed to landslide potential. Out of these structures residential properties have the highest count at 67 as shown in Table H-12. Avila Beach also has 4 critical facilities exposed to landslide potential with 2 in moderately exposed areas and 2 in low.

**Table H-12 Improved Properties Exposed to Landslide Potential**

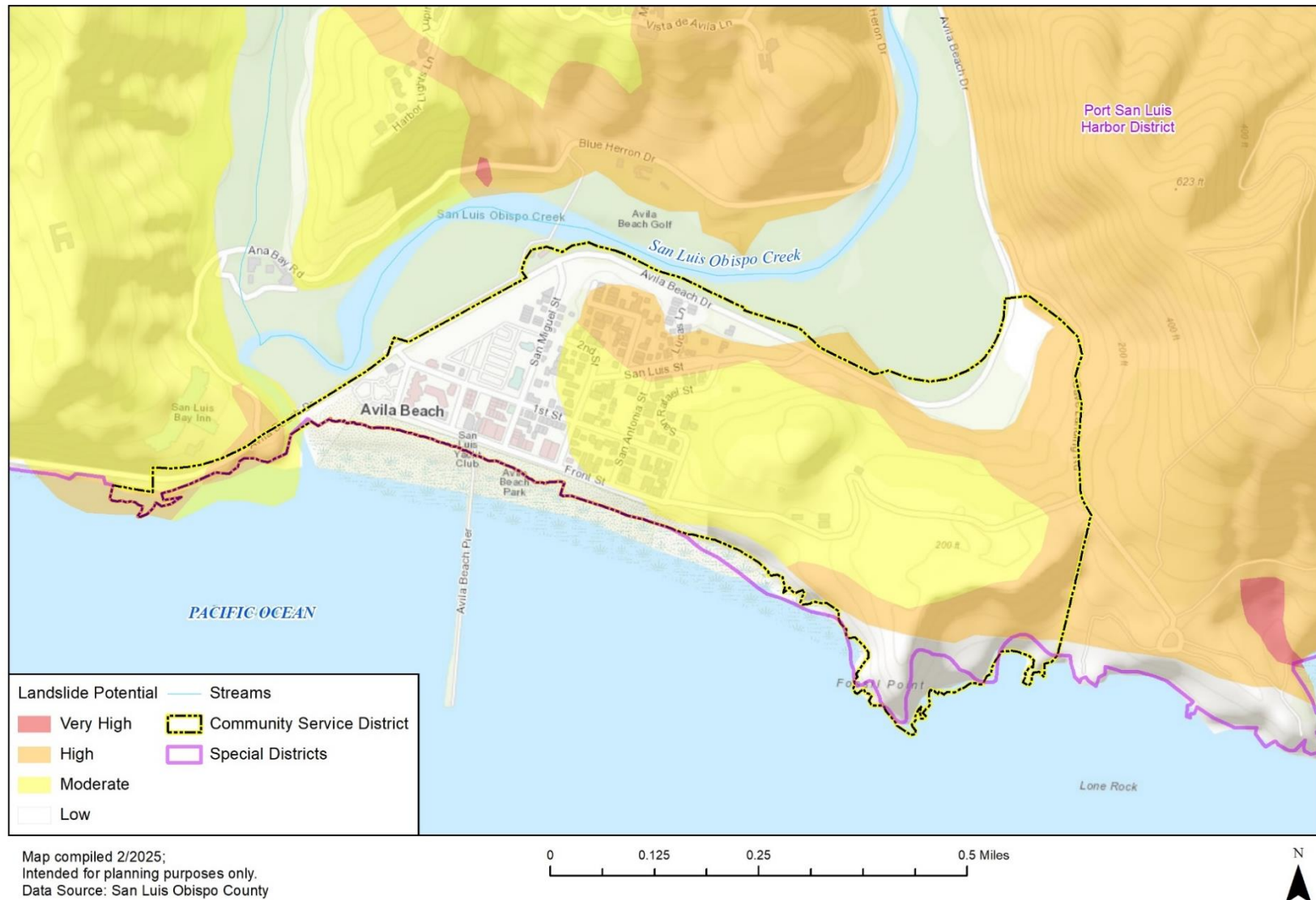
PROPERTY TYPE	TOTAL STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATION
Commercial	2	\$6,341,000	\$6,341,000	\$12,682,000	-
Mixed Use	12	\$5,602,381	\$5,602,381	\$11,204,762	-
Multi-Family Residential	23	\$17,462,270	\$8,731,135	\$26,193,405	57
Residential	67	\$32,838,005	\$16,419,003	\$49,257,008	165
Vacant Improved	4	\$804,497	\$0	\$804,497	-
Total	108	\$63,048,153	\$37,093,519	\$100,141,672	222

Source: San Luis Obispo Assessor Data November 15, 2024, WSP GIS Analysis

A landslide event along Avila Beach Drive, the only major road into or out of the Town of Avila Beach, could have serious impacts on both visitors and residents as well as impact travel to and from the Port of San Luis and the Diablo Canyon Power Plant. According to the LPT a massive landslide event that occurred 20 years ago along Avila Beach Drive did cut off access to the Port and Diablo Canyon. The committee noted there is an alternative entrance through Diablo Canyon, but it is not designed for hundreds of vehicles passing through for the extended period that would be necessary to clean the debris from the roadway caused by the landslide event.



Figure H-6 Avila Beach CSD Landslide Risk

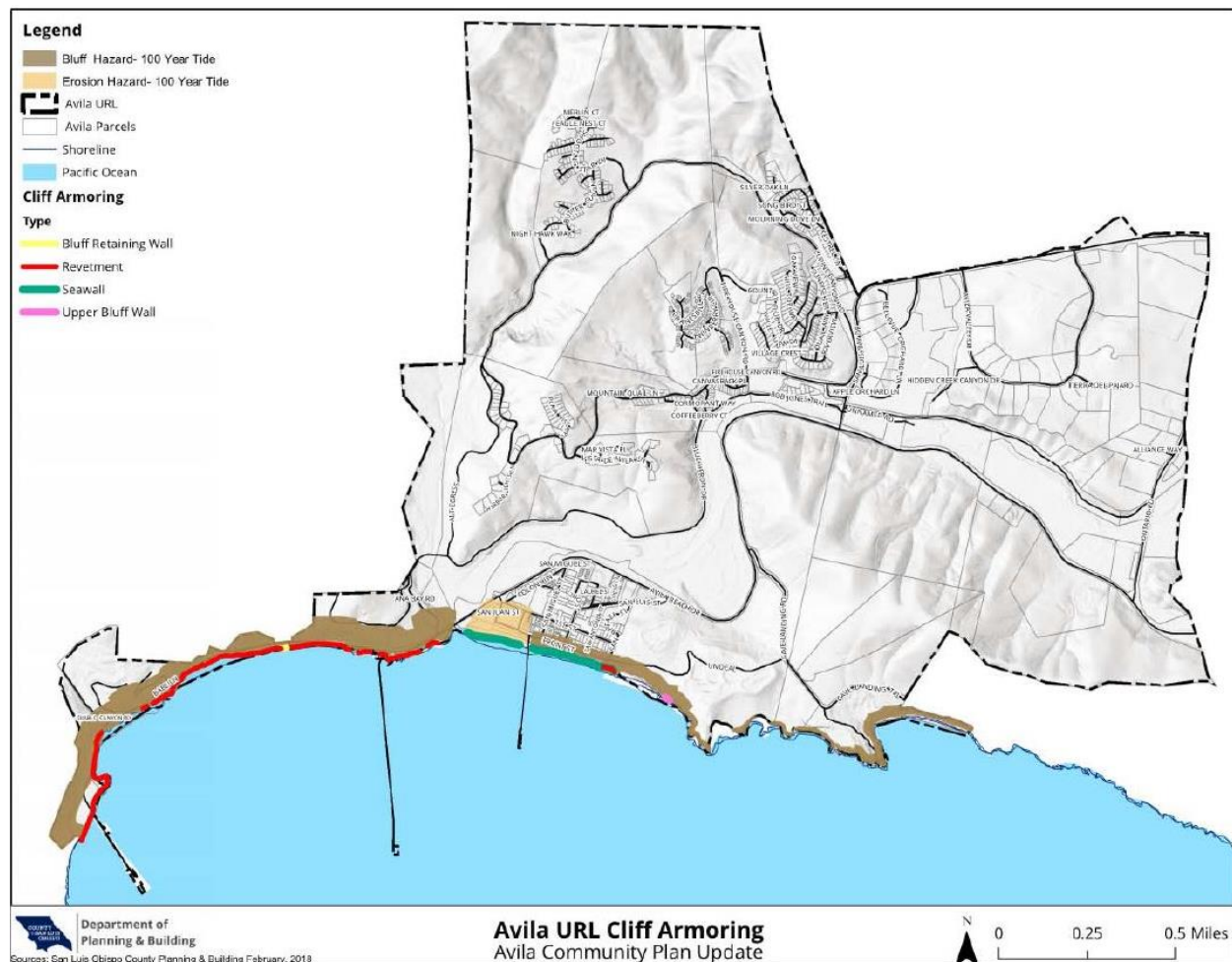


### H.3.3.8 Coastal Storm/Coastal Erosion/Sea Level Rise

Avila Beach, as a low-lying coastal community, faces exposure to multiple coastal hazards, including storm surge, bluff erosion, and sea level rise. These hazards are expected to intensify over time, as detailed in the Base Plan (Section 5). This hazard has been ranked as **medium** significance for the community.

Historically, Avila Beach has experienced coastal storm damage. A March 1983 storm caused major damage to the Union Oil Pier. Additional historical context, photographs, and coastal hazard analysis are provided in the Base Plan. The shoreline along Avila Beach is considered at moderate risk for damage from storm waves. This risk has been partially reduced by coastal armoring, including bluff stabilization projects and seawalls located between Front Street and the shoreline. Because of this infrastructure, Avila Beach is expected to experience less severe bluff erosion compared to other unarmored coastal communities. Figure H-7 shows areas at risk of coastal and bluff erosion and where coastal armoring is in place.

**Figure H-7 Areas at Risk of Coastal and Bluff Erosion and Coastal Armoring**



Source: Avila Community Plan, Background Report, August 2018

Sea level rise is projected to worsen coastal flooding, inundation, and erosion hazards along the Avila Beach coast. Areas with the highest vulnerability include shoreline zones, coastal cliffs, and low-lying lands near San Luis Obispo Creek, which already experience periodic flooding events during major storms.



As part of the hazard mitigation planning effort, Avila Beach was evaluated for sea level rise vulnerability. Mapping showed that multiple properties are at risk under both permanent sea level rise conditions and combined sea level rise with a 1% annual chance coastal flood. Table H-13 and

Table H-14 summarize these exposure results.

Additionally, Figure H-8 and Figure H-10 Figure H-9 depict both the tidal only sea level rise scenario and tidal with the 1% annual chance flood sea level rise extents in the community.

Further details, including methodology and modeling assumptions, are provided in the Base Plan, Section 5.3.4, Coastal Storm, Coastal Erosion, and Sea Level Rise.

### Values at Risk

Table H-3 and Table H-4 show values at risk to sea level coastal storm, coastal erosion, and sea level rise

**Table H-13 Avila Beach Properties Inundated by Sea Level Rise and Sea Level Rise with 1% Annual Chance Flood**

PROPERTY TYPE	25-CM SLR	75-CM SLR	300-CM SLR	25-CM SLR W/1% FLOOD	75-CM SLR W/1% FLOOD	300-CM SLR W/1% FLOOD
Commercial	-	-	15	-	10	18
Exempt	-	-	1	-	1	1
Mixed Use	-	-	18	-	18	19
Multi-Family Residential	-	-	4	-	-	4
Residential	-	-	44	-	27	55
Vacant Improved	-	-	3	-	2	5
Total	0	0	85	0	58	102

Source: San Luis Obispo County Assessor Data November 15, 2024, USGS CoSMoS v3.1, WSP GIS Analysis

**Table H-14 Avila Beach Improved Values of Properties Inundated by Sea Level Rise and Sea Level Rise with 1% Annual Chance Flood**

PROPERTY TYPE	25-CM SLR	75-CM SLR	300-CM SLR	25-CM SLR W/1% FLOOD	75-CM SLR W/1% FLOOD	300-CM SLR W/1% FLOOD
Commercial	-	-	\$30,760,645	-	\$9,945,301	\$31,766,351
Exempt	-	-	\$68,930	-	\$68,930	\$68,930
Mixed Use	-	-	\$11,688,986	-	\$11,688,986	\$14,213,417
Multi-Family Residential	-	-	\$3,063,371	-	-	\$3,063,371
Residential	-	-	\$21,543,152	-	\$11,636,776	\$26,576,416
Vacant Improved	-	-	\$4,328,828	-	\$2,300,672	\$5,085,453
Total	\$0	\$0	\$71,453,912	\$0	\$35,640,665	\$80,773,938

Source: San Luis Obispo County Assessor Data November 15, 2024, USGS CoSMoS v3.1, WSP GIS Analysis

Analysis of property and value exposure in Avila Beach under SLR and combined SLR with 1% annual chance flood scenarios indicate significant future risk to the built environment.

Under the 300-cm SLR scenario alone, 85 properties in Avila Beach would be inundated, primarily residential (44), mixed use (18), and commercial (15), with smaller impacts to multi-family, exempt, and vacant improved parcels. When combined with a 1% annual chance coastal flood event, exposure increases to 102 properties, reflecting expanded inundation



across all categories, including an additional 11 residential structures, 4 vacant improved parcels, and increases in both mixed-use and commercial properties.

The estimated improved value at risk under the 300-cm SLR scenario alone is approximately \$71.5 million. This grows to \$80.8 million when accounting for SLR with a 1% annual chance flood. Residential structures account for the largest share of value impacted (\$26.6 million), followed closely by commercial (\$31.8 million) and mixed-use (\$14.2 million). Notably, the jump from 75-cm to 300-cm sea level rise marks the first threshold where significant property inundation occurs, underscoring the potential for sudden impact escalation if climate change projections intensify. These findings highlight Avila Beach's growing vulnerability to climate-driven coastal hazards. Planning efforts should prioritize adaptive strategies for at-risk structures, with special attention to the mixed-use corridor and older residential zones most vulnerable to combined storm surge and sea level rise events.

### Population at Risk

Based on the projections in Table H-15, population exposure to sea level rise within Avila Beach CSD begins to appear under higher impact scenarios. No residents are shown to be exposed under the 25 cm or 75 cm SLR scenarios alone, indicating that minor sea level increases are not expected to significantly affect residential areas. However, once sea level rise reaches 300 cm, approximately 119 people are projected to be directly exposed. When combined with 1% annual chance flood conditions, even the lower SLR thresholds begin to present risk, 67 people are at risk under the 25 cm sea level rise plus flood scenario, increasing to 146 people under the 300 cm sea level rise plus flood condition. These figures suggest that the combination of sea level rise and coastal flooding substantially amplifies risk to residents, particularly under more extreme future conditions. This highlights the importance of proactive adaptation strategies focused on compound hazards.

**Table H-15 Avila Beach CSD Population Exposed to Sea Level Rise Scenario Hazards**

CSD	25-CM SLR	75-CM SLR	300-CM SLR	25-CM SLR W/ 1% FLOOD	75-CM SLR W/1% FLOOD	300-CM SLR W/1% FLOOD
Avila Beach CSD	-	-	119	-	67	146
Total	-	-	119	-	67	146

Source: San Luis Obispo County Assessor Data November 15, 2024, USGS CoSMoS v3.1, WSP GIS Analysis

### Critical Facilities at Risk

According to Table H-15, Avila Beach CSD faces limited but notable exposure of critical facilities to sea level rise and compound flooding hazards. No facilities are impacted under the lower SLR scenarios of 25 cm and 75 cm alone. However, at the 300 cm SLR level, two critical facilities are projected to be inundated, one related to communications and one to transportation. When sea level rise is combined with the 1% annual chance flood, additional vulnerabilities emerge: one communications facility and one safety and security facility become exposed even at lower sea level rise thresholds. The data suggests that while direct sea level rise may initially pose a modest risk to infrastructure, the combination with extreme coastal flooding significantly heightens that risk, especially for facilities essential to emergency response and public safety. These findings highlight the need for long-term resilience planning that accounts for both gradual and compound hazard scenarios.



**Table H-16 Avila Beach CSD Critical Facilities Inundated by Sea Level Rise and Sea Level Rise with 1% Annual Chance Flood by FEMA Lifeline**

FEMA LIFELINE	25-CM SLR	75-CM SLR	300-CM SLR	25-CM SLR W/1% FLOOD	75-CM SLR W/1% FLOOD	300-CM SLR W/1% FLOOD
Communications	-	1	1	-	1	1
Energy	-	-	-	-	-	-
Food, Hydration, Shelter	-	-	-	-	-	-
Hazardous Material	-	-	-	-	-	-
Health and Medical	-	-	-	-	-	-
Safety and Security	-	1	1	-	1	1
Transportation	-	-	1	-	-	-
Water Systems	-	-	-	-	-	-
Total	-	-	2	-	2	2

Source: San Luis Obispo County, USGS CoSMoS v3.1, CalARP, HIFLD, NBI, NID, WSP Analysis



Figure H-8 Avila Beach Sea Level Rise Scenario Analysis: Tidal Inundation Only

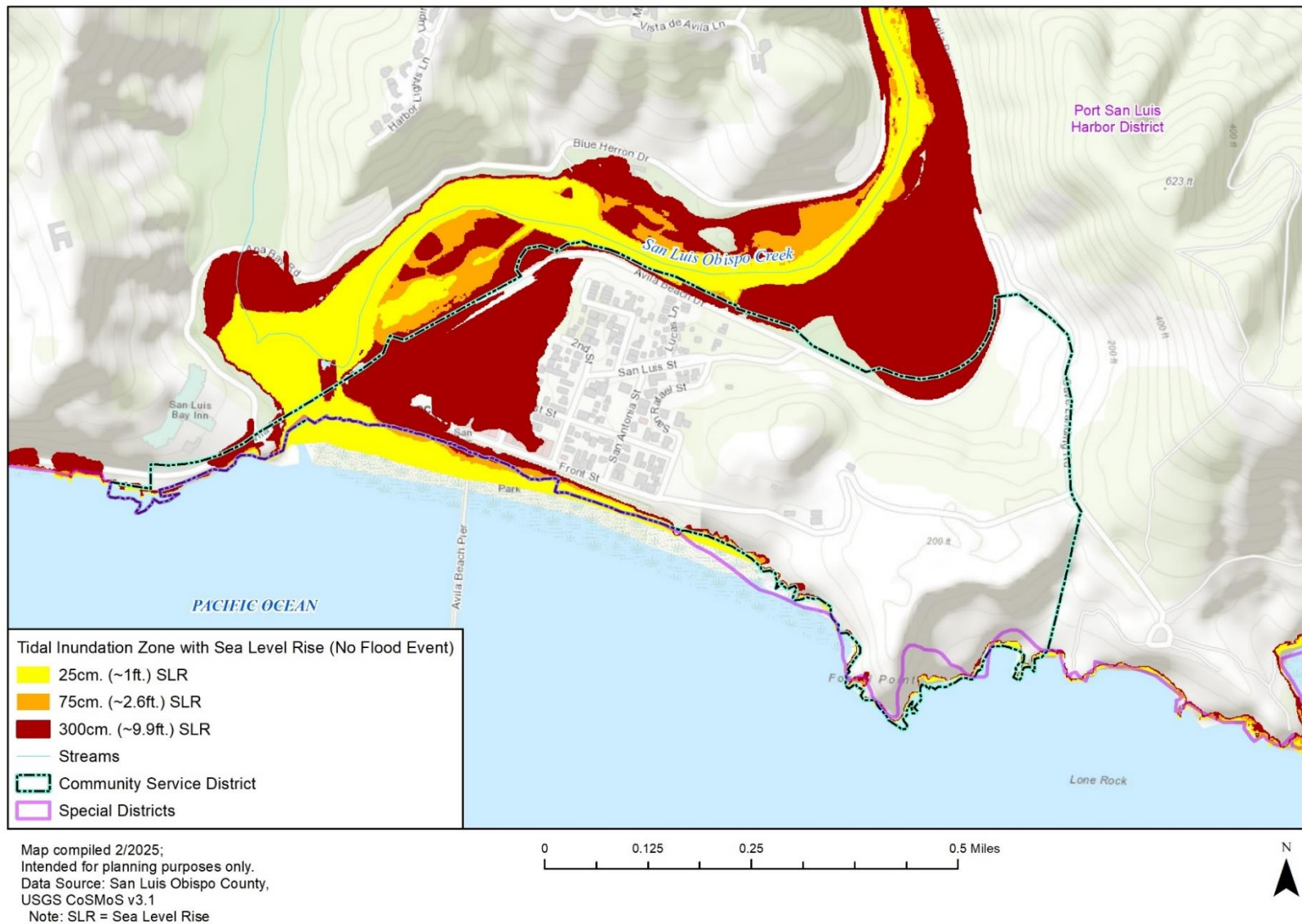
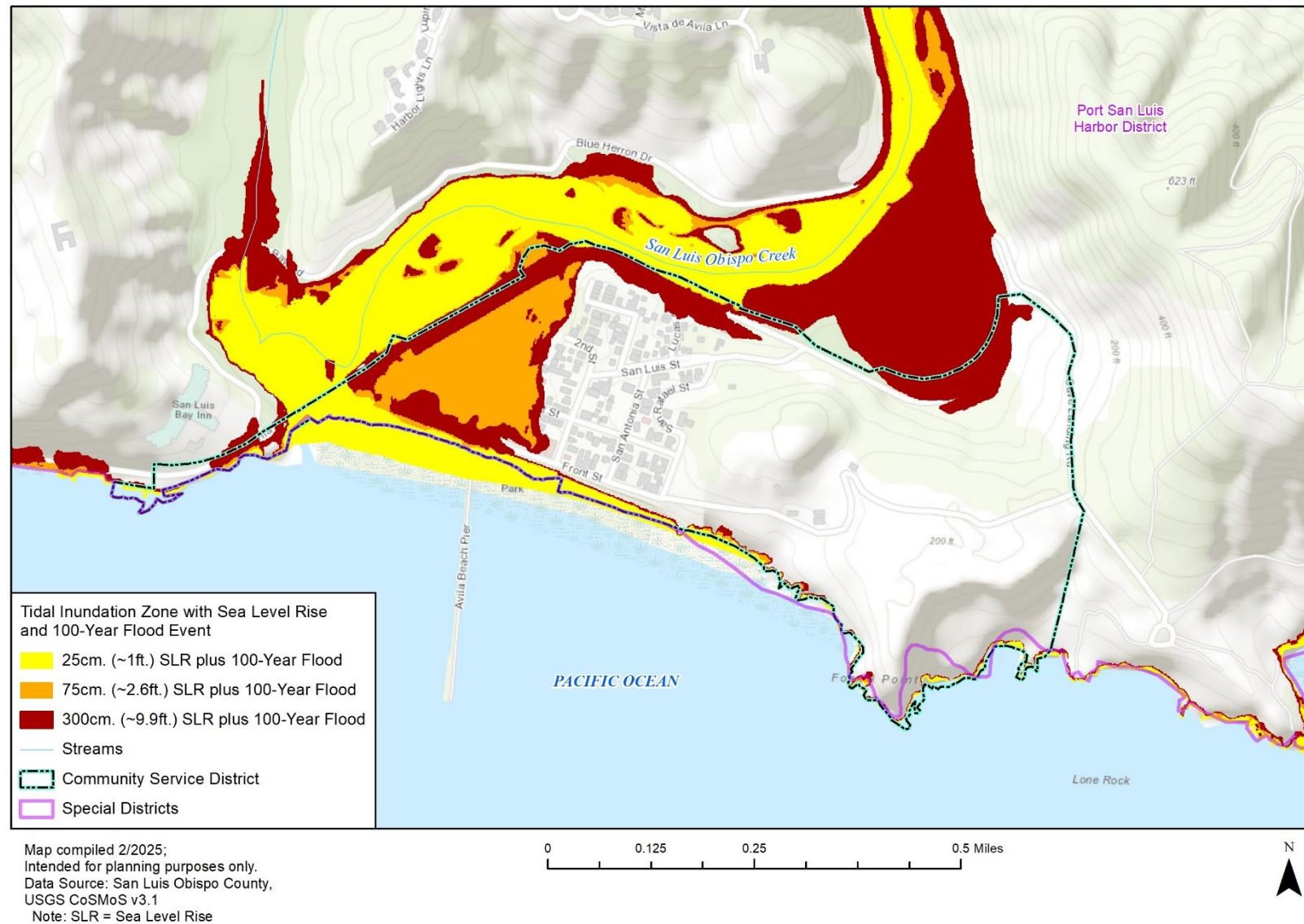




Figure H-9 Avila Beach Sea Level Rise Scenario Analysis: Tidal Inundation and 1% Annual Chance Flood





### H.3.3.9 Tsunami and Seiche

Tsunami inundation poses a risk to all coastal communities in the County of San Luis Obispo. Offshore faults and related seismic activity could generate a tsunami event off the coast of Morro Bay, even if the fault rupture occurs thousands of miles away. Historically, significant tsunamis on the Central Coast of California have been infrequent. According to the County's Tsunami Response Plan the areas within the Avila Beach community that are most vulnerable to a tsunami event include areas inland within and adjacent to San Luis Obispo Creek; this includes Avila Beach Drive, the only major road out of the beach area (refer to Figure H-10). There have been three recorded tsunami events between 1946 and 1964 that have impacted the Avila Beach community. Refer to Section 5 of the Base Plan for more information related to the past tsunami events and analysis on future vulnerability.

The following table breaks down the tsunami risk for the Avila Beach Community by property type.

**Table H-17 Avila Beach Improved Properties Exposed to Exposed to Tsunami Hazard Areas by Property Type**

PROPERTY TYPE	STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATION
Commercial	18	\$31,766,351	\$31,766,351	\$63,532,702	-
Exempt	1	\$68,930	\$68,930	\$137,860	-
Mixed Use	24	\$18,532,488	\$18,532,488	\$37,064,976	-
Multi-Family Residential	24	\$15,890,892	\$7,945,446	\$23,836,338	59
Residential	104	\$47,195,747	\$23,597,874	\$70,793,621	257
Vacant Improved	12	\$6,064,453	\$0	\$6,064,453	-
Total	183	\$119,518,861	\$81,911,089	\$201,429,950	316

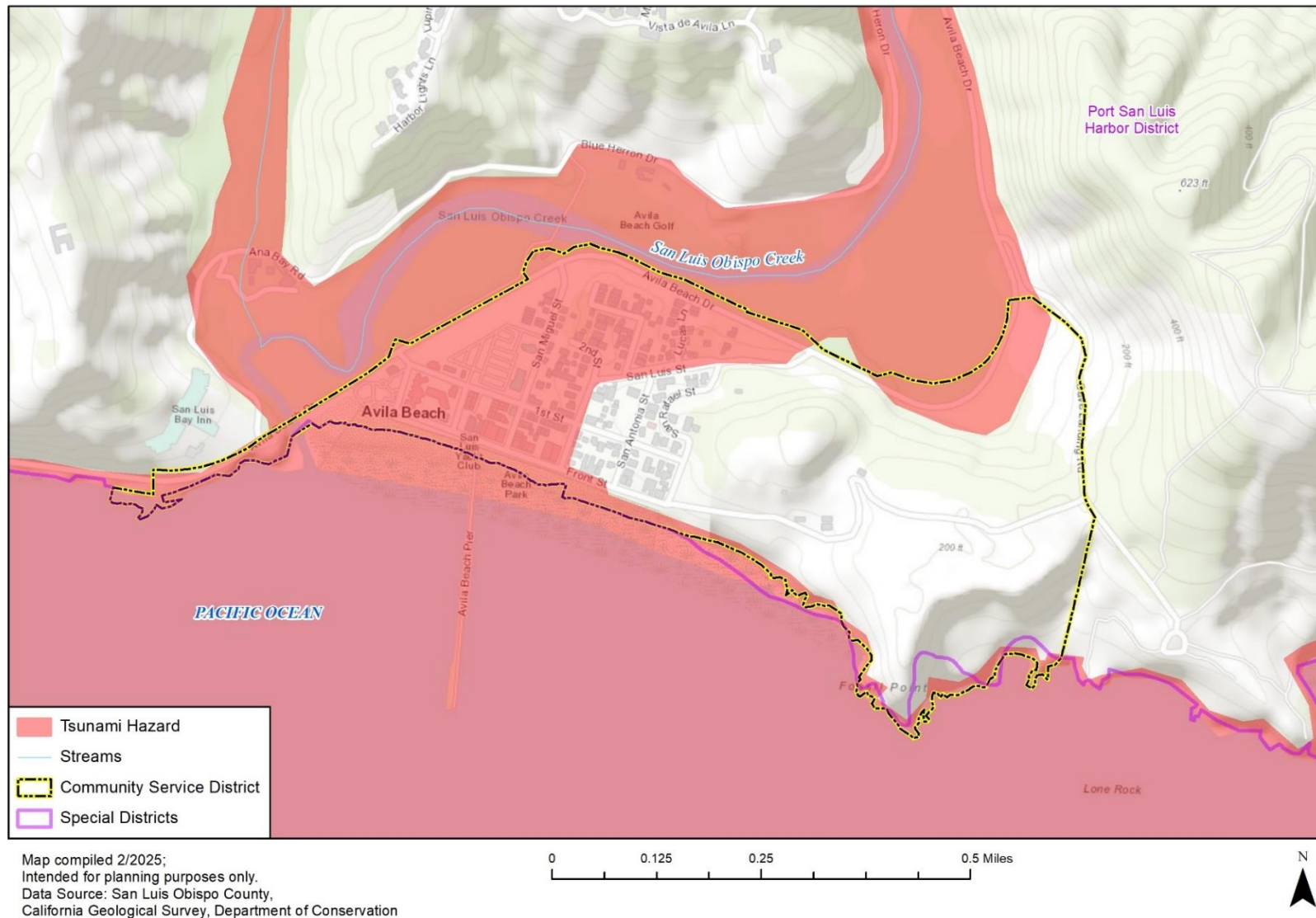
Source: San Luis Obispo Assessor Data November 15, 2024, California Geological Survey, Dept. of Conservation, WSP GIS Analysis

Based on this analysis the western portion of Avila Beach is at significant risk to a tsunami event. There are 183 structures (out of 227 total structures in the district) vulnerable to the impacts of a tsunami, with a combined value of over \$201 million. Of the properties at risk, 128 are residential properties, with a majority being multi-family residential with a combined loss estimate of over \$70 million. There are also two critical facilities within the inundation zone, one of which is communications infrastructure and the other falling under the Safety and Security community lifeline.





Figure H-10 Avila Beach CSD Areas of Potential Tsunami Inundation







### **H.3.3.10 Wildfire**

Wildfire is a high significance hazard for the Avila Beach Community Services District. There is no fire history in the community. But due to factors such as the Irish Hills, a notable topographic feature north of Avila Beach, Cal FIRE has designated the Avila Beach community as being at an increased risk from wildfires and a priority community to work with to prepare and mitigate potential fire risk. According to the County's Community Wildfire Protection Plan (2019), the prevailing wind patterns are another dominant factor that influences the wildfire risk in Avila Beach. A fire that originates in the Los Osos area or at the Diablo Canyon Power Plant could be pushed by prevailing winds southeast towards the Avila Beach community.

Following the methodology described in the wildfire hazard Section 5.3.15 Wildfire of the Base Plan, along with the GIS parcel analysis discussed in more detail under Section 5.2 Asset Summary, a wildfire vulnerability analysis for the Avila Beach was completed. The assessment was performed using GIS, and results indicate that there were neither parcels nor critical facilities in wildfire severity hazard zones within the boundaries of the Avila Beach. However, wildfire hazards have been rated by the district's planning team as holding **High Significance** based on the community's experience and historical evidence.

In Avila Beach CSD, 227 properties are situated within wildfire hazard exposure zones ranging from moderate to very high. All of these properties are located in the High Fire Hazard Severity Zone. Collectively, these properties represent a total assessed value of \$241,619,632 and impact approximately 395 residents across all fire hazard severity zones. Table H-18 shows the properties in the District Exposed to Fire Severity. Figure H-11 depicts the Fire Hazard Severity Zones in Avila Beach.

GIS analysis shows the critical facilities in Avila Beach CSD that are exposed to fire hazard severity, categorizing them by severity level and facility type. The exposure of these critical assets to wildfire hazards poses significant risks to communications. GIS analysis shows that there is a total of four (4) critical facilities that fall in the high fire severity zone rating and none that fall into the very high or moderate fire hazard severity zone rating.

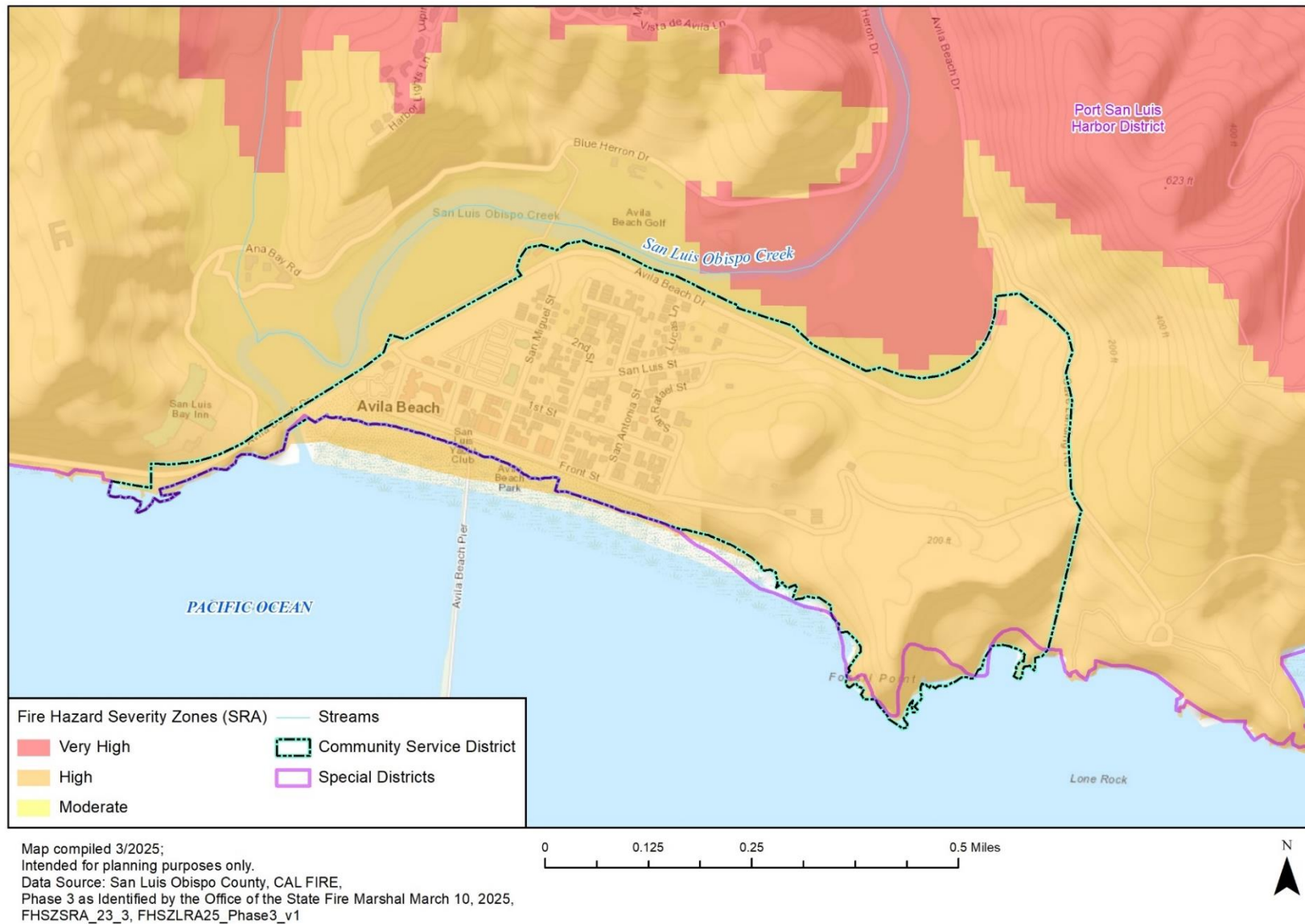
**Table H-18 Avila Beach CSD Improved Properties Exposed to Fire Hazard Severity Zones**

PROPERTY TYPE	STRUCTURE COUNT VERY HIGH	STRUCTURE COUNT HIGH	STRUCTURE COUNT MODERATE	TOTAL STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATION
Commercial	-	20	-	<b>20</b>	\$36,733,751	\$36,733,751	\$73,467,502	-
Exempt	-	1	-	<b>1</b>	\$68,930	\$68,930	\$137,860	-
Mixed Use	-	33	-	<b>33</b>	\$22,493,891	\$22,493,891	\$44,987,782	-
Multi-Family Residential	-	28	-	<b>28</b>	\$19,446,578	\$9,723,289	\$29,169,867	69
Residential	-	132	-	<b>132</b>	\$58,487,514	\$29,243,757	\$87,731,271	326
Vacant Improved	-	13	-	<b>13</b>	\$6,125,350	\$0	\$6,125,350	-
<b>Total</b>	<b>0</b>	<b>227</b>	<b>0</b>	<b>227</b>	<b>\$143,356,014</b>	<b>\$98,263,618</b>	<b>\$241,619,632</b>	<b>395</b>

Source: San Luis Obispo Assessor Data November 15, 2024, CAL FIRE - FHSZ Phase 3 March 10, 2025, WSP GIS Analysis



Figure H-11 Avila Beach CSD Wildfire Risk



### H.3.3.11 Human Caused: Hazardous Materials

The Avila Beach community has a history of hazardous material incidents. The Avila Beach LPT rated hazardous materials incidents as having **medium** overall significance. The Cal OES Spill Release Reporting Center reports 20 hazardous materials incidents in the Avila Beach CSD from January 1<sup>st</sup>, 2019 through December 20<sup>th</sup>, 2024. This likely excludes a number of unreported minor spills. The 20 reported incidents constitutes 4.41% of the hazardous materials incidents reported countywide during the same time frame and averages out to roughly 3.33 incidents per year.

An oil spill that was caused by a Unocal pipeline break August 3, 1992 (Chevron has now taken over the Unocal properties) resulted in extensive cleanup of Avila Beach. This including removing and rebuilding the entire commercial district and ultimately the oil storage tanks being removed. Today, the former tank site area is an industrial zoned property in Avila Beach and is completely fenced off to the public. Chevron maintains the limited sewage disposal system and fire protection facilities for the site and receives water from the Avila Beach Community Services District. In 2013 Chevron applied to re-develop the site into a resort facility. The County of San Luis Obispo Planning Department held a well-attended CEQA scoping meeting in 2016. Since the initial scoping meeting, Chevron has not made any additional efforts to re-develop the site. No progress has been made as of April 2025.

**Figure H-12 Avila Beach Community Evolution, 1996 – 2000**



Source: San Luis Obispo Tribune, David Middle Camp



**Figure H-13 Avila Beach During Unocal Cleanup, 1999**



Source: San Luis Obispo Tribune, Jayson Mellom

The Diablo Canyon Nuclear Power Plant, the state's only operating nuclear power plant is located west of Avila Beach. Accidental release of nuclear materials continues to be a concern for the Avila community, although the Power Plant has extensive seismic monitoring and safety systems in place and has been retrofitted to withstand a 7.5 magnitude earthquake. Avila Beach Drive is currently the only access to the Diablo Canyon Power Plant, which has also caused concern within the community if an evacuation were to happen. The Diablo Canyon Nuclear Power Plant is not closed as of April 2025. Although the original plan was to shut down the plant by 2025, recent legislative and regulatory actions have extended its operation. In 2022, California lawmakers passed Senate Bill 846, allowing the plant to remain open, with Unit 1 licensed through October 31, 2029, and Unit 2 through October 31, 2030. The County of San Luis Obispo Office of Emergency Services has done extensive planning in case of an emergency at the Power Plant. Refer to Section 5 of the Base Plan for more information.

## H.4 Capability Assessment

Capabilities are the programs and policies currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. This capabilities assessment is divided into five sections: regulatory mitigation capabilities, administrative and technical mitigation capabilities, fiscal mitigation capabilities, mitigation outreach and partnerships, and other mitigation efforts.

To develop this capability assessment, the jurisdictional planning representatives used a matrix of common mitigation activities to inventory which of these policies or programs were in place. The team then supplemented this inventory by reviewing additional existing policies, regulations, plans, and programs to determine if they contributed to reducing hazard-related losses.

During the plan update process, this inventory was reviewed by the jurisdictional planning representatives and WSP consultant team staff to update information where applicable and note ways in which these capabilities have improved or expanded. In summarizing current capabilities and identifying gaps, the jurisdictional planning representatives also considered





their ability to expand or improve upon existing policies and programs as potential new mitigation strategies. The Avila Beach CSD capabilities are summarized below.

#### H.4.1 Regulatory Mitigation Capabilities

Table H-19 identifies existing regulatory capabilities the District has in place to help with future mitigation efforts. Note, many of the regulatory capabilities that can be used for the District are within the County's jurisdiction. Refer to Section 6 Capability Assessment of the Base Plan for more information related to the County's mitigation capabilities.

**Table H-19 Avila Beach CSD Regulatory Mitigation Capabilities**

REGULATORY TOOL	YES/NO	COMMENTS
General plan	Yes	SLO County General Plan; Coastal Zone Framework
Zoning ordinance	Yes	Coastal Zone Land Use Ordinance
Subdivision ordinance	No	
Growth management ordinance	No	
Floodplain ordinance	N/A	
Other special purpose ordinance (stormwater, water conservation, wildfire)	Yes	County
Building code	Yes	County
Fire department ISO rating	Yes	6 (Cal Fire/SLO County Fire Department)
Erosion or sediment control program	No	
Stormwater management program	No	
Site plan review requirements	No	
Capital improvements plan	Yes	
Economic development plan	Yes	Avila Beach Specific Plan 2001, Chapter 6 Economic Recovery Strategy
Local emergency operations plan	Yes	County Operation Plans
Other special plans	Yes	Avila Beach Community Plan - Background Report; August 2019; Avila Beach Specific Plan 2001; Avila Beach/Port San Luis Harbor District Sea-Level Rise Vulnerability Assessment 2020 Water Shortage Emergency Action Plan
Flood Insurance Study or other engineering study for streams	No	
Elevation certificates (for floodplain development)	No	

#### H.4.2 Discussion on Existing Building Codes, Land Use and Development Regulations

The San Luis Obispo County Planning Department is the official regulatory body governing land use and development ordinances within the District Service Area. See also section H.1.3.

#### H.4.3 Administrative/Technical Mitigation Capabilities

Table H-20 identifies the personnel responsible for activities related to mitigation and loss prevention in the Avila Beach Community Services District.

**Table H-20 Avila Beach CSD Administrative/Technical Mitigation Capabilities**

PERSONNEL RESOURCES	YES/NO	DEPARTMENT/POSITION
Planner/engineer with knowledge of land development/land management practices	Yes	SLO County Public Works and Planning & Building
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Yes	Avila Beach CSD General Manager/District Engineer
Planner/engineer/scientist with an understanding of natural hazards	Yes	SLO County Planning and Building
Personnel skilled in GIS	Yes	SLO County
Full time building official	Yes	SLO County Planning and Building
Floodplain manager	N/A	
Emergency manager	Yes	SLO County Emergency Services
Grant writer	No	
Other personnel	N/A	
GIS Data Resources (Hazard areas, critical facilities, land use, building footprints, etc.)	Yes	SLO County
Warning systems/services (Reverse 9-11, outdoor warning signals)	Yes	SLO County

#### H.4.4 Fiscal Mitigation Capabilities

Table H-21 identifies financial tools or resources that the CSD could potentially use to help fund mitigation activities.

**Table H-21 Avila Beach CSD Fiscal Mitigation Capabilities**

FINANCIAL RESOURCES	ACCESSIBLE/ELIGIBLE TO USE (YES/NO)
Community Development Block Grants	No
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	No
Fees for water, sewer, gas, or electric services	Yes
Impact fees for new development	Yes
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activities	No
Withhold spending in hazard prone areas	No

#### H.4.5 Mitigation Outreach and Partnerships

**Responsible Water Use Outreach Program:** The Avila Beach Community Services District runs a responsible water use outreach program to encourage conservation and efficiency by sending out public notices for water conservation and responsible water use with monthly water and sewer bills.

**Monitor Water Supply:** The District monitors the amount of water purchased and the amount of water sold each month. This alerts the District to the potential for leaks and water supply losses.



**Plan for Drought:** The District has developed a Water Shortage Emergency Action Plan. The Plan includes water supply trigger levels and authorizes the District to take drought related actions to limit water use and in extreme cases limit new development.

**Map and Assess Vulnerability to Tsunami:** Via on-call consultants, the District has access to GIS mapping tools that can identify areas that are vulnerable to tsunami inundation.

**Protect District Buildings and Infrastructure:** The District's WWTP is located in an area that could be impacted by a tsunami. The District has taken steps to protect structures from tsunamis; informed staff on emergency procedures; and provided vertical evacuation options.

**Wildfire Management:** The District implements their fire management responsibilities via a contract with Cal-Fire. Cal Fire management staff attends the District's monthly Board of Director meetings and always provide suggested mitigation measures for managing and mitigating Wildfire risks.

**Fire-Resistant Construction:** The District encourages customers implement the use of fire-resistant construction materials as part of their capital improvement program.

**Create Defensible Space Around Structures and Infrastructure:** The District maintains a fire buffer around all District facilities and buildings and the District routinely inspects the facilities.

**Wildfire Risk Awareness:** As noted above, Cal Fire Staff attend all District Board of Director meetings and provide fire safe suggestions; offer to conduct local outreach; and assist with the preparation of Fire Counsel Grant applications to reduce wildfire hazards.

#### **H.4.6 Opportunities for Enhancement**

Based on the capability assessment, the Avila Beach Community Services District has several existing mechanisms in place that already help to mitigate hazards. There are also opportunities for the District to expand or improve on these policies and programs to further protect the community. Future improvements may include providing training for staff members related to hazards or hazard mitigation grant funding in partnership with the County and Cal OES. Additional training opportunities will help to inform District staff and board members on how best to integrate hazard information and mitigation projects into the District policies and ongoing duties of the District. Continuing to train District staff on mitigation and the hazards that pose a risk to the Avila Beach Community Services District will lead to more informed staff members who can better communicate this information to the public.

### **H.5 Mitigation Strategy**

#### **H.5.1 Mitigation Goals and Objectives**

The Avila Beach CSD adopts the hazard mitigation goals and objectives developed by the HMPC and described in Section 7 Mitigation Strategy.

#### **H.5.2 Mitigation Actions**

The Avila Beach CSD identified 2 mitigation actions for their 2025 Mitigation Action Plan, both of which are continued from the 2019 HMP. The planning team for the Avila Beach Community Services District identified and prioritized the following mitigation actions based on the risk assessment. Actions were prioritized using the process described in Section 7.2.1 of the Base Plan. Background information and information on how each action will be implemented and administered, such as ideas for implementation, responsible office, potential funding, estimated cost, and timeline are also included. Actions with an "\*" are those that mitigate losses to future development.



As noted in Section H.4.4 Mitigation Outreach and Partnerships the District has done previous work to mitigate drought, extreme heat, tsunامي, and wildfire.



Table H-22    Avila Beach Community Service District’s Mitigation Action Plan

MITIGATION ACTION NUMBER	PRIMARY HAZARD(S) MITIGATED	DESCRIPTIONS/BACKGROUND/BENEFITS	LEAD AGENCY & PARTNERS	ESTIMATED COST & POTENTIAL FUNDING SOURCES	2025 PRIORITY	TIMELINE	STATUS/IMPLEMENTATION NOTES
AB.1	Adverse Weather: Thunderstorm, High Wind and Tornado; Coastal Storm/Coastal Erosion/Sea Level Rise; Flood; Landslide; Earthquake, Tsunami	Avila Beach Revetment reinforcements to ensure Avila Beach Drive doesn't fail due to coastal storms, erosion, undermining or landslide. The reinforcements to the revetment should also help mitigate tsunami damage.	County of SLO; Port San Luis Harbor District; Avila Beach CSD	Over \$1,000,000. County of SLO, SLOCOG; PSLHD	Medium	More than 5 years	Continue - Not Started. SLO County and Port SLO Harbor District are lead agencies. ABCSD has no road repair authority or funding.
AB.2	Adverse Weather: Thunderstorm, Coastal Storm/Coastal Erosion/Sea Level Rise; Flood	Avila Beach Drainage Improvements to include a solution for drainage which accumulates along Beach Colony Lane and the Avila Parking Lot; install pump station or diversion for flood waters; identify funding for long-term operations and maintenance.	County of SLO; Port San Luis Harbor District; Avila Beach CSD Avila Beach property owners	\$500,000 to \$1,000,000. SLO County Property owners; FEMA HMA	Medium	More than 5 years	Continue - Not Started. SLO County is the lead agency for the storm drainage system in Avila Beach. ABCSD has no storm drain repair/maintenance authority or funding.
AB.3	Wildfire	Create and Maintain Defensible Space Around Structures and Infrastructure. This project will continue efforts to create or maintain a fire buffer around all District facilities and buildings.	Avila Beach CSD management	Medium; District general funds	Medium	1-5 years	New in 2025
AB.4	Drought; Adverse Weather: Extreme Heat	Evaluate drought and heat resilience options based on recommendations identified in the Avila Beach CSD Water Resources Analysis Technical Memorandum (2017).	Avila Beach CSD management	Medium; District general funds	Low	1-5 years	New in 2025





## **H.6 Implementation and Maintenance**

Moving forward, the Avila Beach Community Services District will use the mitigation action table in the previous section to track progress on implementation of each project. Implementation of the plan overall is discussed in Section 8 in the Base Plan.

### **H.6.1 Incorporation into Existing Planning Mechanisms**

The information contained within this plan, including results from the Vulnerability Assessment, and the Mitigation Strategy will be used by the Community Services District to help inform updates of the Avila Beach Community Plan and in the development of additional local plans, programs and policies. Understanding the hazards that pose a risk and the specific vulnerabilities to the jurisdiction will help in future capital improvement planning for the District. The County Planning and Building Department may utilize the hazard information when reviewing a site plan or other type of development applications with the boundaries of the Avila Beach Community Services District area. As noted in Section 8 Implementation and Monitoring the HMPC representatives from the Avila Beach Community Services District will report on efforts to integrate the hazard mitigation plan into local plans, programs and policies and will report on these efforts at the annual HMPC plan review meeting.

### **H.6.2 Monitoring, Evaluation and Updating the Plan**

The Avila Beach Community Services District will follow the procedures to monitor, review, and update this plan in accordance with San Luis Obispo County as outlined in Section 8 of the Base Plan. The District will continue to involve the public in mitigation, as described in Section 8.3 of the Base Plan. The CSD General Manager will be responsible for representing the Community Services District in the County HMPC, and for coordination with County staff and departments during plan updates. The Avila Beach Community Services District realizes it is important to review the plan regularly and update it every five years in accordance with the Disaster Mitigation Act Requirements as well as other State of California requirements.



## Annex I Cambria Community Services District

### I.1 District Profile

The Cambria Community Services District (CCSD) is an independent special district that serves the community of Cambria. It provides services to local residents, including water and wastewater treatment, fire protection, and the management of community facilities. CCSD oversees Cambria's water supply, which is drawn from municipal wells on San Simeon Creek and Santa Rosa Creek. In addition to utilities, CCSD operates the Cambria Fire Department, which provides fire protection and emergency response services while promoting community preparedness through public programs. The CCSD also manages several community assets, such as the Cambria Veterans' Memorial Hall, which hosts local events, and maintains parks and recreational spaces.

#### I.1.1 Mitigation Planning History and 2025 Process

This annex was updated in 2025 to build upon the previous version created for the 2017 Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) for the CCSD and Cambria Community Healthcare Districts. The previous MJHMP was integrated into local emergency management and infrastructure strategies to reduce disaster vulnerabilities and inform emergency planning for wildfire, flooding, and seismic risks. It guided wildfire mitigation activities through vegetation management programs and public education efforts, supported stormwater and drought response efforts including water reclamation upgrades, and influenced growth management and capital improvement planning, such as the proposed East Ranch Community Park. Additionally, the previous MJHMP played a key role in pursuing grants to fund hazard mitigation and resilience projects.

The General Manager of the CCSD was the representative for the CCSD and took the lead for developing the plan and this annex in coordination with the CCSD Local Planning Team (Planning Team). The CCSD Planning Team will be responsible for the implementation and maintenance of the plan. Table I-1 summarizes CCSD's Planning Team for the plan revision process.

**Table I-1 Cambria CSD Hazard Mitigation Plan Planning Team**

STAKEHOLDER GROUP	DEPARTMENT OR STAKEHOLDER	TITLE
Local Planning Team	CCSD Fire Department	Fire Chief
	CCSD Administrative Department	General Manager
	CCSD Facilities and Resources	Facilities and Resources Manager
	CCSD Utilities	Utilities Department Manager
	CCSD GIS	Program Manager
	Board of Directors	President
	Community Emergency Response Team (CERT)	Lead
	Friends of Fiscalini Ranch	Executive Director
Agencies involved in hazard mitigation activities	CCSD	General Manager
	CAL FIRE	Deputy
	Cambria Community Healthcare District	Administrator/Finance
	CCSD	General Manager



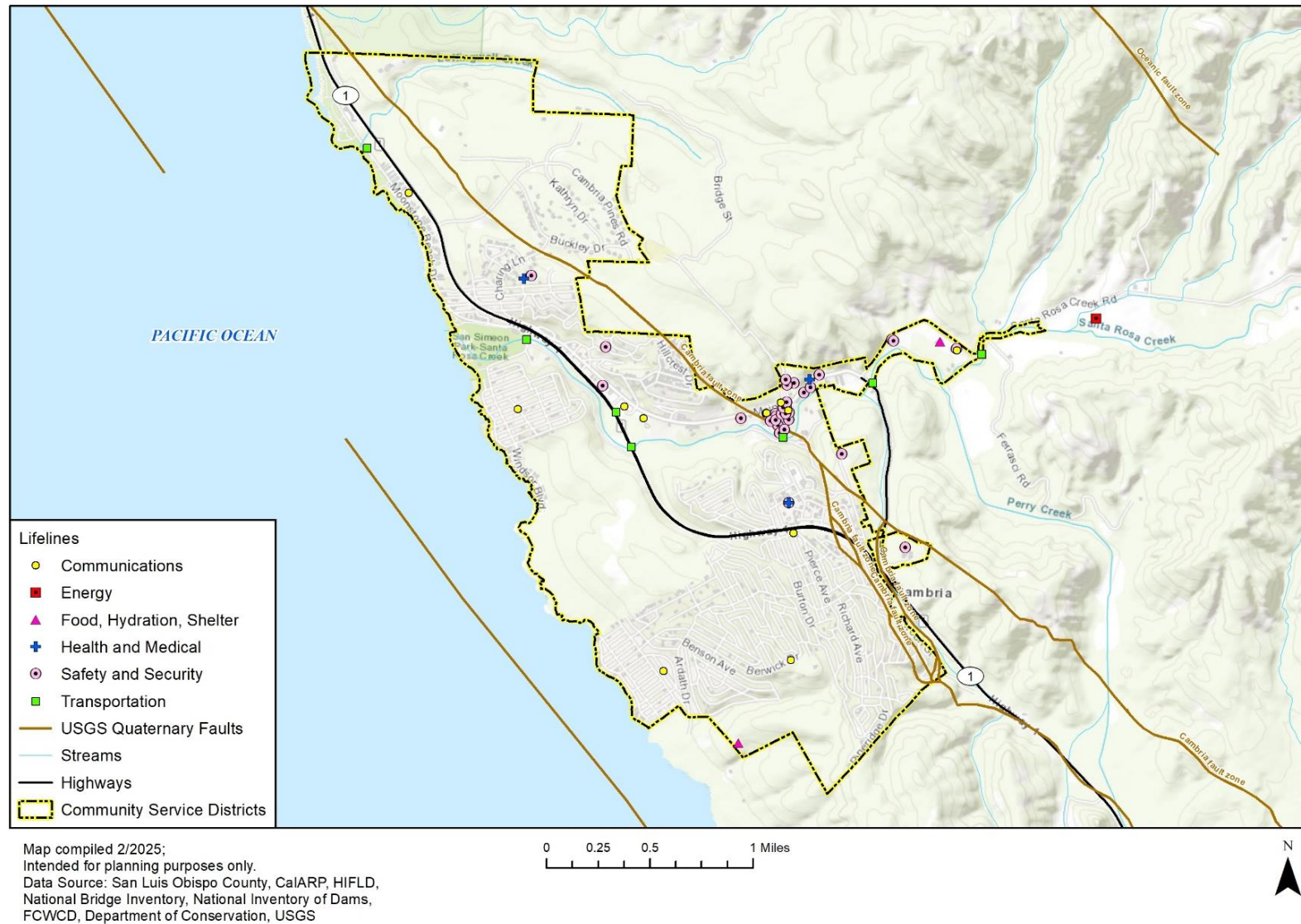
STAKEHOLDER GROUP	DEPARTMENT OR STAKEHOLDER	TITLE
Agencies that have the authority to regulate development	San Simeon CSD	General Manager
Neighboring communities	San Simeon CSD	General Manager
Representatives of business, academia, and other private orgs	Coast Unified School District	Superintendent
	SLO Fire Safe Council	Vice President
Representatives supporting underserved communities	North Coast Advisory Council	Committee Member

More details on the planning process and how the jurisdictions, service districts and stakeholders participated can be found in Section 3 of the Base Plan, as well as how the public was involved during the 2025 update.

Figure I-1 shows the CCSD boundaries.



Figure I-1 Cambria Community Service District





## I.1.2 Geography and Climate

The CCSD covers a total area of 8.5 square miles (22 km<sup>2</sup>). This Census Designated Place (CDP) is located midway between Los Angeles and San Francisco approximately 240 miles in each direction alongside California State Highway 1. Cambria is built upon the Cambria Slab, a 5,000 ft. thick late-Cretaceous sandstone which extends from Villa Creek in Estero Bluffs State Park to San Simeon Creek, holding up the high coastal ridge between Cayucos and San Simeon State Park.

Cambria's terrain is characterized by forested hills and a narrow coastal plain, creating challenges for infrastructure development and maintenance, especially in areas with limited access or steep slopes. The community lies within a wildland-urban interface (WUI), making it highly vulnerable to wildfires, particularly during the dry summer months. This necessitates strong fire protection services, defensible space enforcement, and emergency preparedness. Water supply is another key concern due to the area's reliance on limited local groundwater sources and seasonal creeks, which are affected by ongoing drought conditions and a Mediterranean climate with long, dry summers and cool, wet winters.

## I.1.3 History

The CCSD has historical records dating back to 1769. When Mission San Miguel was built in 1797, the Salinan's worked on an outpost on San Simeon Creek where goods from the mission could be traded as ships landed near the beach. Remnants of the outpost are still present today near Cambria's sewer ponds and water reclamation facility on San Simeon Creek.

Over the years, Cambria has also been called San Simeon, Santa Rosa, Rosaville, and Slab Town. From 1867 to 1870, Cambria was a prosperous town exporting \$280,000 worth of quicksilver. This economic boom lasted until 1878 when mercury prices declined. Cambria's fluctuating mercury business came to an abrupt halt in 1889 as the result of a devastating fire. This was a turning point for Cambria which transitioned from a fishing and mining town into a dairy and lumber export community.

Between 1919 and 1947, Hearst Castle, intended to be a residence for newspaper icon, William Randolph Hearst, was constructed in neighboring San Simeon, California. Hearst Castle became a California State Park in 1954 and was open to visitors four years later. Cambria residents continue to provide services, supplies, and accommodations to Hearst Castle's many visitors.

## I.1.4 Economy

Understanding economic indicators such as median household income, per capita income, poverty rate, and unemployment rate helps the CCSD assess the community's financial and economic resilience. The information in Table I-2 can be used to guide equitable rate structures, identify gaps for assistance programs, and support grant applications that require demonstration of economic need.

**Table I-2 Cambria CDP Demographic and Social Characteristics, 2018-2023**

INDICATOR	2018	2023	% CHANGE
Population	5,725	6,038	+5.5%
Median age	61.7	61.4	+0.5%
Total housing units	4,196	4,119	-1.8%
Housing occupancy rate	65.7%	69.4%	5.6%
% of housing units with no vehicles available	2.8%	2.7%	-3.6%





INDICATOR	2018	2023	% CHANGE
Median home value	\$630,600	\$868,400	37.7%
Unemployment	2.9%	4.0%	+37.9%
Mean travel time to work (minutes)	23.3	20	-14.2%
Median Household Income	\$83,438	\$101,066	+21.1%
Per Capita Income	\$41,503	\$53,560	+29.1%
% of Individuals Below Poverty Level	9.1%	9.8%	+7.7%
# of Households			
Average household size	2.07	2.11	1.9%
% of population over 25 with high school diploma or higher	92.8%	92.7%	-0.1%
% of population over 25 with bachelor's degree or higher	22.5%	43.4%	+92.9%
% with disability	15.9%	16.8%	+5.7%

Source: U.S. Census Bureau American Community Survey 2018-2023 5-Year Estimates, [www.census.gov/](https://www.census.gov/)

Note: Data is for the Cambria Census Designated Place (CDP) which may not have the same boundaries as the Cambria Community Service District.

Employment sector information provides insight into the industries that drive the local economy and influence demand for services within the CCSD. In Cambria, the tourism and hospitality sectors make up a significant portion of local employment, which can lead to seasonal fluctuations in water usage, wastewater production, and emergency service needs. Professional, management, educational, and the health care sectors also make up a portion of the local employment. Table I-3 and Table I-4 below outline key employment sector data relevant to the CCSD service area.

**Table I-3 Cambria CPD Employment by Industry (2023)**

INDUSTRY	# EMPLOYED	% EMPLOYED
Population (16 years and over)	5,244	--
In Labor Force	2,503	47.7%
Agriculture, forestry, fishing and hunting, and mining	56	2.5%
Armed Forces	44	0.8%
Construction	137	6.1%
Manufacturing	147	6.5%
Wholesale trade	58	2.6%
Retail trade	224	10%
Transportation and warehousing, and utilities	34	1.5%
Information	67	3.0%
Finance and insurance, and real estate and rental and leasing	143	6.4%
Professional, scientific, and management, and administrative and waste mgmt. services	381	17.0%
Educational services, and health care and social assistance	266	11.8%
Arts, entertainment, and recreation, and accommodation and food services	563	25.1%
Other services, except public administration	117	5.2%
Public administration	54	2.4%
Unemployed	212	4.0%

Source: U.S. Census Bureau American Community Survey 2018-2023 5-Year Estimates, [www.census.gov/](https://www.census.gov/)

Note: Data is for the Cambria Census Designated Place (CDP) which may not have the same boundaries as the Cambria Community Service District.

**Table I-4 Cambria CPD Employment by Occupation (2023)**

INDUSTRY	# EMPLOYED	% EMPLOYED
Management, business, science, and arts occupations	881	39.2%
Service occupations	616	27.4%
Sales and office occupations	431	19.2%
Natural resources, construction, and maintenance occupations	137	6.1%
Production, transportation, and material moving occupations	182	8.1%

Source: U.S. Census Bureau American Community Survey 2018-2023 5-Year Estimates, [www.census.gov/](https://www.census.gov/)

Note: Data is for the Cambria Census Designated Place (CDP) which may not have the same boundaries as the Cambria Community Service District.

### I.1.5 Population

According to the US Census American Community Survey, between 2000-2023 Cambria's population remained consistent with 6,218 people in 2000 to 6,038 in 2023. More demographic and social characteristics data is found in Table I-2. These characteristics help the CCSD plan inclusive and accessible services, prioritize emergency preparedness outreach, and identify vulnerable groups who may require additional support during hazard events or infrastructure disruptions.

### I.1.6 Development Trends

According to the 2017 Cambria Multi-jurisdictional Hazard Mitigation Plan, land use in CCSD is predominantly comprised of single-family residential and large open urban preservation areas. Other land uses are designated for recreation, a commercial district, and a small agricultural component. From 2007 to 2017 there was a decrease in growth rates resulting from resource constraints and development restrictions despite the existence of a significant number of vacant lots. Water supply shortages, adequate public facilities, and traffic limitations are also problematic. Comparing this to the population statistics from 2018-2023, there was a 5% increase in population since 2018 as well as 3% increase in number of households; however there has been a slight decrease in the number of housing units. There has not been changes in hazard vulnerability as a result of development trends since the 2017 Cambria plan update.

## I.2 Hazard Identification and Summary

The CCSD Planning Team identified the hazards that affect the CCSD and summarized their frequency of occurrence, spatial extent, potential magnitude, and significance specific to the CCSD, as shown in Table I-5. There are no hazards that are unique to the CCSD.

**Table I-5 Cambria CSD Hazard Risk Summary**

HAZARD	GEOGRAPHIC AREA	PROBABILITY OF FUTURE OCCURRENCE	MAGNITUDE/ SEVERITY (EXTENT)	OVERALL SIGNIFICANCE
Adverse Weather: Thunderstorm/ Heavy Rain/ Lightning/ Dense Fog/ Freeze	Significant	Likely	Negligible	Medium
Adverse Weather: High Wind and Tornado	Significant	Likely	Negligible	Low
Adverse Weather: Extreme Heat	Extensive	Occasional	Negligible	Low
Agricultural Pest Infestation and Disease	Limited	Highly Likely	Negligible	Medium
Biological Agents	Extensive	Occasional	Critical	Medium
Coastal Storm/ Coastal Erosion/ Sea Level Rise	Significant	Occasional	Limited	Medium



HAZARD	GEOGRAPHIC AREA	PROBABILITY OF FUTURE OCCURRENCE	MAGNITUDE/ SEVERITY (EXTENT)	OVERALL SIGNIFICANCE
Drought and Water Shortage	Extensive	Likely	Critical	High
Earthquake and Liquefaction	Significant	Likely	Critical	High
Flood	Significant	Likely	Critical	Medium
Landslides and Debris Flow	Significant	Likely	Critical	Medium
Tsunami	Limited	Occasional	Critical	Medium
Wildfire	Extensive	Likely	Critical	High
<b>Geographic Area</b> Limited: Less than 10% of planning area Significant: 10-50% of planning area Extensive: 50-100% of planning area <b>Probability of Future Occurrences</b> Highly Likely: Near 100% chance of occurrence in next year or happens every year. Likely: Between 10 and 100% chance of occurrence in next year or has a recurrence interval of 10 years or less. Occasional: Between 1 and 10% chance of occurrence in the next year or has a recurrence interval of 11 to 100 years. Unlikely: Less than 1% chance of occurrence in next 100 years or has a recurrence interval of greater than every 100 years.		<b>Magnitude/Severity (Extent)</b> Catastrophic—More than 50 percent of property severely damaged; shutdown of facilities for more than 30 days; and/or multiple deaths Critical—25-50 percent of property severely damaged; shutdown of facilities for at least two weeks; and/or injuries and/or illnesses result in permanent disability Limited—10-25 percent of property severely damaged; shutdown of facilities for more than a week; and/or injuries/illnesses treatable do not result in permanent disability Negligible—Less than 10 percent of property severely damaged, shutdown of facilities and services for less than 24 hours; and/or injuries/illnesses treatable with first aid <b>Significance</b> Low: minimal potential impact Medium: moderate potential impact High: widespread potential impact		

### I.3 Vulnerability Assessment

The intent of this section is to assess the CCSD's vulnerability separate from that of the planning area, which has already been assessed in Section 5 Hazard Identification and Risk Assessment in the Base Plan. This vulnerability assessment analyzes the population, property, and other assets at risk to hazards ranked of medium or high significance that may vary from other parts of the planning area.

The information to support the hazard identification and risk assessment for this Annex was collected through a Data Collection Guide, which was distributed to each participating municipality or special district to complete during the planning process. Information collected was analyzed and summarized in order to identify and rank all the hazards that could impact anywhere within the County, as well as to rank the hazards and identify the related vulnerabilities unique to each jurisdiction. In addition, the CCSD Planning Team was asked to share information on past hazard events that have affected the CCSD.

Each participating jurisdiction was in support of the main hazard summary identified in the Base Plan (see Table 5.2). However, the hazard summary rankings for each jurisdictional annex may vary slightly due to specific hazard risk and vulnerabilities unique to that jurisdiction. Identifying these differences helps differentiate the jurisdiction's risk and vulnerabilities from that of the overall County.



### I.3.1 Other Hazards

The following hazards identified in the Base Plan HIRA are not identified within this jurisdictional annex due to low or no risk or insignificant anticipated impacts and are not considered further for mitigation actions:

Dam Inundation

Subsidence

Hazardous Materials Incidents

### I.3.2 Assets at Risk

This section considers CCSD's assets at risk, including values at risk, critical facilities and infrastructure, historic assets, natural resources, economic assets, and growth and development trends.

#### I.3.2.1 Values at Risk

The following data on property exposure is derived from the San Luis Obispo County 2024 Assessor data. This data should only be used as a guideline to overall values in the CCSD as the information has some limitations. It is important to note that in the event of a disaster, it is generally the value of the infrastructure or improvements to the land that is of concern or at risk. Generally, the land itself is not a loss. Table I-6 shows the exposure of properties (e.g., the values at risk based on improvement values, content values, and total values) broken down by property type for the CCSD. Refer to the Base Plan Section 5.2 (HIRA Asset Summary) for more details on value information, content calculations, and overall parcel analysis methodology.

**Table I-6 Property Exposure for the Cambria CSD by Property Types**

PROPERTY TYPE	STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE
Commercial	164	\$111,052,346	\$111,052,346	<b>\$222,104,692</b>
Exempt	22	\$4,565,330	\$4,565,330	<b>\$9,130,660</b>
Industrial	3	\$2,817,956	\$4,226,934	<b>\$7,044,890</b>
Mixed Use	35	\$12,269,512	\$12,269,512	<b>\$24,539,024</b>
Mobile Home	5	\$1,033,862	\$516,931	<b>\$1,550,793</b>
Multi-Family Residential	39	\$13,479,219	\$6,739,610	<b>\$20,218,829</b>
Residential	3,629	\$1,199,087,546	\$599,543,773	<b>\$1,798,631,319</b>
Vacant Improved	28	\$17,798,610	\$17,798,610	<b>\$35,597,220</b>
<b>Total</b>	<b>3,925</b>	<b>\$1,362,104,381</b>	<b>\$756,713,046</b>	<b>\$2,118,817,427</b>

Source: San Luis Obispo County Assessor Data November 15, 2024, WSP GIS Analysis

#### I.3.2.2 Critical Facilities and Infrastructure

A critical facility is defined as one that is essential in providing utility or direction either during the response to an emergency or during the recovery operation. The four types of Critical Facilities categorized by the San Luis Obispo County HMPC are emergency services, high potential loss facilities, lifeline utility systems, and transportation systems. See Section 5 of the Base Plan for more details on the definitions and categories of critical facilities and section 5.2 of the base plan for more information on the assets used throughout this annex and the county-wide analyses.



Table I-7 provides an inventory of critical facilities in the CCSD compiled using GIS data from San Luis Obispo County and structure information from the Homeland Infrastructure Foundation-Level Dataset (HIFLD). The location of these facilities is illustrated in Figure I-1.

**Table I-7 Cambria CSD's Critical Facilities**

LIFELINE TYPE	FACILITY COUNT
Communications	15
Energy	-
Food, Hydration, Shelter	2
Hazardous Material	-
Health and Medical	3
Safety and Security	30
Transportation	6
Water Systems	-
<b>Total Count</b>	<b>56</b>

Source: San Luis Obispo County, CalARP, HIFLD, National Bridge Inventory, National Inventory of Dams, FCWCD, WSP Analysis

### *1.3.2.3 Historic and Cultural Resources*

The CCSD aims to integrate historical and cultural resources into community development and public projects. In 2023, the CCSD approved the sale of the Center Street Pocket Park to the Cambria Historical Society, facilitating the development of a historical district and the relocation of the historic Cambria Jail. This agreement includes a deed restriction to ensure the site remains a public historic facility. Additionally, the CCSD incorporates cultural resource assessments into its planning efforts, as seen in the Cambria Skatepark Project, where environmental and historical reviews were conducted to protect significant sites. The CCSD also manages Fiscalini Ranch Preserve, a 430-acre open space with ecological and cultural value, providing trails and educational opportunities that connect residents and visitors to Cambria's heritage.

### *1.3.2.4 Natural Resources*

Natural resources are important to include in benefit-cost analyses for future projects and may be used to leverage additional funding for projects that also contribute to community goals for protecting sensitive natural resources. Awareness of natural assets can lead to opportunities for meeting multiple objectives. For instance, protecting wetlands areas protects sensitive habitat as well as attenuates and stores floodwaters.

Cambria is home to diverse and sensitive natural environments, including extensive Monterey pine forests, one of the few remaining native stands of this rare tree species. These forests contribute to the CCSD's scenic beauty while supporting local biodiversity. Along the coastline, Cambria benefits from its location within the Monterey Bay National Marine Sanctuary, a protected area that sustains a variety of marine life, including sea otters, harbor seals, and migrating whales. These natural features not only enhance ecological diversity but also bolster tourism, a key economic driver for the community.

To preserve these valuable resources, the CCSD partners with organizations such as the Land Conservancy of San Luis Obispo County through programs like the Transfer Development Credits Lot Retirement Program. This initiative helps safeguard sensitive habitats by retiring development rights on parcels that contain ecologically important landscapes, ensuring long-term environmental protection.

Water resource management is another essential focus for the CCSD, as Cambria's water supply depends on wells that draw from San Simeon and Santa Rosa creeks. Due to the community's vulnerability to water shortages, the CCSD has implemented projects such as the Water Reclamation Facility to treat brackish water and replenish local aquifers to support long-





term water sustainability. Additionally, the CCSO manages the Fiscalini Ranch Preserve, a 430-acre coastal open space that features diverse habitats, recreational trails, and vital wildlife corridors.

### 1.3.2.5 Economic Assets

The CCSO operates and maintains the community's water supply and wastewater treatment systems. These facilities are essential for providing residents with reliable water services and ensuring environmental compliance. The CCSO's financial investments in these utilities are reflected in its annual budgets and financial statements. Additionally, the CCSO oversees various public properties, including the Veterans Memorial Hall, community parks, and open spaces like the Fiscalini Ranch Preserve. These assets not only serve as community hubs but also contribute to local tourism and recreation, supporting the area's economy.

## 1.3.3 Estimating Potential Losses

This section details vulnerability to specific hazards of high or medium significance, where quantifiable, and/or where (according to Planning Team input) it differs from that of the County overall.

Table I-6 above shows CCSO's exposure to hazards in terms of number and value of structures. The most vulnerable structures are those in the floodplain (especially those that have been flooded in the past), unreinforced masonry buildings, and buildings built prior to the introduction of modern-day building codes. Impacts of past events and vulnerability to specific hazards are further discussed below (see Section 5 of the Base Plan.)

### 1.3.3.1 Adverse Weather: Thunderstorm/ Heavy rain/ Lightning/ Dense Fog/ Freeze

Cambria CSD's risk and vulnerability to this hazard does not differ substantially from that of San Luis Obispo County. Cambria experiences similar patterns of seasonal weather, including occasional winter storms that brings periods of rainfall and the potential for localized flooding. Thunderstorms and lightning are infrequent but can occur, sometimes bringing hail and brief downpours. Dense fog, particularly in the early mornings, can affect visibility and transportation safety. The overall significance rating of this hazard for Cambria is medium. The tables below shows key climate variables such as extreme temperatures, precipitation totals, and the frequency of specific weather events. Note that the San Simeon weather station provides the closest available data for the Cambria area.

**Table I-8 San Simeon Climate Summary Table - Weather (Period of Record: 08/01/1938 - 06/03/2005)**

SUMMARY PERIOD	MONTHLY MEAN MAXIMUM TEMP.	MONTHLY MEAN MINIMUM TEMP.	DAILY EXTREME HIGH TEMP	DAILY EXTREME HIGH DATE	DAILY EXTREME LOW TEMP	DAILY EXTREME LOW DATE	MAXIMUM TEMP. $\geq$ 90°F MEAN # DAYS	MINIMUM TEMP. $\leq$ 32°F MEAN # DAYS
Winter	58.9 °F	46.1 °F	82 °F	2/12/1943	29 °F	2/2/1939	0	0.3
Spring	58.3 °F	46.7 °F	79 °F	5/10/1941	32 °F	4/1/1955	0	0
Summer	61.3 °F	50.9 °F	80 °F	7/18/1951	37 °F	8/18/1954	0	0
Fall	62.8 °F	50.9 °F	90 °F	10/24/1965	33 °F	11/19/1964	0	0
Annual	60.5 °F	48.6 °F	90 °F	10/24/1965	29 °F	2/2/1939	0	0.2

Source: Western Regional Climate Center (WRCC) <https://wrcc.dri.edu/>

\* Winter is defined as December, January, and February

\*\* Summer is defined as June, July, and August

**Table I-9 San Simeon Climate Summary Table – Precipitation (Period of Record: 08/01/1938 - 06/03/2005)**

SUMMARY PERIOD	PRECIP. MEAN	PRECIP. HIGH	PRECIP. HIGH YEAR	PRECIP. LOW	PRECIP. LOW YEAR	PRECIP.1 DAY MAXIMUM	PRECIP.1 DAY MAXIMUM DATE	PRECIP. ≥ 1.00 IN. MEAN # DAYS
Winter	11.59 in.	36.32 in.	1969	3.31 in.	1964	5.28 in.	1/19/1969	3.2
Spring	4.91 in.	15.51 in.	1958	0.18 in.	1959	2.54 in.	3/3/1949	1.4
Summer	0.1 in.	0.68 in.	1958	0 in.	1942	0.68 in.	8/16/1958	0
Fall	3.36 in.	9.02 in.	1965	0.66 in.	1959	3.48 in.	11/14/1965	0.8
Annual	20.69 in.	41.86 in.	1969	9.7 in.	1959	5.28 in.	1/19/1969	6

Source: Western Regional Climate Center (WRCC) <https://wrcc.dri.edu/>

\* Winter is defined as December, January, and February

\*\* Summer is defined as June, July, and August

### **I.3.3.2 Adverse Weather: High Wind and Tornado**

Cambria CSD's risk and vulnerability to this hazard does not differ substantially from that of the County overall significance rating of **low**. While these hazards are not common in the region, they can occasionally occur during strong storm systems, particularly in the winter months. Cambria may experience gusty winds capable of causing minor damage and tornado activity is extremely rare across the County.

### **I.3.3.3 Adverse Weather: Extreme Heat**

Extreme heat is a **low** significance hazard for CCSD. The monthly mean temperature for San Simeon, the closest NOAA weather station to CCSD, is 60.5°F; however, temperatures up to 90°F have been recorded (see Table I-8). Additionally, rising temperatures and more frequent heat waves are increasing the likelihood of more extreme heat events in the future.

In addition to sensitive populations within Cambria, such as low-income households, elderly residents, and outdoor workers, infrastructure within the CCSD is also vulnerable to the effects of extreme heat. Increased demand for electricity during heat events can strain the regional energy grid, potentially leading to rolling blackouts that would disrupt critical services, including water and wastewater operations. Additionally, extreme heat elevates evaporation rates and increases water consumption, placing stress on water supplies, including the groundwater wells from which Cambria sources its water.

Many of Cambria CDP's homes may be older and may lack adequate insulation or air conditioning, making indoor temperatures dangerously high during heat waves. While the CCSD provides educational materials on heat illness prevention, there is no formal designation of cooling centers within the CCSD. This presents a challenge for residents who lack climate-controlled environments. Additionally, language barriers and limited internet access can hinder the effectiveness of emergency communication and public health outreach during heat events.

### **I.3.3.4 Agricultural Pest Infestation and Disease**

The district gave Cambria a **medium** rating for agricultural pest infestation and plant disease.

An indicator of plant health and potential monetary damages caused by exposure to disease is tree mortality rates. Reduced numbers of trees or pest infestation of nearby vegetation can also reduce property values and leave surrounding areas highly susceptible to wildfires. Within Cambria there are 2,525 structures with a total value of over \$1.4 billion exposed to tree mortality areas as shown in Table I-10. Cambria land use is a mix of open space, rural lands, and residential single-family areas all surrounded by agriculture. A disease outbreak or pest



infestation that targets pine trees, such as the Pine Pitch Canker, would greatly affect the open spaces and areas within and surrounding Cambria that are made up of Monterey Pines. Within Cambria there are 53 critical facilities exposed to tree mortality, as shown below in Table I-11. Out of these, safety and security have the most exposure with 30 facilities in the tree mortality zones.

**Table I-10 Improved Properties Exposed to Tree Mortality Hazard Zones**

STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATION
2,525	\$898,297,573	\$507,922,094	\$1,406,219,667	6,032

Source: San Luis Obispo Assessor Data November 15, 2024, CAL FIRE, FRAP, TMTF October 2022, WSP GIS Analysis

**Table I-11 Critical Facility Assets Exposed to Tree Mortality Hazard Zones**

	COMMUNICATIONS	ENERGY	FOOD, HYDRATION, SHELTER	HAZARDOUS MATERIAL	HEALTH AND MEDICAL	SAFETY AND SECURITY	TRANSPORTATION	WATER SYSTEMS	TOTAL COUNT
Facility Count	13	-	1	-	3	30	6	-	53

Source: San Luis Obispo County, CAL FIRE, FRAP, TMTF October 2022, CalARP, HIFLD, NBI, NID, WSP Analysis

### ***1.3.3.5 Biological Agents (Naturally Occurring)***

The Cambria Planning Team gave biological agents a **medium** overall significance rating. Cambria's risk and vulnerability to this hazard does not differ substantially from that of the County's overall. Disease outbreaks usually occur in densely populated areas, where person to person proximity provides ample opportunity for transmission of illnesses. Places of work and business, schools and high-population public spaces are of particular concern when the threat of transmissible illness occurs. More information on biological agents can be found in Section 5.3.6 of the Base Plan.

### ***1.3.3.6 Coastal Storm/Coastal Erosion/Sea Level Rise***

The CCSD, located along the central California coast, faces increasing risks from coastal storms, bluff erosion, and sea level rise. The community's steep cliffs and low-lying zones are vulnerable to strong wave action and flooding, especially during high tides and storm events. These hazards are expected to worsen as climate change drives higher ocean levels and more intense weather systems.

Recent Atmospheric River (AR) events have brought heavy rainfall and powerful surf, accelerating erosion and triggering localized landslides along the coast. Soils saturated by runoff and pounded by waves have weakened cliff edges, threatening nearby homes, roads, and public infrastructure. In some locations, bluff recession and undermining are already visible. Sea level rise accelerates these problems. Even modest increases in sea levels allow storm surges to reach further inland, expanding flood zones and intensifying damage during coastal storms. Areas that currently remain dry during extreme tides may not stay that way for long.

To respond, Cambria is assessing long-term strategies. These include strengthening shore defenses where feasible, limiting development in the most exposed areas, and restoring



natural features that buffer storm impacts. Continued planning and coordination are essential to manage these risks while maintaining access, services, and safety for the community.

The CCSD was ranked as **medium** significance for this hazard. See Section 5.3.4 Coastal Storm/Coastal Erosion/Sea Level Rise in the Base Plan for more details on the scenarios and data sources used for this analysis.

### Values at Risk

Table I-12 and Table I-13 summarize the number of properties and the associated improved values within Cambria CSD projected to be inundated under multiple sea level rise scenarios, both with and without the added impact of a 1% annual chance flood event. Next, sea level rise projections for the Cambria CSD reveal limited exposure under near-term scenarios but a sharp increase in vulnerability under more extreme future conditions. Under 25- and 75-centimeter rise scenarios, with or without a 1% annual chance flood, only one exempt property is affected. However, by the end of the century, 300 centimeters of sea level rise results in 12 parcels being exposed, including 11 residential properties. This number rises to 41 (including 40 residential parcels) when combining 300 centimeter rise with a 1% flood, indicating compounding risk. Notably, even modest sea level rise has the potential to expose properties when combined with storm surge, highlighting the significance of compound flood scenarios.

While no properties show significant improved value losses in early-stage projections, the financial risk escalates considerably with higher sea level rise. At 300 centimeters of sea level rise alone, over \$4.5 million in improved residential property value is at risk. This increases to nearly \$22 million when accounting for a 1% flood at the same sea level threshold. These figures highlight the growing fiscal exposure facing the CCSD under future sea level rise conditions, particularly when flood events are layered on top of baseline changes in ocean height.

**Table I-12 Cambria CSD Properties Inundated by Sea Level Rise and Sea Level Rise with 1% Annual Chance Flood**

PROPERTY TYPE	25-CM SLR	75-CM SLR	300-CM SLR	25-CM SLR W/ 1% FLOOD	75-CM SLR W/ 1% FLOOD	300-CM SLR W/ 1% FLOOD
Exempt	1	1	1	1	1	1
Residential	-	-	11	-	-	40
<b>Total</b>	<b>1</b>	<b>1</b>	<b>12</b>	<b>1</b>	<b>1</b>	<b>41</b>

Source: San Luis Obispo County Assessor Data November 15, 2024, USGS CoSMoS v3.1, WSP GIS Analysis

**Table I-13 Cambria CSD Improved Values of Properties Inundated by Sea Level Rise and Sea Level Rise with 1% Annual Chance Flood**

PROPERTY TYPE	25-CM SLR	75-CM SLR	300-CM SLR	25-CM SLR W/ 1% FLOOD	75-CM SLR W/ 1% FLOOD	300-CM SLR W/ 1% FLOOD
Residential	-	-	\$4,592,333	-	-	\$21,910,963
<b>Total</b>	<b>\$0</b>	<b>\$0</b>	<b>\$4,592,333</b>	<b>\$0</b>	<b>\$0</b>	<b>\$21,910,963</b>

Source: San Luis Obispo County Assessor Data November 15, 2024, USGS CoSMoS v3.1, WSP GIS Analysis

### Populations at Risk

Table I-14 shows the Cambria CSD affected populations potentially inundated by sea level rise and sea level rise with 1% annual chance flood by FEMA lifeline.

**Table I-14 Cambria CSD Population Exposed to Sea Level Rise Scenario Hazards**

COMMUNITY CSD	25-CM SLR	75-CM SLR	300-CM SLR	25-CM SLR W/ 1% FLOOD	75-CM SLR W/ 1% FLOOD	300-CM SLR W/1% FLOOD
Cambria CSD	-	-	27	-	-	99
<b>Total</b>	-	-	<b>27</b>	-	-	<b>99</b>

Source: San Luis Obispo County Assessor Data November 15, 2024, USGS CoSMoS v3.1, WSP GIS Analysis

The population exposure data presented indicates that while lower sea level rise scenarios (25- and 75-centimeter SLR) show no projected impact to residents, the 300-centimeter sea level rise scenario results in an estimated 27 people affected. When this higher sea level rise is combined with a 1% annual chance coastal flood, the number of residents potentially exposed rises to 99. These figures suggest that while near-term impacts may be minimal, longer-term sea level rise and extreme coastal flooding could significantly increase risk to residential areas, highlighting the importance of forward-looking adaptation strategies to protect vulnerable populations, given elderly and households with limited transportation accessibility may be at higher risk.

### Critical Facilities at Risk

Table I-15 shows Cambria CSD critical facilities inundated by sea level rise and sea level rise with 1% annual chance flood by FEMA lifeline.

**Table I-15 Cambria CSD Critical Facilities Inundated by Sea Level Rise and Sea Level Rise with 1% Annual Chance Flood by FEMA Lifeline**

FEMA LIFELINE	25-CM SLR	75-CM SLR	300-CM SLR	25-CM SLR W/1% FLOOD	75-CM SLR W/1% FLOOD	300-CM SLR W/1% FLOOD
Communications	-	-	-	-	-	-
Energy	-	-	-	-	-	-
Food, Hydration, Shelter	-	-	-	-	-	-
Hazardous Material	-	-	-	-	-	-
Health and Medical	-	-	-	-	-	-
Safety and Security	-	-	-	-	-	-
Transportation	4	4	4	4	4	5
Water Systems	-	-	-	-	-	-
<b>Total</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>5</b>

Source: San Luis Obispo County, USGS CoSMoS v3.1, CalARP, HIFLD, NBI, NID, WSP Analysis

This analysis shows that transportation infrastructure is the only FEMA lifeline currently projected to be affected by sea level rise and its combination with 1% annual chance coastal flooding in Cambria CSD. Four transportation-related critical facilities are consistently exposed under both the 25-centimeter and 75-centimeter sea level rise scenarios, including when modeled with 1% flood conditions. Under the 300-centimeter sea level rise scenario combined with 1% flooding, exposure increases to five transportation facilities. No other lifeline categories, including health and medical, safety and security, water systems, or hazardous material, show any exposure across any of the modeled sea level rise scenarios. This suggests a focused area of vulnerability concentrated solely within the transportation network, which could impact evacuation routes, emergency response, and access to essential services in the future.

As shown below, Figure I-2 and Figure I-3 depict the Cambria CSD sea level rise scenario analysis extents for tidal inundation with and without the 1% annual chance flood. As shown in the figures, the inundation areas extend around local beaches and extend west along Santa Rosa Creek.





Figure I-2 Cambria CSD Sea Level Rise Scenario Analysis: Tidal Inundation Only

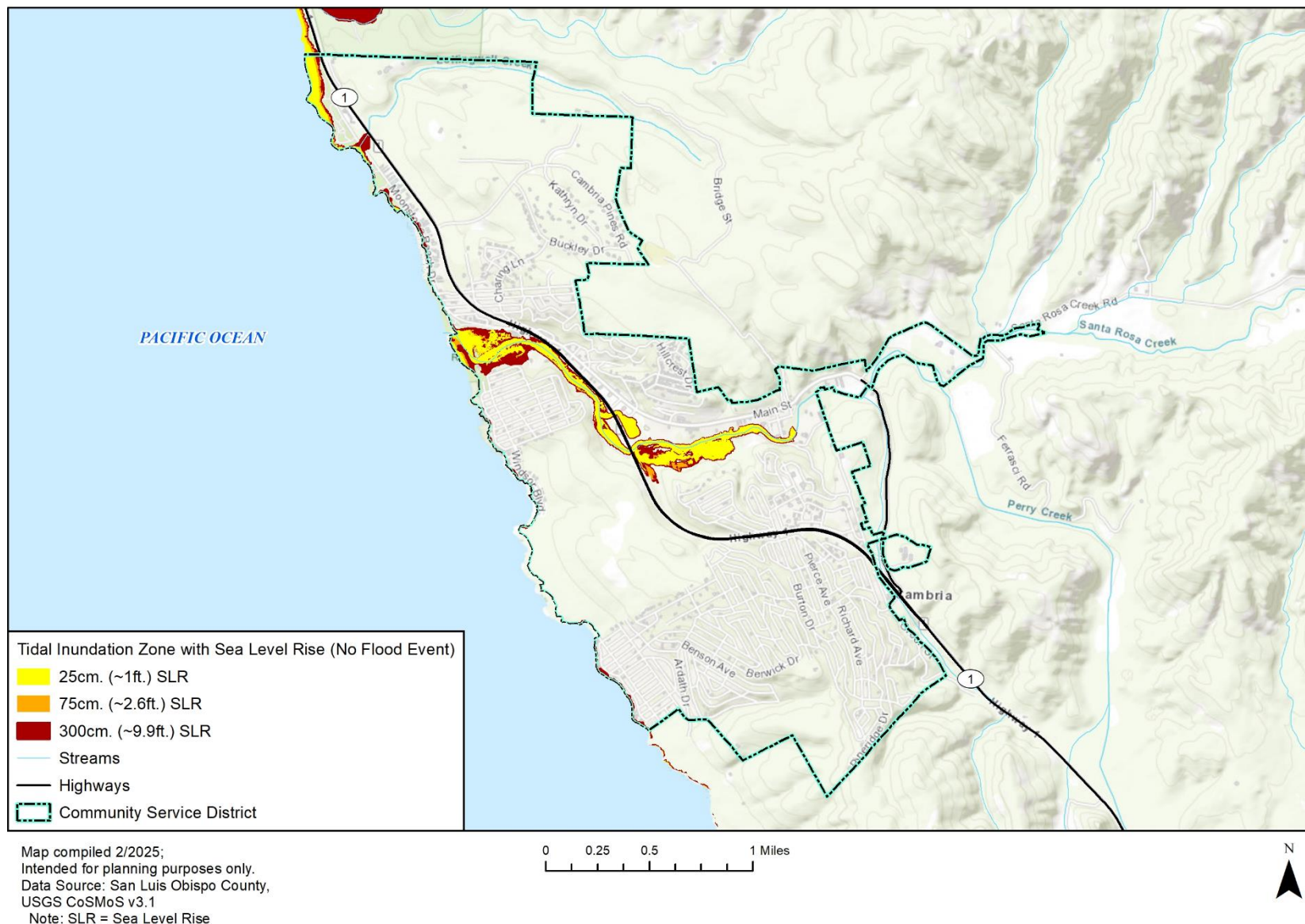
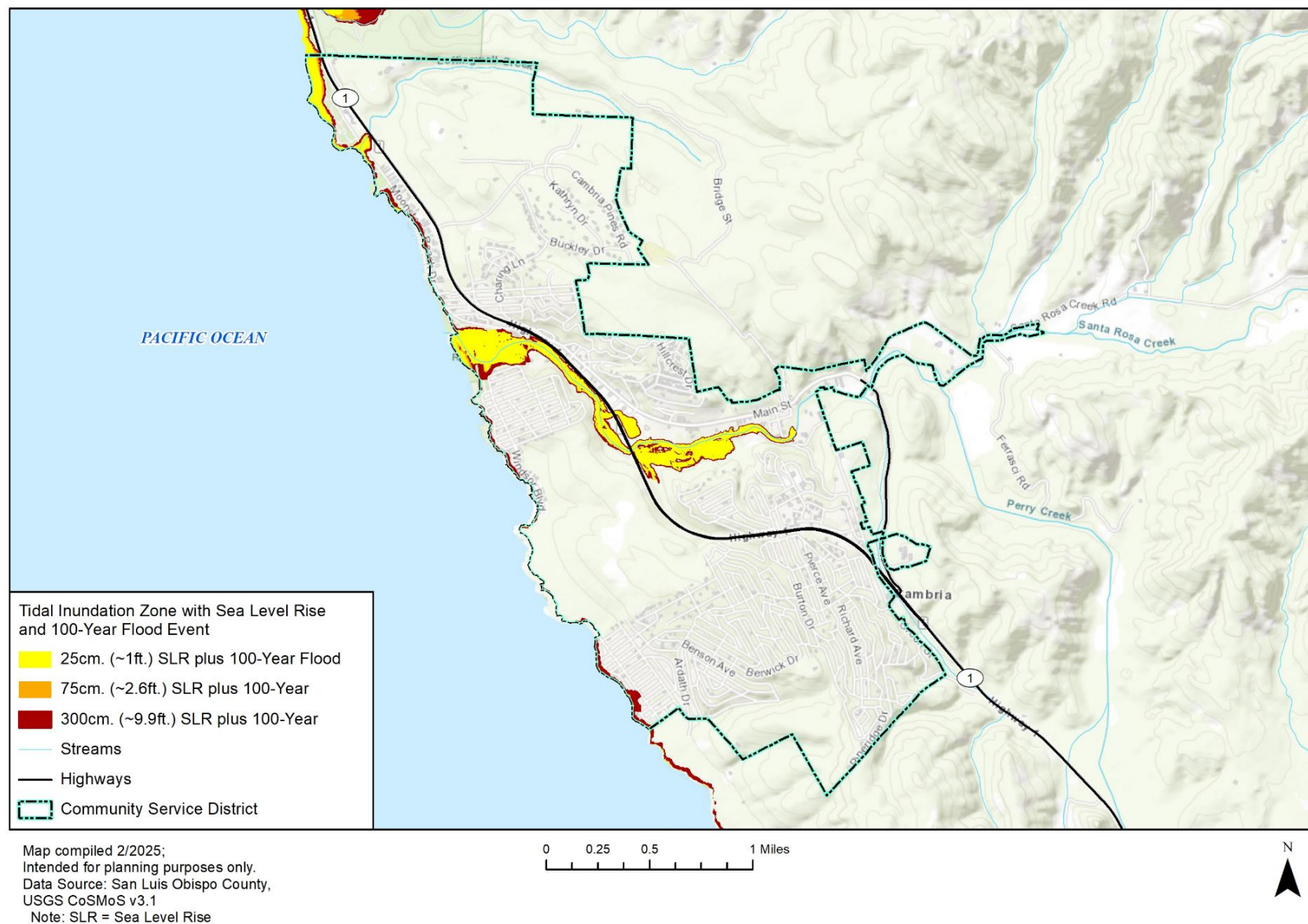




Figure I-3 Cambria CSD Sea Level Rise Scenario Analysis: Tidal Inundation and 1% Annual Chance Flood





### 1.3.3.7 Drought and Water Shortage

Drought impacts are wide-reaching and may be economic, environmental, and/or societal. The most significant impacts associated with drought in the planning area are those related to water intensive activities such as wildfire protection, jurisdictional usage, commerce, tourism and recreation. During past drought events in the planning area, water restrictions have been imposed. Drought conditions can also cause soil to compact and not absorb water well, potentially making an area more susceptible to flooding.

The CCSD relies entirely on local groundwater from two coastal aquifers, the San Simon Creek Aquifer and the Santa Rosa Creek Aquifer. Water production is regulated by water rights permits and waste discharge requirements that limit the amount the CSD can extract. The CCSD does not receive imported water from sources like the State Water Project.

To supplement groundwater, Cambria CSD has developed a Water Reclamation Facility (WRF), which provides treated recycled water for groundwater recharge and supply augmentation. In addition to the groundwater wells and WRF, the CSD's water infrastructure consists of storage tanks, distribution pipelines, a wastewater treatment plant, and pump stations and booster stations. The CCSD has prioritized enhancing water resilience through projects like a proposed seawater desalination plant to address drought vulnerabilities and ensure water availability during emergencies such as wildfires or chemical spills. This project is part of broader efforts to maintain critical services during disasters and mitigate risks to the community's fragile groundwater supplies.

According to the CCSD's 2020 Urban Water Management Plan, the CCSD faces several challenges in ensuring a reliable and sustainable water supply. Groundwater supplies are limited due to strict extraction regulations, and drought conditions pose a significant threat to long-term availability. Aging water infrastructure has led to pipeline leaks and inefficiencies as well as unnecessary water loss. However, a five-year Drought Risk Assessment, shown in Table I-16 below, indicates that even under extended drought conditions, the CCSD can meet demand through stored water and conservation measures.

**Table I-16 Multiple Dry Year Supply and Demand Comparison, in Acre-Feet per Year**

DROUGHT YEAR	SUPPLY/DEMAND	2025	2030	2035	2040	2045
First Year	Supply Totals	725	725	725	725	725
	Demand Totals	580	590	610	630	630
	Difference	145	135	115	95	95
Second Year	Supply Totals	733	733	733	733	733
	Demand Totals	580	590	610	630	630
	Difference	153	143	123	103	103
Third Year	Supply Totals	717	717	717	717	717
	Demand Totals	580	590	610	630	630
	Difference	137	127	107	87	87
Fourth Year	Supply Totals	717	717	717	717	717
	Demand Totals	580	590	610	630	630
	Difference	137	127	107	87	87
Fifth Year	Supply Totals	744	744	744	744	744
	Demand Totals	580	590	610	630	630
	Difference	164	154	134	114	114

Source: 2020 Cambria CSD Urban Water Management Plan





### I.3.3.8 Earthquake and Liquefaction

Earthquake and liquefaction hazards pose a **high** significance for the CCSD. As shown in Figure I-4, The Cambria Fault Zone runs directly through the area in a north-south orientation and is capable of generating an earthquake with a maximum moment magnitude of 6.25 according to the Safety Element of the San Luis Obispo County General Plan. The Oceanic Fault Zone and San Simeon Fault are also in close proximity to the CCSD. As a coastal community, there is also a risk of earthquakes offshore and resulting tsunami events (refer to the Tsunami Section below).

Unlike many of the coastal communities in the County, liquefaction doesn't pose a significant risk to the CCSD. Table I-17 shows the types of properties at risk of liquefaction. Based on this analysis there are only 14 properties at moderate risk of liquefaction with a total value of over \$2.1 billion, and none are at high risk. As shown in Figure I-5, the only stretches of moderate liquefaction risk are along Leffingwell and Santa Rosa Creeks, which have limited development along them. The majority of exposed properties are commercial.

**Table I-17 Cambria CSD Improved Properties Exposed to Liquefaction Potential by Property Type**

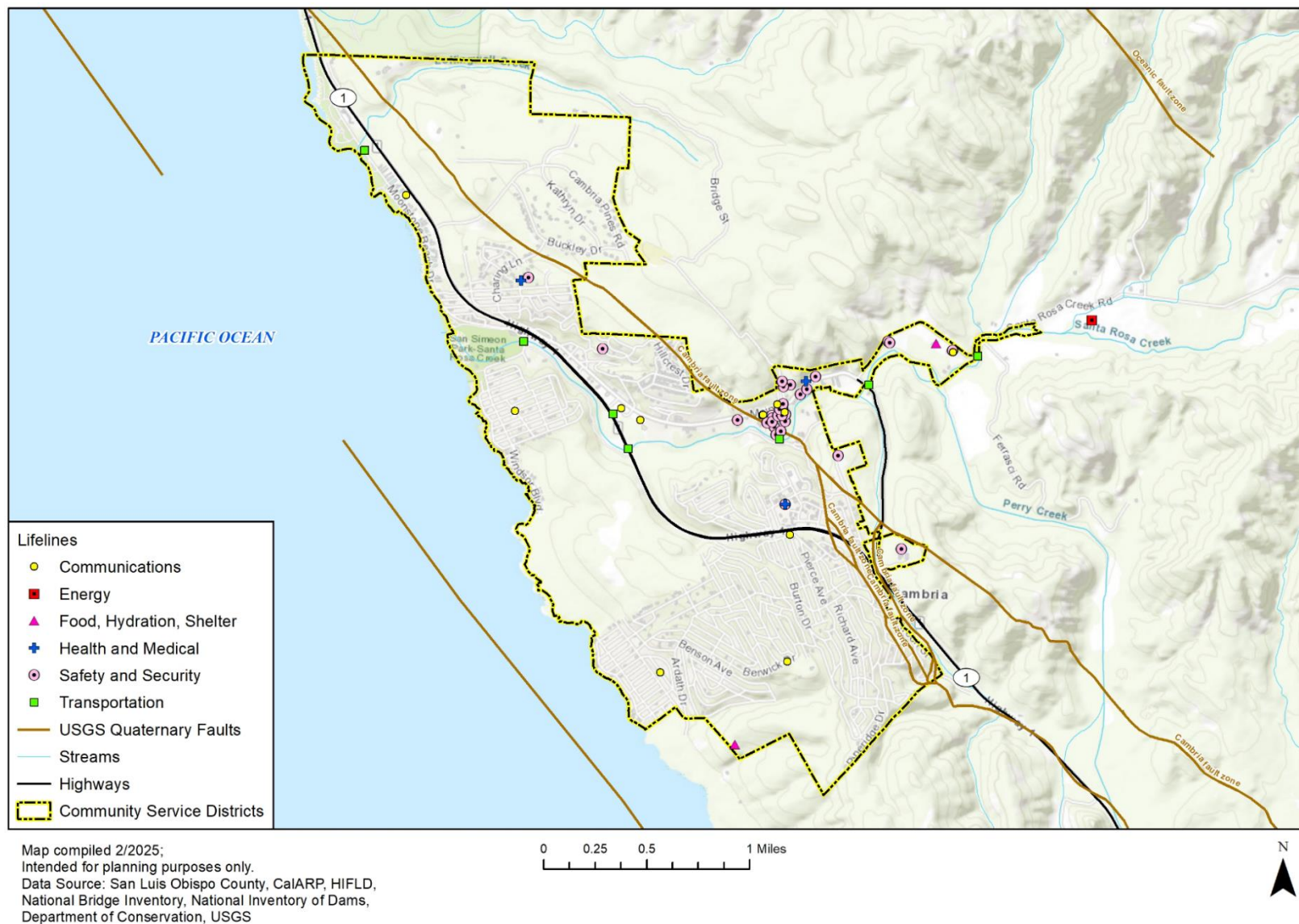
PROPERTY TYPE	STRUCTURE COUNT MODERATE	STRUCTURE COUNT LOW	TOTAL STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE
Commercial	6	158	<b>164</b>	\$111,052,346	\$111,052,346	\$222,104,692
Exempt	4	18	<b>22</b>	\$4,565,330	\$4,565,330	\$9,130,660
Industrial	2	1	<b>3</b>	\$2,817,956	\$4,226,934	\$7,044,890
Mixed Use	-	35	<b>35</b>	\$12,269,512	\$12,269,512	\$24,539,024
Mobile/Manufactured Homes	1	4	<b>5</b>	\$1,033,862	\$516,931	\$1,550,793
Multi-Family Residential	-	39	<b>39</b>	\$13,479,219	\$6,739,610	\$20,218,829
Residential	-	3,629	<b>3,629</b>	\$1,199,087,546	\$599,543,773	\$1,798,631,319
Vacant Improved	1	27	<b>28</b>	\$17,798,610	\$0	\$17,798,610
<b>Total</b>	<b>14</b>	<b>3,911</b>	<b>3,925</b>	<b>\$1,362,104,381</b>	<b>\$738,914,436</b>	<b>\$2,101,018,817</b>

Source: San Luis Obispo Assessor Data November 15, 2024, WSP GIS Analysis

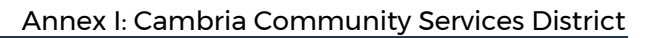
The Cambria CSD also has a total of 12 critical facilities exposed to moderate liquefaction risk, mostly in the Transportation and Safety and Security FEMA Lifelines. See Table 5-97 in the Base Plan.



Figure I-4 Cambria CSD Critical Facilities, USGS Quaternary Faults, and Alquist Priolo Earthquake Fault Zone







**Liquefaction Susceptibility**

- Moderate Potential
- Low Potential
- Streams
- Highways
- Community Service Districts

Map compiled 2/2025;  
Intended for planning purposes only.  
Data Source: San Luis Obispo County



### 1.3.3.9 Flood

Cambria CSD has faced multiple significant flooding events in recent years, notably in January 2021 and March 2023, which have caused widespread damage to both public infrastructure and private properties. These events have underscored the community's vulnerability to severe weather and the need for continued mitigation strategies.

In January 2021, a powerful storm system brought over 11 inches of rain to Cambria, resulting in extensive flooding that inundated Main Street and left the entire town without power. The CCSD's Facilities and Resources Department building was flooded with water, mud, and debris, necessitating substantial cleanup and repairs. The California Office of Emergency Services later approved reimbursement of nearly \$50,000 to the CCSD to cover a portion of these costs.

In March 2023, another severe storm, fueled by an AR, delivered approximately 8.4 inches of rain to the area. Santa Rosa Creek overflowed its banks, leading to the flooding of the West Village, Oak Terrace Mobile Home Park, and parts of the East Village. The rapid rise in water levels, over 5 feet in just 5 hours, prompted evacuations and road closures, including the temporary shutdown of Windsor Boulevard. Additionally, more than 175,000 gallons of water spilled into a Cambria creek during the storm, highlighting the strain on the community's infrastructure.

These recurring flooding incidents have had significant impacts on vulnerable populations, particularly those living in mobile homes. They also have significant economic impacts, forcing multiple businesses to close temporarily and imposing substantial repair costs on the CSD. Given Cambria's susceptibility to severe weather events, there is a high likelihood of similar occurrences in the future. Consequently, the CCSD is actively seeking to enhance its mitigation capabilities to better protect the community and its infrastructure from future flooding events.

The CCSD does not participate in the National Flood Insurance Program (NFIP) but will continue to support the county's participation in and compliance with the NFIP.

Cambria was ranked a **high** significance for flood risk.

### Values at Risk

Table I-18 and Table I-19 summarize the values at risk in the 1% and 0.2% annual floodplains, respectively. These tables also detail loss estimates for each flood zone, as well as population estimates.

**Table I-18 Cambria CSD's FEMA 1% Annual Chance Flood Hazard by Property Type and Population**

PROPERTY TYPE	PROPERTY COUNT	IMPROVED VALUE	CONTENT VALUE	TOTAL VALUE	LOSS ESTIMATE	POP.
Commercial	58	\$22,303,351	\$22,303,351	\$44,606,702	\$11,151,676	-
Exempt	4	\$55,175	\$55,175	\$110,350	\$27,588	-
Mixed Use	11	\$4,328,132	\$4,328,132	\$8,656,264	\$2,164,066	-
Vacant Improved	1	\$49,212	-	\$49,212	\$12,303	-
<b>Total</b>	<b>74</b>	<b>\$26,735,870</b>	<b>\$26,686,658</b>	<b>\$53,422,528</b>	<b>\$13,355,632</b>	<b>0</b>

Source: San Luis Obispo Assessor Data November 15, 2024, FEMA NFHL Effective Date 6/6/2024, WSP GIS Analysis

**Table I-19 CSD's FEMA 0.2% Annual Chance Flood Hazard by Property Type and Population**

PROPERTY TYPE	PROP. COUNT	IMPROVED VALUE	CONTENT VALUE	TOTAL VALUE	LOSS ESTIMATE	POP.
Commercial	42	\$20,010,490	\$20,010,490	\$40,020,980	\$10,005,245	-
Exempt	2	\$257,547	\$257,547	\$515,094	\$128,774	-
Industrial	3	\$2,817,956	\$4,226,934	\$7,044,890	\$1,761,223	-



PROPERTY TYPE	PROP. COUNT	IMPROVED VALUE	CONTENT VALUE	TOTAL VALUE	LOSS ESTIMATE	PO P.
Mixed Use	4	\$1,357,705	\$1,357,705	\$2,715,410	\$678,853	-
Multi-Family Residential	2	\$694,699	\$347,350	\$1,042,049	\$260,512	5
Residential	28	\$8,410,189	\$4,205,095	\$12,615,284	\$3,153,821	69
Vacant Improved	2	\$86,838	\$0	\$86,838	\$21,710	-
<b>Total</b>	<b>83</b>	<b>\$33,635,424</b>	<b>\$30,405,120</b>	<b>\$64,040,544</b>	<b>\$16,010,136</b>	<b>74</b>

Source: San Luis Obispo Assessor Data November 15, 2024, FEMA NFHL Effective Date 6/6/2024, WSP GIS Analysis

### Values at Risk

Cambria CSD has over \$53.4 million in total property value exposed to the 1% annual chance (100-year) flood hazard, with an estimated loss potential of approximately \$13.4 million. The largest at-risk category is commercial property, making up more than 80% of the total exposure. For the 0.2% annual chance (500-year) flood hazard, exposure increases to more than \$64 million in total value, with estimated losses exceeding \$16 million. This broader floodplain includes more diverse property types such as industrial and residential parcels, further expanding the district's economic vulnerability.

### Population at Risk

Although no population is formally recorded as residing within the 1% annual chance (100-year) floodplain, this does not eliminate life safety concerns. Commercial and mixed-use structures in these areas may still be occupied during flood events, particularly by employees, customers, or transient populations. In the 0.2% annual chance (500-year) floodplain, an estimated 74 residents are at risk, primarily in multi-family and residential structures. This may also include at-risk populations based on household income and other factors, such as housing type. While overall population exposure appears limited, both flood zones present risks that require targeted outreach, emergency response planning, and consideration of evacuation challenges, especially for those who may be in affected buildings during a flood event.

### Critical Facilities at Risk

Table I-20 and Table I-21 show Cambria CSD critical facility assets exposed to 1% and 0.2% annual flood hazards by FEMA lifelines.

**Table I-20 Cambria CSD Critical Facility Assets Exposed to 1% Flood Hazards by FEMA Lifelines**

COMMUNITY SERVICE DISTRICT	COMMUNICATIONS	ENERGY	FOOD, HYDRATION, SHELTER	HAZARDOUS MATERIAL	HEALTH AND MEDICAL	SAFETY AND SECURITY	TRANSPORTATION	WATER SYSTEMS	TOTAL COUNT
Cambria	1	-	-	-	-	2	6	-	9
<b>Total</b>	<b>1</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>6</b>	<b>-</b>	<b>9</b>

Source: San Luis Obispo County, FEMA NFHL Effective Date 6/6/2024, CalARP, HIFLD, NBI, NID, FCWCD, WSP Analysis

**Table I-21 Cambria CSD Critical Facility Assets Exposed to 0.2% Flood Hazards by FEMA Lifelines**

COMMUNITY SERVICE DISTRICT	COMMUNICATIONS	ENERGY	FOOD, HYDRATION, SHELTER	HAZARDOUS MATERIAL	HEALTH AND MEDICAL	SAFETY AND SECURITY	TRANSPORTATION	WATER SYSTEMS	TOTAL COUNT
Cambria	2	-	-	-	1	13	-	-	16
<b>Total</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>13</b>	<b>-</b>	<b>-</b>	<b>16</b>

Source: San Luis Obispo County, FEMA NFHL Effective Date 6/6/2024, CalARP, HIFLD, NBI, NID, FCWCD, WSP Analysis

Nine critical facilities within Cambria CSD fall within the 1% annual chance (100-year) flood hazard zone. These include one communications facility, two safety and security facilities, and six transportation-related assets. The concentration of transportation assets in this zone highlights potential access and mobility disruptions during flood events, which may limit evacuation routes and delay emergency response.

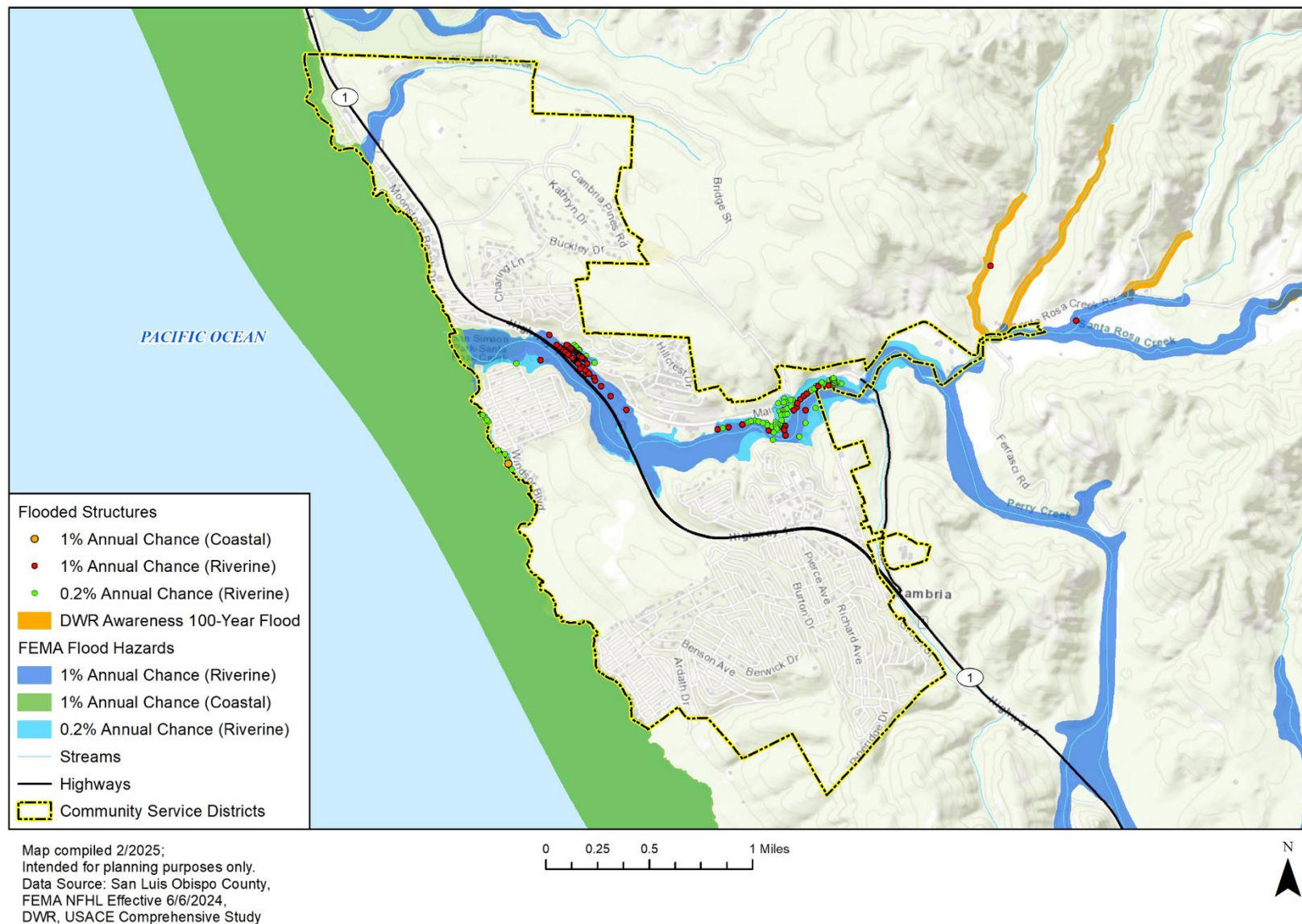
An additional 16 critical facilities are located within the 0.2% annual chance (500-year) flood hazard zone, increasing overall vulnerability during extreme flood conditions. These include two communications assets, one hazardous materials facility, and thirteen safety and security facilities. The presence of numerous public safety facilities in this broader floodplain emphasizes the importance of ensuring flood resilience in the CCSD's emergency infrastructure, as disruption to these assets could impair the community's ability to respond effectively during high-impact events.

Figure I-6, below, shows the Cambria CSD DWR and FEMA flood hazards with flooded structures. As shown the majority of the flood hazards extend along Santa Rosa Creek. Flooding also affects other tributaries, such as Perry Creek and Green Valley Creek. Intermittent streams and culverted stormwater channels in the eastern portions of Cambria near Cambria Pines Road and above Moonstone Beach also are at risk to flooding.





Figure I-6 Cambria CSD DWR & FEMA Flood Hazards with Flooded Structures







### I.3.3.10 Landslides and Debris Flow

Cambria was ranked a **medium** significance for landslide and debris flow risk by the Planning Team. Within the CCSD there are 1,719 structures with a value of over \$1 billion exposed to landslide potential. Out of these structures residential properties have the highest count at 1,525 with 3,767 people within the CCSD affected as shown in Table I-22. Cambria also has 56 critical facilities exposed to landslide potential with 35 in high-exposed areas and 21 in low-exposed areas.

**Table I-22 Improved Properties Exposed to Landslide Potential**

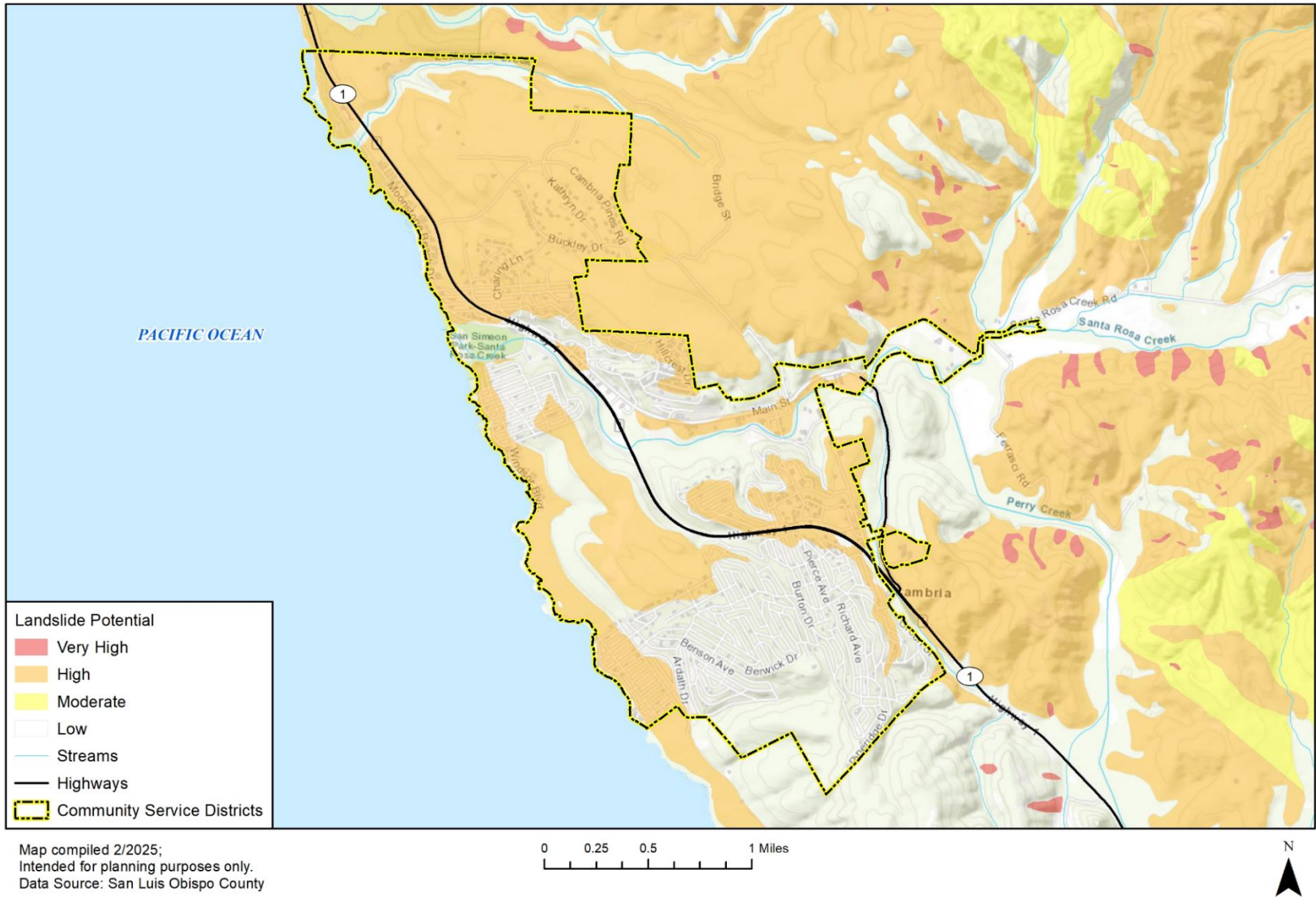
PROPERTY TYPE	TOTAL STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATION
Commercial	124	\$83,818,012	\$83,818,012	\$167,636,024	-
Exempt	11	\$2,983,861	\$2,983,861	\$5,967,722	-
Mixed Use	18	\$8,285,731	\$8,285,731	\$16,571,462	-
Mobile/Manufactured Homes	2	\$269,991	\$134,996	\$404,987	5
Multi-Family Residential	25	\$9,211,121	\$4,605,561	\$13,816,682	62
Residential	1,525	\$576,635,942	\$288,317,971	\$864,953,913	3,767
Vacant Improved	14	\$16,036,735	\$0	\$16,036,735	-
<b>Total</b>	<b>1,719</b>	<b>\$697,241,393</b>	<b>\$388,146,131</b>	<b>\$1,085,387,524</b>	<b>3,833</b>

Source: San Luis Obispo Assessor Data November 15, 2024, WSP GIS Analysis

Previously Cambria had a major landslide in 2010 that took with it 50 feet of Pembroke Drive's pavement, a 6-inch water main, 8-inch sewer main and utility poles and service. The water-main break spilled 200,000 gallons of water. Recently, the winter storms in 2023 caused road closures and evacuations, including landslides throughout the district and over 10.4 inches of rain in some areas. Figure I-7 below shows areas of the CCSD with potential landslide risk with the northern part of the district mostly having a high potential for landslides along the coast and Highway 1.



Figure I-7 Cambria CSD Landslide Risk





### I.3.3.11 Tsunami

Tsunami inundation poses a risk to all coastal communities in the County of San Luis Obispo. Offshore faults and related seismic activity could generate a tsunami event off the coast of Cambria, even if the fault rupture occurs thousands of miles away. Due to the varied geography and higher elevations along the coast in Cambria, this area has relatively lower tsunami risk than other tsunami-exposed portions of the county. Much of the development in Cambria is located at elevations of 100 feet or greater above mean sea level. However, there are still vital portions of the CCSD which are vulnerable, including Moonstone Beach Park, low-lying areas inland along the Santa Rosa Creek, the San Simeon Creek Campground, and stretches of Highway 1 as it traverses the mouths of these creeks. These areas are illustrated in Figure I-8 below.

The following table breaks down the tsunami risk for the CCSD by property type.

**Table I-23 Cambria CSD Improved Properties Exposed to Exposed to Tsunami Hazard Areas by Property Type**

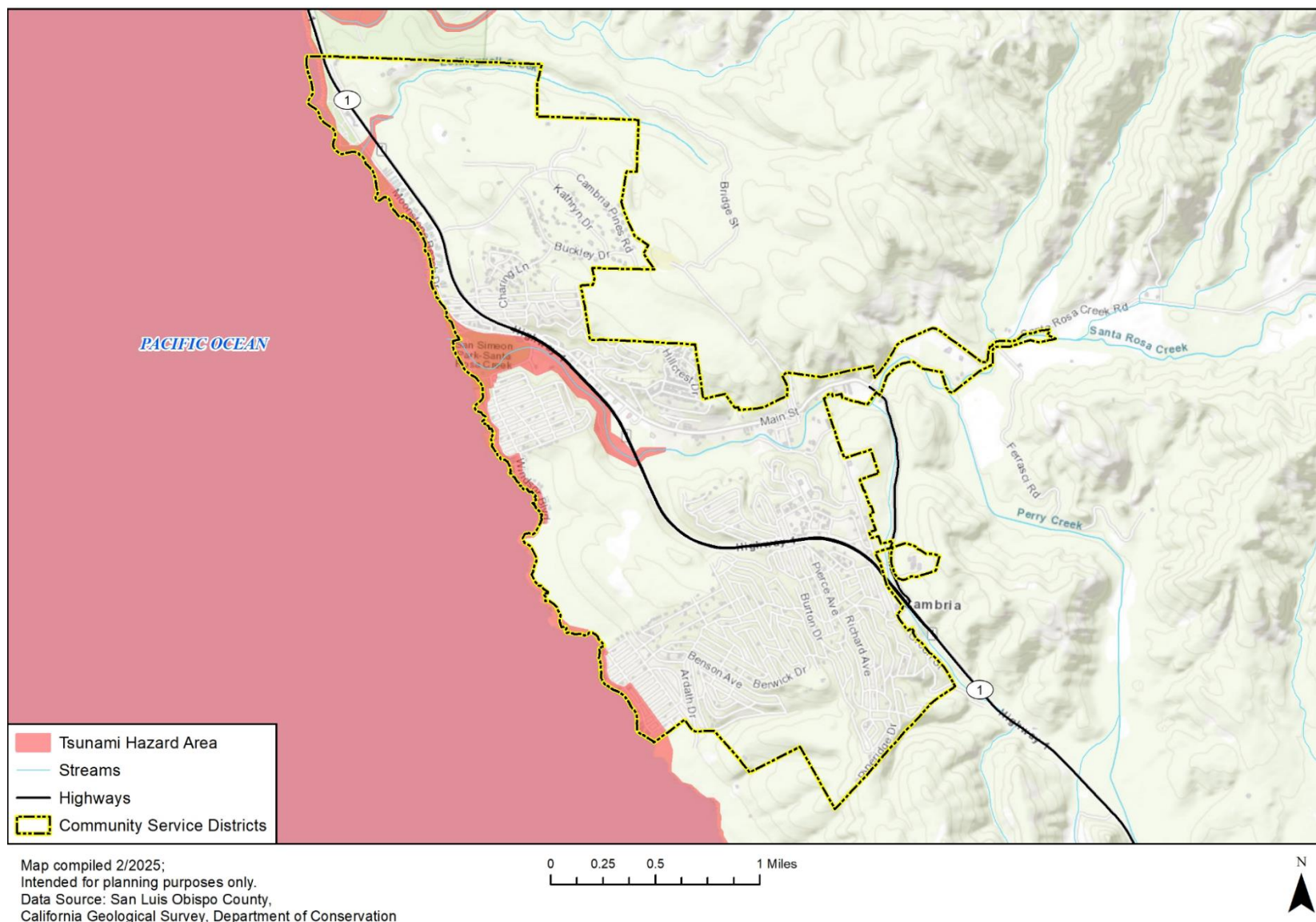
PROPERTY TYPE	STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATION
Commercial	2	\$6,217,430	\$6,217,430	\$12,434,860	-
Exempt	1	\$0	\$0	\$0	-
Residential	125	\$61,852,896	\$30,926,448	\$92,779,344	309
Vacant Improved	1	\$543,620	\$0	\$543,620	-
<b>Total</b>	<b>129</b>	<b>\$68,613,946</b>	<b>\$37,143,878</b>	<b>\$105,757,824</b>	<b>309</b>

Source: San Luis Obispo Assessor Data November 15, 2024, California Geological Survey, Dept. of Conservation, WSP GIS Analysis

Based on this analysis there are 129 structures vulnerable to the impacts of a tsunami with a combined value of over \$105.8 million. Of the properties at risk the majority are residential properties, with 125 residential structures valued at approximately \$92.8 million. There are also three identified transportation facilities vulnerable to tsunami impacts.



Figure I-8 Cambria CSD Areas of Potential Tsunami Inundation





### *1.3.3.12 Wildfire*

Wildfire is a **high** significance hazard for the CCSD. There is no fire history in the community. But due to factors such as the Irish Hills, a notable topographic feature north of Cambria, Cal FIRE has designated the Cambria community as being at an increased risk from wildfires and a priority community to work with to prepare and mitigate potential fire risk. According to the County's Community Wildfire Protection Plan (2019), the prevailing wind patterns is another dominant factor that influences the wildfire risk in Cambria. A fire that originates in the Los Osos area or at the Diablo Canyon Power Plant could be pushed by prevailing winds southeast towards the Cambria community.

In the CCSD, 3,925 properties are situated within fire hazard severity zones (FHSZ) ranging from moderate to very high risk. Of these, 912 properties are located in the Very FHSZ, while 1,744 properties fall within the High FHSZ and 1,269 properties fall within the Moderate FHSZ. Collectively, these properties represent a total assessed value of \$2,101,018,817 (\$2.10 billion) and impact approximately 9,072 residents across all FHSZs. Table I-24 shows the properties in the district exposed to FHSZs. Figure I-9 depicts the FHSZs in Cambria CSD.



**Table I-24 Cambria CSD's Improved Properties Exposed to Fire Hazard Severity Zones by Property Type**

PROPERTY TYPE	STRUCTURE COUNT VERY HIGH	STRUCTURE COUNT HIGH	STRUCTURE COUNT MODERATE	TOTAL STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATION
Commercial	139	7	18	<b>164</b>	\$111,052,346	\$111,052,346	\$222,104,692	-
Exempt	15	7	-	<b>22</b>	\$4,565,330	\$4,565,330	\$9,130,660	-
Industrial	3	-	-	<b>3</b>	\$2,817,956	\$4,226,934	\$7,044,890	-
Mixed Use	33	1	1	<b>35</b>	\$12,269,512	\$12,269,512	\$24,539,024	-
Mobile/Manufactured Homes	4	1	-	<b>5</b>	\$1,033,862	\$516,931	\$1,550,793	12
Multi-Family Residential	12	17	10	<b>39</b>	\$13,479,219	\$6,739,610	\$20,218,829	96
Residential	697	1,701	1,231	<b>3,629</b>	\$1,199,087,546	\$599,543,773	\$1,798,631,319	8,964
Vacant Improved	9	10	9	<b>28</b>	\$17,798,610	\$0	\$17,798,610	-
<b>Total</b>	<b>912</b>	<b>1,744</b>	<b>1,269</b>	<b>3,925</b>	<b>\$1,362,104,381</b>	<b>\$738,914,436</b>	<b>\$2,101,018,817</b>	<b>9,072</b>

Source: San Luis Obispo Assessor Data November 15, 2024, CAL FIRE - FHSZ Phase 3 March 10, 2025, WSP GIS Analysis



Figure I-9 Cambria CSD Fire Hazard Severity Risk

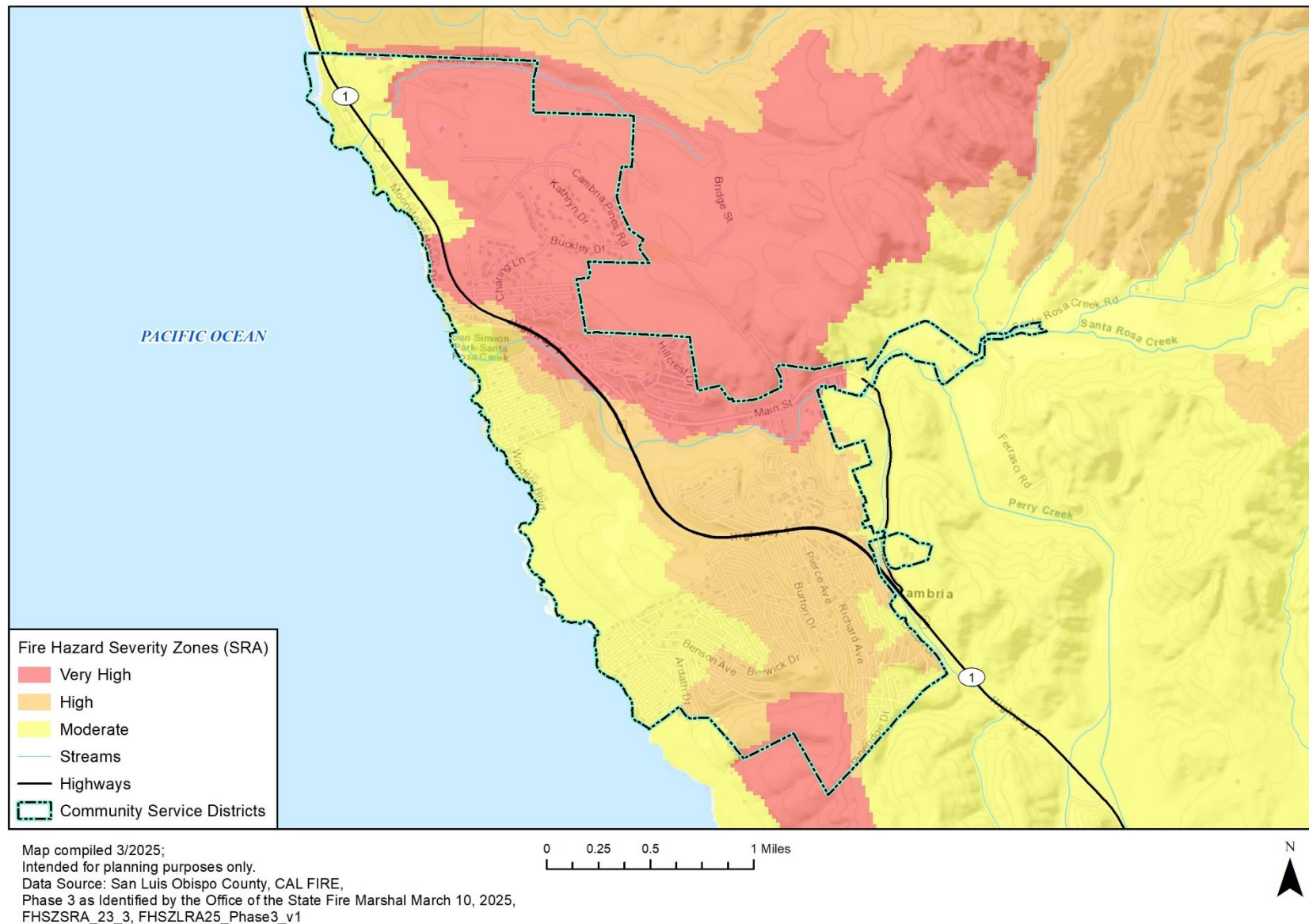




Table I-25 shows critical facilities in Cambria CSD that are exposed to moderate to very high fire hazard severity, categorizing them by severity level and facility type. The exposure of these critical assets to wildfire hazards poses significant risks to safety and security. Table I-25 shows that there is a total of fifty-six (56) critical facilities exposed to moderate, high, and very high FHSZs, thirty-four (34) of which fall in the very high FHSZ rating.

**Table I-25 Cambria CSD Critical Facilities Assets Exposed to Fire Hazard Severity Zones**

FIRE HAZARD SEVERITY ZONE	COMMUNICATIONS	ENERGY	FOOD, HYDRATION, SHELTER	HAZARDOUS MATERIAL	HEALTH AND MEDICAL	SAFETY AND SECURITY	TRANSPORTATION	WATER SYSTEMS	TOTAL COUNT
Very High	6	-	-	2	-	24	2	-	34
High	5	-	1	-	1	2	2	-	11
Moderate	4	-	1	-	-	4	2	-	11
<b>Total</b>	<b>15</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>30</b>	<b>6</b>	<b>0</b>	<b>56</b>

Source: San Luis Obispo County, CAL FIRE - FHSZ Phase 3 March 10, 2025, CalARP, HIFLD, NBI, NID, WSP Analysis

## I.4 Capability Assessment

Capabilities are the programs and policies currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. This capabilities assessment is divided into five sections: regulatory mitigation capabilities, administrative and technical mitigation capabilities, fiscal mitigation capabilities, mitigation outreach and partnerships, and other mitigation efforts.

To develop this capability assessment, the jurisdictional planning representatives (Planning Team) used a matrix of common mitigation activities to inventory which of these policies or programs were in place. The team then supplemented this inventory by reviewing additional existing policies, regulations, plans, and programs to determine if they contributed to reducing hazard-related losses.

During the plan update process, this inventory was reviewed by the jurisdictional planning representatives and WSP consultant team staff to update information where applicable and note ways in which these capabilities have improved or expanded. In summarizing current capabilities and identifying gaps, the jurisdictional planning representatives also considered their ability to expand or improve upon existing policies and programs as potential new mitigation strategies. The CCSD capabilities are summarized below.

### I.4.1 Regulatory Mitigation Capabilities

Table I-26 identifies existing regulatory capabilities the CCSD has in place to help with future mitigation efforts. Note, many of the regulatory capabilities that can be used for the CCSD are within the County's jurisdiction. Refer to Section 6 Capability Assessment of the Base Plan for more information related to the County's mitigation capabilities.

**Table I-26 Cambria CSD Regulatory Mitigation Capabilities**

REGULATORY TOOL	YES/NO	COMMENTS
General Plan	Yes	



REGULATORY TOOL	YES/NO	COMMENTS
Zoning ordinance	Yes	Title 8 of the CCSD Code of Ordinances specifically addresses utility systems and administration.
Subdivision ordinance	No	
Growth management ordinance	No	
Floodplain ordinance	No	
Other special purpose ordinance (stormwater, steep slope, wildfire)	No	
Building code and Type/Year	Yes	Ordinance 01-2023. This ordinance adopts and amends the 2022 California Fire Code and the 2021 International Wildland Urban Interface Code.
Building Code Effectiveness Grading System and Rating (if applicable)		New
Fire department ISO rating	Yes	ISO rating of 4/4X
Erosion or sediment control program	No	
Stormwater management program	No	
Site plan review requirements	No	
Capital improvements plan	No	
Economic development plan	No	
Local emergency operations plan	No	
Other special plans	Yes	Strategic Plan, Water Waste Plan, Urban Water Management Plan, Water Shortage Contingency Plan
Flood insurance study or other engineering study for streams	Yes	Cambria Drainage and Flood Control Study
Elevation certificates (for floodplain development)	No	
Other		2017 Cambria Community Services and Healthcare Districts Multi-Jurisdictional Hazard Mitigation Plan

### Discussion on Existing Building Codes, Land Use and Development Regulations

While land use and building code enforcement fall under the jurisdiction of San Luis Obispo County, the CCSD influences development by determining service availability and issuing water and sewer commitments. Due to limited water resources, the CCSD enforces strict connection policies, including the Water Wait List and Retrofit-to-Build Program, which require conservation measures before new development can proceed.

In addition, the CCSD enforces portions of the California Fire Code through its Fire Department, including defensible space requirements and vegetation management in high fire risk areas. The CCSD also adopts local ordinances related to utility service, water conservation, and infrastructure standards. While it does not have zoning authority, the CCSD regularly reviews and comments on development proposals to ensure consistency with available services and long-term resource planning.

### I.4.2 Administrative/Technical Mitigation Capabilities

Table I-27 identifies the personnel responsible for activities related to mitigation and loss prevention in the CCSD.

**Table I-27 Cambria CSD Administrative/Technical Mitigation Capabilities**

PERSONNEL RESOURCES	YES/NO	DEPARTMENT/POSITION
Planner/engineer with knowledge of land development/land management practices	No	SLO County Public Works and Planning & Building
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Yes	Utilities Department Manager-District Engineer, Wastewater Systems Superintendent
Planner/engineer/scientist with an understanding of natural hazards	Yes	Utilities Department Manager-District Engineer, Program Manager
Personnel skilled in GIS	Yes	SLO County
Full time building official	Yes	SLO County Planning and Building
Floodplain manager	Yes	CCSD General Manager
Emergency manager	Yes	SLO County Emergency Services
Grant writer	No	
Other personnel	N/A	
GIS Data Resources (Hazard areas, critical facilities, land use, building footprints, etc.)	Yes	SLO County
Warning systems/services (Reverse 9-11, outdoor warning signals)	Yes	SLO County

### I.4.3 Fiscal Mitigation Capabilities

Table I-28 identifies financial tools or resources that the CSD could potentially use to help fund mitigation activities.

**Table I-28 Cambria CSD Fiscal Mitigation Capabilities**

FINANCIAL RESOURCES	ACCESSIBLE/ELIGIBLE TO USE (YES/NO)
Community Development Block Grants	No
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	No
Fees for water, sewer, gas, or electric services	Yes
Impact fees for new development	Yes
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activities	No
Withhold spending in hazard prone areas	No

The CCSD requested FEMA Hazard Mitigation Assistance (HMA) funding to address damages to critical infrastructure caused by a recent flooding event. The funding request specifically targets repairs and improvements to the Facilities and Resources Maintenance Building and a fire department storage shed that were both impacted. The goal of the funding is to mitigate future risks by enhancing the resilience of these facilities, ensuring they remain operational during emergencies, and improving the district's ability to manage and respond to future hazards effectively. The application was funded.





### I.4.4 Mitigation Outreach and Partnerships

**Table I-29 Cambria CSD Mitigation Outreach and Partnerships**

CAPABILITY TYPE	YES/NO	NOTES
Hazard Awareness/Education Campaigns	Yes	
Firewise	Yes	
Storm Ready	No	
Severe Weather Awareness Week	No	
School programs	No	
Other	Yes	
Methods Used to Communicate Hazard Info. to the Public	Yes	
Local News	Yes	
Social media	Yes	
Community Newsletters	Yes	
Utility Bill Inserts	Yes	
Community Events	Yes	
Other	Yes	
Organizations that represent or work with underserved or vulnerable communities	Yes	
American Red Cross	Yes	
Salvation Army	No	
Veterans Groups	Yes	
Environmental/Conservation Groups	Yes	
Homeowner/Neighborhood Associations	Yes	
Chamber of Commerce	Yes	
Community Organizations (Lions, Kiwanis, etc.)	Yes	

CCSD works with a variety of local organizations to support underserved and vulnerable communities, including the American Red Cross, local environmental and conservation groups, homeowner associations, the Chamber of Commerce, and civic organizations such as Lions and Kiwanis Clubs. These partnerships play a vital role in disaster preparedness, community education, and post-disaster recovery.

### I.4.5 Opportunities for Enhancement

Based on the capability assessment, the CCSD has several existing mechanisms in place that help mitigate hazards, and there are ongoing efforts to expand and improve these policies and programs to further protect the community. Regulatory capabilities could be strengthened by adopting local ordinances stormwater control and emergency operations, which would help reduce risk and improve access to state and federal funding.

Administratively, the CCSD relies heavily on San Luis Obispo County for planning, emergency management, floodplain management, and GIS support. However, the District has also implemented its own GIS capabilities, enhancing local access to hazard-related data and decision-making tools. This reliance on the County still indicates a potential opportunity for additional local staffing or shared services, particularly for planning and grant writing.

Fiscal capacity remains limited, with no authority to levy taxes or access certain funding mechanisms independently, but collaboration with the County and other partners could open doors to additional resources.



Outreach and engagement capabilities have improved, with the implementation of Community Outreach Programs that specifically include efforts to reach vulnerable populations. While formal hazard education programs and documented communications strategies are still developing, participation in the Firewise program and potential involvement in initiatives like StormReady reflect meaningful progress in building mitigation readiness. Expanding public education, continuing to leverage community partnerships, and enhancing documentation of outreach efforts will further strengthen CCSD's resilience.

## I.5 Mitigation Strategy

The Cambria Community Services District (CCSD) is committed to reducing risk and enhancing community resilience through targeted mitigation strategies that leverage existing capabilities and expand collaborative efforts. The District actively engages in hazard awareness and education through community outreach programs, social media, newsletters, local news, and participation in community events. These efforts include specific outreach to vulnerable populations and support the District's designation as a Firewise community.

While the District is not currently a StormReady community and does not formally participate in Severe Weather Awareness Week or school-based hazard education programs, there are opportunities to expand outreach and education by establishing these programs and enhancing engagement with youth and schools.

This comprehensive and collaborative approach will enhance CCSD's ability to prepare for, respond to, and recover from natural hazards while promoting a culture of safety and resilience across the entire community.

### I.5.1 Mitigation Goals and Objectives

For the CCSD, resilience encompasses the community's ability to effectively prepare for, respond to, and recover from various challenges, including natural disasters and resource constraints. This involves proactive measures such as wildfire preparedness, emergency response initiatives, and the development of comprehensive water management plans to ensure a reliable water supply. By implementing these strategies, the CCSD aims to maintain and enhance the quality of life for Cambria residents, ensuring the community remains adaptable and robust in the face of adversity.

The 2017 Multi-Jurisdictional Hazard Mitigation Plan for the CCSD and Cambria Community Healthcare Districts outlined the following goals, which were evaluated and continue to serve the District in 2025 with some modifications to Goal 2, 3, 4 and 7:

- **Goal 1:** Promote understanding and support for hazard mitigation by key stakeholders and the public with the Cambria Community Services District.
- **Goal 2:** Mitigate hazard impacts to existing and future development.
- **Goal 3:** Build and support local capacity to address, and commitment to minimize, the Cambria Community Services District's vulnerability to potential hazards through collaboration with San Luis Obispo County.
- **Goal 4:** Minimize the level of injury, loss of life, and damage to existing and future critical facilities, property, and infrastructure caused by natural hazards including flooding, earthquakes, tsunami and landslides.
- **Goal 5:** Minimize the level of damage and losses to people, existing and future critical facilities and infrastructure due to wildland fires.



- **Goal 6:** Limit risk and impacts from hazardous materials spills and intentional discharges, including biological agent threats, illegal disposals, transportation accidents, or system failures.
- **Goal 7:** Adopt and implement strategies to enable the Cambria Community Services District to prepare for and adapt to the impacts of climate change through collaboration with San Luis Obispo County.

### I.5.2 Completed 2019 Mitigation Actions

During the 2025 planning process the Cambria Planning Team reviewed all the mitigation actions from the 2017 plan. The Planning Team identified that four actions that were completed, described in Table I-30.

**Table I-30 CCSD Complete and Deleted Actions**

2019 ACTION ID	HAZARD(S) ADDRESSED	MITIGATION ACTION TITLE	LEAD AGENCY	ACTION STATUS NOTES
4.ID	Flood	Improve the drainage through the West Village through a combination of vegetation management and storm drain improvements along Highway 1 - east side.	SLO County	Completed. Nothing additional to report
4.1E	Flood	Automate the large flood pump at the north end of the West Village.	SLO County	Completed. Nothing additional to report
4.1F	Flood	Improve the storm drain collector behind the Shell gas station at the north end of the West Village so that it no longer clogs/overflows.	SLO County	Completed. Nothing additional to report
5.2C	Wildfire	Purchase a Type 6 Fire Engine (Brush Unit) so as to provide initial response to wildfires in the District.	Fire Department	Completed. Apparatus has been purchased, and we are awaiting arrival. Outfitting and funding for equipment will begin upon arrival.

### I.5.3 Mitigation Actions

The Planning Team for the CCSD identified and prioritized the following mitigation actions based on the risk assessment. Actions were prioritized using the process described in Section 7.2.1 of the Base Plan. Background information and information on how each action will be implemented and administered, such as ideas for implementation, responsible office, potential funding, estimated cost, and timeline are also included. Actions with an asterisk (\*) are those that mitigate losses to future development.



Table I-31 Cambria Community Service District’s Mitigation Action Plan

MITIGATION ACTION NUMBER	PRIMARY HAZARD(S) MITIGATED	DESCRIPTIONS/BACKGROUND/BENEFITS	LEAD AGENCY & PARTNERS	ESTIMATED COST & POTENTIAL FUNDING SOURCES	2025 PRIORITY	TIMELINE	STATUS/ IMPLEMENTATION NOTES
C.1	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Ag. Pest; Biological Agents; Coastal Storm; Drought; Earthquake; Flood; Landslide; Tsunami; Wildfire	Through newsletters, advertisements, speaking engagements and other public contacts, continue to educate the general public and key stakeholders on the issues, responsibilities, and current efforts and successes in the area of disaster mitigation and preparedness as they impact the community.	<b>Fire Department,</b> Administrative Department, Utilities Department, Facilities and Resource Department	Little to no cost; General funds	Medium	Ongoing	Annual Implementation. Ongoing, nothing additional to report.
C.2	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Ag. Pest; Biological Agents; Coastal Storm; Drought; Earthquake; Flood; Landslide; Tsunami; Wildfire	Utilize the CCSD, the Cambria CERT Team and the Cambria Fire Safe focus group social media venues to inform the public of hazard mitigation efforts, disaster preparedness messages, and emergency situation information. These social media venues will include educational components focused on adverse weather campaigning around mitigation toolkits property owners can take to minimize impacts during events, and information on where to go during extreme heat events, such as cooling centers. The focus groups will also promote education on high wind events, coastal hazards and sea level rise, and flood mitigation.	<b>Fire Department,</b> Administrative Department, Utilities Department, Facilities and Resource Department	Little to no cost; General funds	Low	Short-Term	Annual Implementation. Ongoing, nothing additional to report.
C.3	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Ag. Pest; Biological Agents; Coastal Storm; Drought; Earthquake; Flood; Landslide; Tsunami; Wildfire	Educate the planning staff, administrative staff and elected officials on the importance of keeping current on trends and developments in disaster mitigation and preparedness.	<b>Fire Department,</b> Administrative Department, Utilities Department, Facilities and Resource Department	Little to no cost; General funds	Medium	Medium-Term	Annual Implementation. Ongoing, nothing additional to report.
C.4*	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Ag. Pest; Biological Agents; Coastal Storm; Drought; Earthquake; Flood; Landslide; Tsunami; Wildfire	Encourage planning and administrative staff to attend seminars and lectures on naturally occurring hazards so that they may better assist the governing bodies as they process future development.	<b>Administrative Department,</b> Utilities Department, Facilities and Resource Department, Fire Department	Low; General Funds	Medium	Medium-Term	Annual Implementation. Ongoing, nothing additional to report.
C.5*	Earthquake, Flood, Tsunami, Wildfire	In order to better protect life and property, continue to develop a more accurate and comprehensive series of maps and data sets that pertain to the CCSD’s earthquake, wildfire, tsunami and flood threats.	<b>Administrative Department,</b> Utilities Department, Facilities and Resource Department, Fire Department	Low; General Funds	Medium	Ongoing	Annual Implementation. Ongoing, nothing additional to report.
C.6	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Ag. Pest;	Develop a Continuity of Operations Plan (COOP) for the CCSD’s and train all essential staff on their roles and responsibilities as delineated in the Plan.	<b>Fire Department,</b> Administrative Department, Utilities Department,	Low; General Funds	High	Medium-Term	Not Started. Ongoing, nothing additional to report.



MITIGATION ACTION NUMBER	PRIMARY HAZARD(S) MITIGATED	DESCRIPTIONS/BACKGROUND/BENEFITS	LEAD AGENCY & PARTNERS	ESTIMATED COST & POTENTIAL FUNDING SOURCES	2025 PRIORITY	TIMELINE	STATUS/IMPLEMENTATION NOTES
	Biological Agents; Coastal Storm; Drought; Earthquake; Flood; Landslide; Tsunami; Wildfire; Hazmat		Facilities and Resource Department				
C.7	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Biological Agents; Coastal Storm; Drought; Earthquake; Flood; Landslide; Tsunami; Wildfire; Hazmat	Update the existing District Operations Plans and supporting documents to ensure coordination with the County Department Operations Center (DOC)/Emergency Plans and Standard Operating Procedures (SOPs).	<b>Fire Department,</b> Administrative Department, Utilities Department, Facilities and Resource Department	Little to no cost; General funds	Medium	Ongoing	Annual Implementation. County Plan has been updated and adopted.
C.8	Adverse Weather: Thunderstorm; Adverse Weather: High Wind; Adverse Weather: Extreme Heat; Ag. Pest; Biological Agents; Coastal Storm; Drought; Earthquake; Flood; Landslide; Subsidence ; Tsunami; Wildfire	Train all CCSD department managers and key staff members on their roles and responsibilities in emergency management and the District DOC as outlined in independent study courses FEMA/National Incident Management System - ICS 100, 700, and 800.	<b>Fire Department,</b> Administrative Department, Utilities Department, Facilities and Resource Department	Little to no cost; General funds	High	Short-Term	Not Started. Plans are in place to begin development.
C.9	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Biological Agents; Coastal Storm; Earthquake; Flood; Landslide; Tsunami; Wildfire	Continue to train all CCSD first responders to the FEMA/National Incident Management System ICS 100, 200, 300, 700, and 800 levels.	<b>Fire Department</b>	Little to no cost; General funds	High	Ongoing	Not Started. Plans are in place to begin development.
C.10	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Biological Agents; Drought; Earthquake; Flood; Landslide; Tsunami; Wildfire; Hazmat	Develop an SOP, specific to each department, for guidance on response and coordination to major emergency events.	<b>Administrative Department,</b> Utilities Department, Facilities and Resource Department, Fire Department	Little to no cost; General funds	High	Medium-Term	In Progress. Updates are progressing and ongoing.
C.11	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Biological Agents; Earthquake; Flood; Landslide; Tsunami; Wildfire; Hazmat	Working with SLO County OES, increase participation by CCSD staff members in disaster drills put on by the County.	<b>Administrative Department,</b> Utilities Department, Facilities and Resource Department, Fire Department	Little to no cost; General funds	Medium	Short-Term	Annual Implementation. Ongoing, nothing additional to report.
C.12	Wildfire	Review the current configuration of the CCSD DOC at the fire station and make improvements as needed.	<b>Fire Department</b>	Low; General Funds	Medium	Short-Term	Not Started. Plans are in place to begin development.





MITIGATION ACTION NUMBER	PRIMARY HAZARD(S) MITIGATED	DESCRIPTIONS/BACKGROUND/BENEFITS	LEAD AGENCY & PARTNERS	ESTIMATED COST & POTENTIAL FUNDING SOURCES	2025 PRIORITY	TIMELINE	STATUS/IMPLEMENTATION NOTES
C.13	Wildfire	Study ways to improve the existing automatic aid and mutual aid agreements with CAL FIRE and neighboring first responders.	<b>Fire Department</b>	Little to no cost; General funds	Low	Short-Term	Annual Implementation. Ongoing, nothing additional to report.
C.14	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Biological Agents; Coastal Storm; Drought; Earthquake; Flood; Landslide; Tsunami; Wildfire; Hazmat	Continue to support the development of the CERT. Through newsletters, advertisements, speaking engagements and other public contacts, encourage the general public to take the basic CERT training.	<b>Fire Department, Administrative Department, Utilities Department, Facilities and Resource Department</b>	Little to no cost; General funds	Medium	Ongoing	In Progress. CERT has been updated and reinstated after a reorganization process.
C.15	Adverse Weather: High Wind; Wildfire	Train CERT team members in a Fire Watch program when a Red Flag warning is issued by the National Weather Service.	<b>Administrative Department, Utilities Department, Facilities and Resource Department, Fire Department</b>	Little to no cost; General funds	Medium	Short-Term	Annual Implementation. Ongoing, nothing additional to report.
C.16	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Biological Agents; Coastal Storm; Earthquake; Flood; Landslide; Tsunami; Wildfire; Hazmat	In order to ensure that employees are available to assist during a major emergency, have all CCSD departments adopt a Family Support Plan. (Note: A model plan is available through SLO County OES.)	<b>Utilities Department, Administrative Department, Facilities and Resource Department, Fire Department</b>	Low; General Funds, HMGP Grants	Medium	Ongoing	Annual Implementation. Ongoing, nothing additional to report.
C.17	Biological Agents	Support the efforts of the CCSD utilities division to better protect public health by initiating a Watershed Survey.	<b>Utilities Department, Administrative Department, Facilities and Resource Department, Fire Department</b>	General Fund, USDA Natural Resources Conservation Service (NRCS) Programs	Medium	Ongoing	Annual Implementation. Ongoing, nothing additional to report.
C.18*	Drought; Wildfire	Increase the water storage of the CCSD to ensure service for both fire protection and domestic consumption.	<b>Utilities Department, Administrative Department, Facilities and Resource Department, Fire Department</b>	General Fund, Water SMART Program	Low	Short-Term	Annual Implementation. Ongoing, nothing additional to report.
C.19	Drought; Wildfire	Improve the “purple pipe” recycled water system along Moonstone Drive so that it may be utilized for fire protection.	<b>Utilities Department</b>	General Fund, California Water Recycling Funding Program (WRFPP)	Medium	Short-Term	Annual Implementation. Ongoing, nothing additional to report.
C.20	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Biological Agents; Coastal Storm; Drought; Earthquake; Flood; Landslide; Tsunami; Wildfire	Develop a Master Plan for the CCSD’s communications systems.	<b>Administrative Department, Fire Department</b>	General Funds, California Advanced Services Fund (CASF) – Broadband Adoption Account	Medium	Medium-Term	Not Started. Plans are in place to begin development.



MITIGATION ACTION NUMBER	PRIMARY HAZARD(S) MITIGATED	DESCRIPTIONS/BACKGROUND/BENEFITS	LEAD AGENCY & PARTNERS	ESTIMATED COST & POTENTIAL FUNDING SOURCES	2025 PRIORITY	TIMELINE	STATUS/ IMPLEMENTATION NOTES
C.21	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Biological Agents; Coastal Storm; Drought; Earthquake; Flood; Landslide; Tsunami; Wildfire	Update the CCSD's radio system as outlined in the Communications Master Plan.	<b>Administrative Department, Fire Department</b>	General Funds, California Radio Interoperable System (CRIS), HSGP	Medium	Short-Term	Not Started. Plans are in place to begin development.
C.22	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Biological Agents; Coastal Storm; Drought; Earthquake; Flood; Landslide; Tsunami; Wildfire	Obtain and install another radio repeater, purchase additional radios support materials, and provide a standby power source, for the amateur radio group (ARES/RACES) to facilitate communications throughout the District.	<b>Fire Department</b>	General funds, Community Development Block Grant (CDBG) Program	Low	Ongoing	In Progress. SAFER Grant has been secured; funding is ending in June of 2025. Plans are to continue to seek additional grant funding or tax assessment to improve staffing.
C.23	Wildfire	Study and pursue funding sources to staff the fire department to a level of 4 firefighters 24 hrs. X 365 days.	<b>Fire Department</b>	Little to no cost; General funds	High	Short-Term	In Progress. Ongoing, nothing additional to report.
C.24	Adverse Weather: Thunderstorm, High Wind; Coastal Storm; Earthquake; Flood; Landslide; Tsunami; Wildfire; Hazmat	Promote firefighter training and involvement in the California Mutual Aid System as single resources.	<b>Utilities Department, SLO County</b>	Little to no cost; General funds	Low	Ongoing	Annual Implementation. Ongoing, nothing additional to report.
C.25	Flood	Maintain compliance with the NFIP requirements.	<b>Utilities Department, SLO County</b>	Little to no cost; General funds	Low	Medium-Term	Annual Implementation. Ongoing, nothing additional to report.
C.26*	Flood	Through the Development Review process, restrict construction of essential service facilities in the 100-year flood plain.	<b>Administrative Department, Utilities Department, Facilities and Resource Department, Fire Department</b>	Low; FMA, HMGP, General Funds	High	Ongoing	Annual Implementation. Ongoing, nothing additional to report.
C.27	Flood	Continue to work cooperatively with the county, state, and federal flood related agencies for funding improvements through grant and agency programs	<b>Fire Department</b>	Low; HMGP, General Funds	High	Ongoing	In Progress. Training is ongoing



MITIGATION ACTION NUMBER	PRIMARY HAZARD(S) MITIGATED	DESCRIPTIONS/BACKGROUND/BENEFITS	LEAD AGENCY & PARTNERS	ESTIMATED COST & POTENTIAL FUNDING SOURCES	2025 PRIORITY	TIMELINE	STATUS/ IMPLEMENTATION NOTES
C.28	Adverse Weather: Thunderstorm; Coastal Storm; Earthquake; Flood; Tsunami	Continue water rescue training for all first responders.	<b>Fire Department</b>	Low; General Funds, HMGP Grants, Boating Safety and Enforcement Equipment (BSEE) Grant Program, FEMA's Assistance to Firefighters Grant (AFG) , FEMA's Authorized Equipment List (AEL), HSGP	High	Medium-Term	In Progress. Plans are in place to secure funding for improved and updated equipment.
C.29	Adverse Weather: Thunderstorm; Coastal Storm; Earthquake; Flood; Tsunami	Write a grant to fund the purchase of a Personal Water Craft with rescue sled and related safety equipment and subsequently train first responders in its use.	<b>Fire Department</b>	Moderate; General Funds, HMGP Grants, BSEE Grant Program, FEMA AFG , FEMA AEL, HSGP	Medium	Medium-Term	Not Started. Plans are in place to secure funding for improved and updated equipment.
C.30	Adverse Weather: Thunderstorm; Coastal Storm; Earthquake; Flood; Tsunami	Purchase an inflatable rescue boat with motor to replace an existing unit that has reached the end of its recommended service life.	<b>Fire Department</b>	Little to no cost; General funds	High	Short-Term	Annual Implementation. Ongoing, nothing additional to report.
C.31*	Wildfire	Prevent wildfires through code enforcement efforts by working with Engine Company Captains to increase the education and enforcement of California Health and Safety Code Section 14875 and International Property Maintenance Code Section 302, in collaboration with the CAL FIRE enforcement of Public Resource Code 4291.	<b>Fire Department, SLO County Fire</b>	Little to no cost; General funds	High	Ongoing	Annual Implementation. Ongoing, nothing additional to report.
C.32*	Wildfire	In order to assist fire prevention efforts and to better manage large fires when they occur, continue to improve GIS mapping and tracking efforts by gathering and maintaining relevant GIS data layers and imagery and utilizing the best available mapping applications and software.	<b>Fire Department</b>	Little to no cost; General funds	High	Short-Term	Annual Implementation. Ongoing, nothing additional to report.
C.33*	Wildfire	Collaborate with property owners and regulatory agencies in order to utilize prescribed fire on private and state owned lands in the County areas that surround the District.	<b>Fire Department</b>	Little to no cost; General funds	High	Ongoing	Annual Implementation. Ongoing, nothing additional to report.



MITIGATION ACTION NUMBER	PRIMARY HAZARD(S) MITIGATED	DESCRIPTIONS/BACKGROUND/BENEFITS	LEAD AGENCY & PARTNERS	ESTIMATED COST & POTENTIAL FUNDING SOURCES	2025 PRIORITY	TIMELINE	STATUS/IMPLEMENTATION NOTES
C.34*	Wildfire	Work with the CCSD, Fire Safe Council, Cambria Focus Group, and the Cambria Forest Committee to reduce the wildfire threat by: <ul style="list-style-type: none"><li>· Supporting the ongoing aggressive efforts to reduce the fuel load problem through a variety of methods such as chipping, forest re-mulching, salvage logging, and hand clearing.</li><li>· Assisting in identifying and prioritizing treatment areas.</li><li>· Investigating additional funding sources for fuel reduction and forest management projects.</li><li>· Investigating additional funding sources for fuel reduction and forest management projects.</li><li>· Updating the Community Wildfire Protection Plans (Both District and County).</li><li>· Enhancing collaboration amongst all fire agencies and stakeholders.</li><li>· Support the development of a biomass cogeneration plant.</li></ul>	<b>Fire Department;</b> Administrative Department	Low; Fire Safe Grant, California Air Resource's Board (CARB) Carl Moyer Program, California State Water Resources Control Board Drinking Water State Revolving Fund (DWSRF), DWR Integrated Regional Water Management (IRWM) Grant Program; General Fund, CAL FIRE's Forest Health Grant Program,	High	Short-Term	In Progress. Ongoing, nothing additional to report.
C.35	Wildfire	Obtain a large portable water tank to improve water supply and storage for wildland firefighting through Fire Safe Council grant funds. (FOL-DA-TANK style)	<b>Fire Department</b>	Little to no cost; General funds	High	Short-Term	In Progress. Ongoing, nothing additional to report.
C.36	Wildfire	Replace the existing Type 3 Water Tender which has reached the end of its service life. (Note: Unit may also provide a funding source when utilized in the CA mutual aid system)	<b>Utilities Department</b>	Low; General Fund	Medium	Ongoing	Annual Implementation. Ongoing, nothing additional to report.
C.37*	Drought; Wildfire	Work with the District Water Department to improve fire flow, system reliability and redundancy, and improve the existing water supply in the District.	<b>Fire Department</b>	Low; AFG Program, CAL FIRE Volunteer Fire Capacity (VFC) Program	Medium	Short-Term	Not Started. Ongoing, nothing additional to report.
C.38*	Wildfire	Protect water conveyance system by reducing fuels adjacent to Covell and Fiscalini Ranch water tanks.	<b>Fire Department</b>	Moderate; AFG Program, HSGP	Medium	Medium-Term	Not Started. Ongoing, nothing additional to report.
C.39*	Ag. Pest; Drought; Wildfire	Implement the Cambria Forest Management Plan and pursue funding to hire a professional Forest Ecologist to manage the forest.	<b>Utilities Department,</b> Administrative Department	Low; CSTI Grant	Medium	Ongoing	In Progress. Training is ongoing
C.40*	Ag. Pest; Drought; Wildfire	Implement a weed abatement Best Practices program for the general public and weed abatement contractors.	<b>Fire Department,</b> SLO County OES, CCHD	Little to no cost; General funds	Medium	Medium-Term	Annual Implementation. Ongoing, nothing additional to report.
C.41	Earthquake	Perform seismic safety studies on the District's critical public safety facilities.	<b>Fire Department,</b> SLO County OES	Little to no cost; General funds	Medium	Short-Term	In Progress. Ongoing, nothing additional to report.



MITIGATION ACTION NUMBER	PRIMARY HAZARD(S) MITIGATED	DESCRIPTIONS/BACKGROUND/BENEFITS	LEAD AGENCY & PARTNERS	ESTIMATED COST & POTENTIAL FUNDING SOURCES	2025 PRIORITY	TIMELINE	STATUS/ IMPLEMENTATION NOTES
C.42	Earthquake	Working with SLO County OES, increase the public's awareness and participation in earthquake preparedness activities such as the annual Great California Shake-Out drill.	<b>Fire Department</b> , SLO County OES	Little to no cost; General funds	Medium	Ongoing	Not Started. Plans are in place to begin development.
C.43	Earthquake; Landslide	Continue to support the work of the District in replacing sewer and water lines that are most vulnerable to an earthquake or mudslide.	<b>Fire Department</b>	Low; CSTI Grant	High	Short-Term	In Progress. Training is ongoing
C.44	Adverse Weather: Thunderstorm; Earthquake; Wildfire	Train Fire Department staff in the California State Fire Marshal's Rescue System 1 and 2 programs.	<b>Fire Department</b> , SLO County OES	Low; FEMA AFG Program	Medium	Ongoing	In Progress. Plans are in place to begin development.
C.45	Earthquake	Purchase a heavy rescue cache/trailer for earthquake preparedness (tools, equipment, and supplies).	<b>Fire Department</b> , Tourism Board	Little to no cost; General funds	Medium	Short-Term	In Progress. Ongoing, nothing additional to report.
C.46	Earthquake	Annually, send two District management employees (non-fire) to the California Specialized Training Institute (CSTI) Introduction to Earthquake Management Course.	<b>Fire Department</b> , Cal Fire, San Luis Obispo County Fire Department, FEMA, Cal OES, Fire Equipment Manufacturers, Local Government and elected officials, Community Members and Local Organizations, Local Contractors and Mechanics	Very High; FEMA Hazard Mitigation Assistance Grant, Local Funds, In-Kind, Private Non-Profit	High	Long-Term	In Progress. Training is ongoing
C.47	Adverse Weather: Thunderstorm; Earthquake; Flood; Landslide; Wildfire	Work with County OES and the Cambria Community Healthcare District in developing an emergency operations plan to deal with the impacts of a Highway 1 and/or Highway 46 closure south of Cambria.	<b>Fire Department</b> , SLO County, Wireless Providers including Verizon, AT&T, T-Mobile, Etc.	Very High; FEMA Hazard Mitigation Assistance Grant, Local Funds, In-Kind, Private Non-Profit	High	Medium-Term	Annual Implementation. Ongoing, nothing additional to report.
C.48	Hazmat	Educate community members on the dangers associated with household hazardous materials including proper storage techniques.	<b>Fire Department</b> , SLO County, Wireless Providers including Verizon, AT&T, T-Mobile, Etc.	Very High; FEMA Hazard Mitigation Assistance Grant, Local Funds, In-Kind, Private Non-Profit	High	Long-Term	In Progress. Ongoing, nothing additional to report.





MITIGATION ACTION NUMBER	PRIMARY HAZARD(S) MITIGATED	DESCRIPTIONS/BACKGROUND/BENEFITS	LEAD AGENCY & PARTNERS	ESTIMATED COST & POTENTIAL FUNDING SOURCES	2025 PRIORITY	TIMELINE	STATUS/ IMPLEMENTATION NOTES
C.49	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Biological Incidents; Drought; Earthquake; Flooding; Landslides; Coastal Storm; Subsidence, Tsunami; Wildfire; Hazmat	Replacing or upgrading the fire station with a new, modern facility that is strategically located, built to current safety standards, and designed with resilient features will improve emergency response capabilities and community safety. The new station will be equipped with enhanced firefighting technology, provide adequate space for vehicles and equipment, and offer better protection for personnel during fire events. Additionally, the new station will be constructed with climate-resilient materials to ensure its continued operation in extreme conditions.	<b>Fire Department</b> , Cal Fire, San Luis Obispo County Fire Department, FEMA, Cal OES, Fire Equipment Manufacturers, Local Government and elected officials, Community Members and Local Organizations, Local Contractors and Mechanics	Very High; FEMA Hazard Mitigation Assistance Grant, Local Funds, In-Kind, Private Non-Profit	High	Long-Term	New in 2025
C.50	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Biological Agents; Drought; Earthquake; Flooding; Landslides; Coastal Storm; Tsunami; Wildfire; Hazmat	Increase alert capabilities by enhancing the cellular network infrastructure to ensure dependable coverage, particularly for emergency situations. The cellular service in the Cambria area is currently inadequate, resulting in poor signal coverage, dropped calls, and slow data speeds. Key steps include tower upgrades and new installations, expanding coverage in high-risk areas, increasing collaboration with emergency response teams, and taking steps to ensure reliable communication during disasters.	<b>Fire Department</b> , SLO County, Wireless Providers including Verizon, AT&T, T-Mobile, Etc.	Very High; FEMA Hazard Mitigation Assistance Grant, Local Funds, In-Kind, Private Non-Profit	High	Medium-Term	New in 2025
C.51	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Biological Agents; Drought; Earthquake; Flooding; Landslides; Coastal Storm; Tsunami; Wildfire; Hazmat	Enhanced Evacuation Route Development and Traffic Management Through Technology in Collaboration with SLO County. The community is highly susceptible to wildfires due to its proximity to dry vegetation, rugged terrain, and seasonal weather conditions. Inadequate evacuation routes, limited communication during emergencies, and insufficient infrastructure for quick response make it difficult to effectively manage wildfire threats. This can be achieved through evacuation route planning and road widening, roadside brushing and fuel reductions, improved traffic management systems, and improved communication networks.	<b>Fire Department</b> , SLO County, Wireless Providers including Verizon, AT&T, T-Mobile, Etc.	Very High; FEMA Hazard Mitigation Assistance Grant, Local Funds, In-Kind, Private Non-Profit	High	Long-Term	New in 2025



MITIGATION ACTION NUMBER	PRIMARY HAZARD(S) MITIGATED	DESCRIPTIONS/BACKGROUND/BENEFITS	LEAD AGENCY & PARTNERS	ESTIMATED COST & POTENTIAL FUNDING SOURCES	2025 PRIORITY	TIMELINE	STATUS/ IMPLEMENTATION NOTES
C.52	Adverse Weather: High Wind/Tornado	Support Structural Home Hardening program that supports retrofits of homes and critical infrastructure in the CCSD. Hardening methods could include installing wind-resistant roofing, shutters, and anchoring systems on homes. The CCSD and County could work together to explore inventive programs or rebates for installing upgraded roofing, window, and ember-resistant vents on homes.	<b>Fire Department</b> , SLO County, PG&E, Fire Safe Council of SLO County, CAL FIRE	Very High; FEMA Hazard Mitigation Assistant Grant, CAL FIRE Fire Prevention Grants Program, California Fire Safe Councils Grants, Community Power Resiliency Program,	Medium	Medium-Term	New in 2025
C.53	Adverse Weather: Extreme Heat	Establish a local Cooling Center in an existing community center or library in Cambria that can serve as an accessible shelter during heat waves and equip the center with backup power, water stations, and stable communication systems.	<b>Administration Department</b> , SLO County OES and Public Health Department, Tourism Board,	Moderate; FEMA HMGP, Cal OES – Community Resilience Grants, California Climate Investments, Low-Income Weatherization Program	Low	Medium-Term	New in 2025



## **I.6 Implementation and Maintenance**

Moving forward, the CCSD will use the mitigation action table in the previous section to track progress on implementation of each project. Implementation of the plan overall is discussed in Section 8 in the Base Plan.

### **I.6.1 Incorporation into Existing Planning Mechanisms**

The information in this plan, including the results of the Vulnerability Assessment and the Mitigation Strategy, will inform the development of local plans, programs and policies. A thorough understanding of the hazards facing the jurisdiction as well as its specific vulnerabilities, will support future capital improvement planning for the CCSD. As outlined in Section 8: Implementation and Monitoring, CCSD representatives (CCSD Planning Team) on the HMPC will report on efforts to incorporate the Hazard Mitigation Plan into relevant local initiatives. These efforts will be reviewed and discussed during the annual HMPC plan review meeting.

### **I.6.2 Monitoring, Evaluation and Updating the Plan**

The CCSD will follow the procedures to monitor, review, and update this plan in accordance with San Luis Obispo County as outlined in Section 8 of the Base Plan. The CCSD will continue to involve the public in mitigation, as described in Section 8.3 of the Base Plan. The CSD General Manager will be responsible for representing the Community Services District in the county HMPC, and for coordination with county staff and departments during plan updates. The CCSD realizes it is important to review the plan regularly and update it every five years in accordance with the Disaster Mitigation Act Requirements as well as other State of California requirements.



## Annex J Ground Squirrel Hollow Community Services District

### J.1 District Profile

#### J.1.1 Mitigation Planning History and 2025 Process

This annex was updated in 2025 to build upon the previous version created for the 2019 San Luis Obispo Hazard Mitigation Plan update and integrated the previous MJHMP. Table J-1 were the representatives for the District on the County HMPC as the Ground Squirrel Hollow Community Services District Local Planning Team. The local (District) Planning Team will be responsible for implementation and maintenance of the plan. See Table J-1 for more information on the local Planning Team.

**Table J-1 Ground Squirrel Hollow CSD Hazard Mitigation Plan Planning Team**

DEPARTMENT	TITLE
Administration	General Manager
Administration	Administrative Manager
Administration	District Engineer
Operations	Operations Manager

Additionally, the plan must document opportunities for neighboring communities, local and regional agencies involved in hazard mitigation activities, agencies with the authority to regulate development, as well as businesses, academia, and other private and non-profit interests, to actively participate in the planning process. Stakeholder groups are listed below in Table J-2.

More details on the planning process and how the jurisdictions, services districts and stakeholders participated can be found in Chapter 3 of the Base Plan, along with how the public was involved during the 2025 update.

**Table J-2 Ground Squirrel Hollow CSD Stakeholder Groups, Neighboring Communities, and Local Agencies**

STAKEHOLDER CATEGORY	ORGANIZATION
Agencies involved in hazard mitigation activities:	County Planning and Building
Agencies that have the authority to regulate development:	County Planning and Building
Neighboring Communities:	County Planning and Building
Representatives of business academia, and other private orgs:	Atascadero Unified School District
Representatives supporting underserved communities:	Community Action Partnership of SLO

#### J.1.2 District Overview

Ground Squirrel Hollow is a rural community located about ten miles east of the City of Paso Robles. The Ground Squirrel Hollow Community Services District was established in June 2004 for the purpose of providing road maintenance services to residents within its respective boundaries. In March 2014, the District began providing solid waste services to residents located within its boundaries. The District strives to provide these services in the most cost-



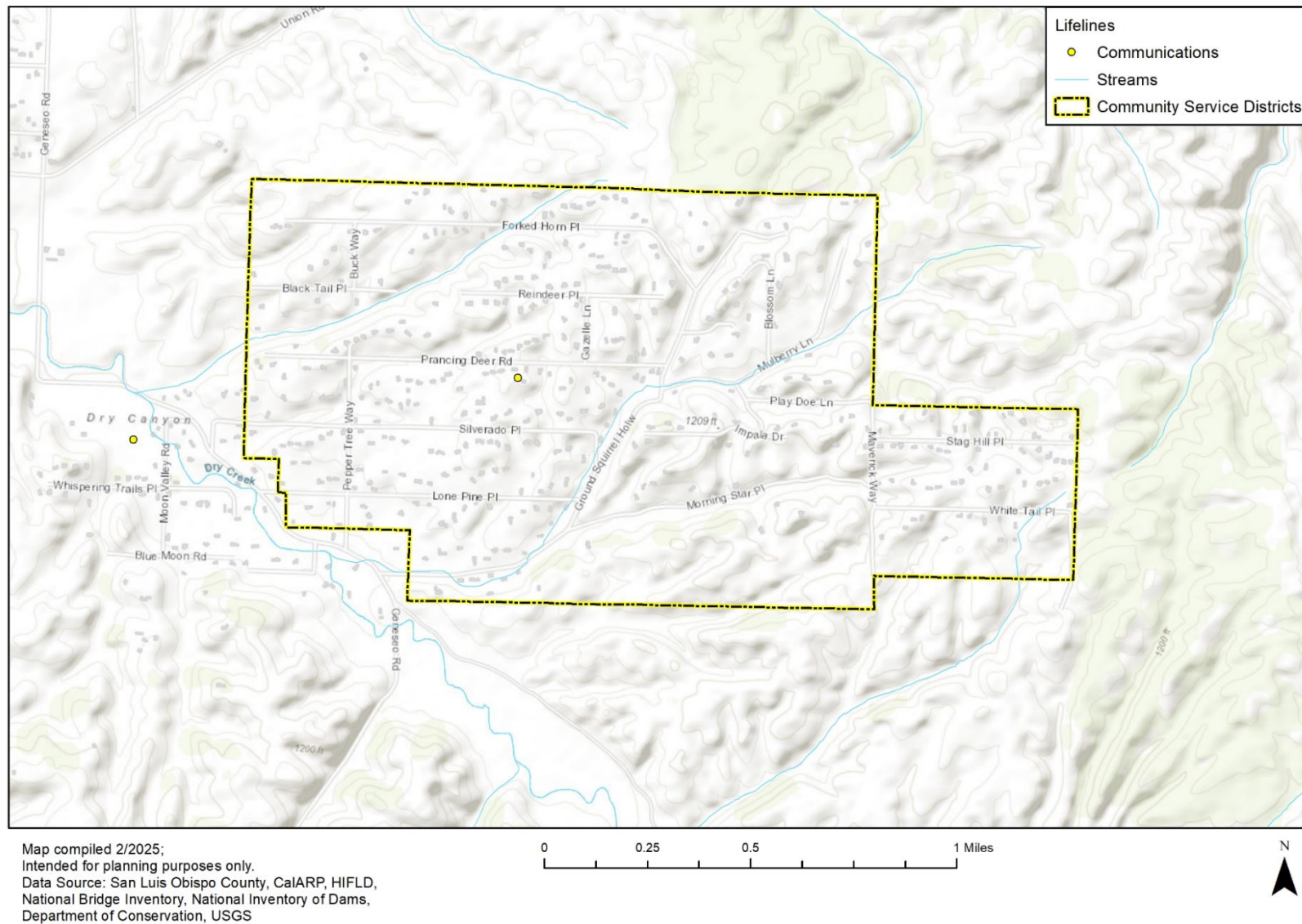
effective and efficient manner possible. The District is governed by an elected Board of Directors and is managed by a general manager and a member of the County Board of Supervisors. The District serves 375 homes within its boundaries. Figure J-1 shows the Ground Squirrel Hollow Community Services District (CSD) boundaries.

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Figure J-1 Ground Squirrel Hollow Community Services District





### J.1.3 Development Trends

The District is almost 70% developed, with 375 of the 525 rural residential parcels within the Ground Squirrel Hollow CSD having been developed. The Planning Team noted that several of the undeveloped parcels do not have frontage on an improved road. Developing those parcels would require building the necessary access to minimum District standards (20' wide double chip seal), and the District would then take ownership and maintain the road in perpetuity. There have been no development since the last plan update in 2019 that have changed vulnerability to hazards.

### J.1.4 Other Community Planning Efforts

Coordination and synchronization with other community planning mechanisms and efforts are vital to the success of this plan. To have a thorough evaluation of hazard mitigation practices already in place, appropriate planning procedures should also involve identifying and reviewing existing plans, policies, regulations, codes, tools, and other actions designed to reduce a community's risk and vulnerability from natural hazards.

As an unincorporated community, the Ground Squirrel Hollow CSD is referenced in other County planning documents and regulated by County policies and planning mechanisms. Integrating existing planning efforts, mitigation policies, and action strategies into this annex establishes a credible, comprehensive document that weaves the common threads of a community's values together. The development of this jurisdictional annex involved a comprehensive review of existing plans, studies, reports, and initiatives from San Luis Obispo County and the Ground Squirrel Hollow community that relate to hazards or hazard mitigation. A high-level summary of the key plans, studies and reports is summarized in Table J-3. Information on how they informed the update are noted and incorporated where applicable.

**Table J-3 Summary of Review of Key Plans, Studies and Reports**

PLAN, STUDY, REPORT NAME	HOW THE DOCUMENT INFORMED THIS ANNEX
County of San Luis Obispo Local Hazard Mitigation Plan (2019)	Informed past hazard event history.
Unit Strategic Fire Plan – CAL FIRE/San Luis Obispo County Fire (2018)	Informed wildfire vulnerability assessment
Community Wildfire Protection Plan – San Luis Obispo County (2019)	Informed wildfire vulnerability assessment

The Ground Squirrel Hollow CSD District Codes are the main planning mechanism to regulate development within the District's boundaries. In addition to the standards within the District Code, the following planning mechanisms regulate future and existing development and activities within the Ground Squirrel Hollow CSD planning area.

- California Government Code Section 61100(c)
- California Government Code Section 61100(i)
- Solid Waste Disposal Code of Ordinances
- Ground Squirrel Hollow CSD Developer's Guide
- Various Ground Squirrel Hollow CSD Resolutions
- San Luis Obispo County Public Improvement Standards



Refer to Section J.4 as well as the Base Plan for more information on the plans, policies, regulations and staff that govern the Ground Squirrel Hollow CSD.

## J.2 Hazard Identification and Summary

The Ground Squirrel Hollow CSD planning team identified the hazards that affect the District and summarized their frequency of occurrence, spatial extent, potential magnitude, and significance specific to the Ground Squirrel Hollow CSD (see Table J-4). There are no hazards that are unique to the District.

**Table J-4 Ground Squirrel Hollow CSD – Hazard Summaries**

HAZARD	GEOGRAPHIC AREA	PROBABILITY OF FUTURE OCCURRENCE	MAGNITUDE/ SEVERITY (EXTENT)	OVERALL SIGNIFICANCE
Adverse Weather: Thunderstorm/ Heavy Rain/ Lightning/ Freeze/ Hail/ Dense Fog	Limited	Likely	Negligible	Medium
Adverse Weather: High Wind and Tornado	Limited	Likely	Negligible	Medium
Adverse Weather: Extreme Heat	Limited	Likely	Negligible	Medium
Landslides and Debris Flow	Significant	Likely	Critical	Medium
Earthquake	Limited	Occasional	Negligible	Medium
Wildfire	Extensive	Occasional	Critical	High
<b>Geographic Area</b> Limited: Less than 10% of planning area Significant: 10-50% of planning area Extensive: 50-100% of planning area  <b>Probability of Future Occurrences</b> Highly Likely: Near 100% chance of occurrence in next year or happens every year. Likely: Between 10 and 100% chance of occurrence in next year or has a recurrence interval of 10 years or less. Occasional: Between 1 and 10% chance of occurrence in the next year or has a recurrence interval of 11 to 100 years. Unlikely: Less than 1% chance of occurrence in next 100 years or has a recurrence interval of greater than every 100 years.		<b>Magnitude/Severity (Extent)</b> Catastrophic—More than 50 percent of property severely damaged; shutdown of facilities for more than 30 days; and/or multiple deaths Critical—25-50 percent of property severely damaged; shutdown of facilities for at least two weeks; and/or injuries and/or illnesses result in permanent disability Limited—10-25 percent of property severely damaged; shutdown of facilities for more than a week; and/or injuries/illnesses treatable do not result in permanent disability Negligible—Less than 10 percent of property severely damaged, shutdown of facilities and services for less than 24 hours; and/or injuries/illnesses treatable with first aid  <b>Significance</b> Low: minimal potential impact Medium: moderate potential impact High: widespread potential impact		

## J.3 Vulnerability Assessment

The intent of this section is to assess the Ground Squirrel Hollow Community Services District's vulnerability separately from that of the planning area, which has already been assessed in Section 5 Hazard Identification and Risk Assessment (HIRA) in the base plan. This vulnerability



assessment analyzes the population, property, and other assets at risk to hazards ranked of medium or high significance.

The information to support the HIRA portion of this Annex was collected through a Data Collection Guide, which was distributed to each participating municipality or district to complete during the planning process. Information collected was analyzed and summarized in order to identify and rank all the hazards that could impact anywhere within the County, as well as to rank the hazards and identify the related vulnerabilities unique to each jurisdiction/district. In addition, the Ground Squirrel Hollow CSD Planning Team members were asked to share information on past significant hazard events that have affected the District.

Each participating jurisdiction and district were in support of the main hazard summary identified in the Base Plan (See Chapter 5). However, the hazard summary rankings for each jurisdictional annex may vary slightly due to specific hazard risk and vulnerabilities unique to that jurisdiction (See Table J-4). Identifying these differences helps the reader to differentiate the jurisdiction's risk and vulnerabilities from that of the overall County.

Note: The hazard "significance" reflects overall ranking for each hazard and is based on the Ground Squirrel Hollow CSD planning team input from the Data Collection Guide and the risk assessment results compiled during the planning process (see Chapter 5 of the Base Plan), which included more detailed quantitative analyses with best available data.



### J.3.1.1 Other Hazards

The following hazards identified in the base plan HIRA are not identified within the jurisdictional annex due to low or no risk or significant anticipated impact and are not further considered for vulnerability assessment or mitigation actions:

- Agricultural Pest Infestation and Plant Disease/ Marine Invasive Species
- Biological Agents
- Dam failure
- Drought
- Earthquakes
- Flooding
- Subsidence
- Tsunami and Seiches
- Coastal Storm/Coastal Erosion/Sea Level Rise

### J.3.2 Assets at Risk

This section considers the District's assets at risk, including values at risk, critical facilities and infrastructure, historic assets, economic assets, and growth and development trends. See Section 5.2 of the Base Plan (Asset Summary) for more details and background on the parcel summarization, analysis, and datasets available.

#### J.3.2.1 Values at Risk

This section considers Ground Squirrel Hollow's assets at risk, including an inventory of improved properties and critical facilities and Community Lifelines, and historic, economic, cultural, and environmental assets. Please refer to Section 5.2.2 of the base plan for a detailed description of the methodology used. Table J-5 shows the exposure of properties (e.g., the values at risk) broken down by property type for the Ground Squirrel Hollow Community Services District.

**Table J-5 Ground Squirrel Hollow CSD Exposure by Property Types**

PROPERTY TYPE	STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE
Mobile Home	18	\$3,097,524	\$1,548,762	<b>\$4,646,286</b>
Residential	363	\$114,373,566	\$57,186,783	<b>\$171,560,349</b>
Vacant Improved	2	\$171,002	\$171,002	<b>\$342,004</b>
<b>Total</b>	<b>383</b>	<b>\$117,642,092</b>	<b>\$58,906,547</b>	<b>\$176,548,639</b>

Source: San Luis Obispo County Assessor Data November 15, 2024, WSP GIS Analysis

#### J.3.2.2 Critical Facilities and Infrastructure

A critical facility is defined as one that is essential in providing utility or direction either during the response to an emergency or during the recovery operation.

An inventory of critical facilities in the district is provided in Table J-6 as well as illustrated in Figure J-1. Refer to Section 5.2 of the Base Plan for more information on the Assets used throughout this annex, including the definitions and categories of critical facilities, and the County-wide analyses.



**Table J-6 Ground Squirrel Hollow CSD Critical Facilities Assets Summary by FEMA Lifeline**

FEMA LIFELINE CATEGORY	COUNTS
Communications	1
Energy	-
Food, Hydration, Shelter	-
Hazardous Material	-
Health and Medical	-
Safety and Security	-
Transportation	-
Water Systems	-
Total	1

Source: San Luis Obispo County, CalARP, HIFLD, National Bridge Inventory, National Inventory of Dams, FCWCD, WSP Analysis

### *J.3.2.3 Transportation and Lifeline Facilities*

The Ground Squirrel Hollow Planning Team identified the road system, with a replacement value of \$3 million, as critical to the community. Prior to a January 2017 storm, half of the District's roads were constructed from Class II Base material and required substantial and expensive maintenance. In 2017, the District secured private financing and constructed the Chip Seal Project, which added base and an asphalt double-chip seal to those roads. Despite being better protected from winter weather, all the District's roads will need periodic maintenance (chip seal, cape seal, and/or fog seal overlays) from time to time in order to achieve a life expectancy beyond the payback period of the financing. One concern of the Planning Team is that available funding will not be adequate to provide the needed maintenance, or that the District will not be able to afford a similar project in the future due to rising costs and limited funding.

### *J.3.2.4 Historic and Cultural Resources*

No historic or cultural resources have been identified in the Ground Squirrel Hollow CSD.

### *J.3.2.5 Natural Resources*

Natural resources are important to include in benefit-cost analyses for future projects and may be used to leverage additional funding for projects that also contribute to community goals for protecting sensitive natural resources. Awareness of natural assets can lead to opportunities for meeting multiple objectives. For instance, protecting wetlands areas protects sensitive habitat as well as attenuates and stores floodwaters.

### *J.3.2.6 Economic Assets*

Ground Squirrel Hollow is a residential area, and there is very little commercial development.

## **J.3.3 Estimating Potential Losses**

Note: This section details vulnerability to specific hazards of high or medium significance, where quantifiable, and/or where (according to Planning Team input) it significantly differs from that of the overall County.

Table J-5 under Section J.3.2 summarizes Ground Squirrel Hollow's exposure in terms of number and value of parcels falling within the District's boundaries. San Luis Obispo County's parcel and assessor data was used to calculate the improved value of parcels, using ParcelQuest's spatial layers on parcel geometry. The most vulnerable structures are those in the parcels within hazard threat areas such as unreinforced masonry buildings, and buildings built prior to the introduction of modern-day building or land regulatory codes. Impacts of past events and vulnerability to specific hazards are further discussed below as particular to each



hazard. See Section 5 of the Base Plan for more information on assets, parcel analysis methodology, and hazard profiles.

### J.3.3.1 Adverse Weather: Thunderstorm/ Heavy Rain/ Lightning/ Freeze/ Hail/ Dense Fog

Ground Squirrel Hollow's risk and vulnerability to this hazard does not differ substantially from that of the County, so adverse weather was rated as **Medium** Significance for the District. The District experiences similar patterns of seasonal weather, including occasional winter storms that brings periods of heavy rainfall and the potential for localized flooding. Thunderstorms and lightning are infrequent but can occur, sometimes bringing hail and brief downpours. The area receives about 14 inches of precipitation annually, most of which occurs in the wintertime. The tables below shows key climate variables such as extreme temperatures, precipitation totals, and the frequency of specific weather events. Refer to Section 5.3.1 of the Base Plan for additional information on the risk adverse weather poses the County of San Luis Obispo.

**Table J-7 Paso Robles Climate Summary Table - Weather (Period of Record: 01/01/1894 - 04/15/2025)**

SUMMARY PERIOD	MONTHLY MEAN MAXIMUM TEMP.	MONTHLY MEAN MINIMUM TEMP.	DAILY EXTREME HIGH TEMP	DAILY EXTREME HIGH DATE	DAILY EXTREME LOW TEMP	DAILY EXTREME LOW DATE	MAXIMUM TEMP. ≥ 90°F MEAN # DAYS	MINIMUM TEMP. ≤ 32°F MEAN # DAYS
Winter	61.9 °F	33.9 °F	87 °F	12/4/1958	0 °F	1/6/1913	0	41.7
Spring	73.2 °F	41 °F	110 °F	5/31/1910	20 °F	3/2/1971	6.5	7.9
Summer	90.8 °F	49.6 °F	117 °F	8/13/1933	31 °F	6/15/1973	54.5	0
Fall	79.7 °F	41.8 °F	115 °F	9/7/2020	14 °F	11/17/1958	21.1	12.6
Annual	76.5 °F	41.6 °F	117 °F	8/13/1933	0 °F	1/6/1913	82.4	63.2

Source: Western Regional Climate Center (WRCC) <https://wrcc.dri.edu/>

\* Winter is defined as December, January, and February

\*\* Summer is defined as June, July, and August

**Table J-8 Paso Robles Climate Summary Table - Precipitation (Period of Record: 01/01/1894 - 04/15/2025)**

SUMMARY PERIOD	PRECIP. MEAN	PRECIP. HIGH	PRECIP. HIGH YEAR	PRECIP. LOW	PRECIP. LOW YEAR	PRECIP. 1 DAY MAXIMUM	PRECIP. 1 DAY MAXIMUM DATE	PRECIP. ≥ 1.00 IN. MEAN # DAYS
Winter	9.06 in.	26.18 in.	1969	2.03 in.	1964	5.25 in.	12/6/1966	2.4
Spring	3.77 in.	12.84 in.	1995	0 in.	1997	4.7 in.	3/10/1995	0.7
Summer	0.13 in.	2.82 in.	2015	0 in.	1900	2.29 in.	7/19/2015	0
Fall	2.07 in.	7.64 in.	1900	0.02 in.	1980	3.88 in.	10/14/2009	0.3
Annual	14.88 in.	29.19 in.	1941	2.78 in.	2013	5.25 in.	12/6/1966	3.5

Source: Western Regional Climate Center (WRCC) <https://wrcc.dri.edu/>

\* Winter is defined as December, January, and February

\*\* Summer is defined as June, July, and August

### J.3.3.2 Adverse Weather: High Wind and Tornado

The overall significance of high wind and tornadoes in Ground Squirrel Hollow CSD is rated **medium**, primarily due to frequent high wind events. These winds, often associated with winter storms or pressure system shifts, can lead to minor property damage, downed trees or limbs, and localized power outages. While tornadoes are extremely rare in the region, there was a rare occurrence of an EF1 tornado that touched down in Los Osos in 2024, highlighting the potential of this hazard in the area.



### *J.3.3.3 Adverse Weather: Extreme Heat*

Extreme heat is a **medium** significance hazard for the Ground Squirrel Hollow CSD. The monthly mean summer temperature for Paso Robles, the closest NOAA weather station to the Ground Squirrel Hollow CSD, is 90.8°F; however, temperatures up to 117°F have been recorded (see Table J-7). Additionally, rising temperatures and more frequent heat waves are increasing the likelihood of more extreme heat events in the future.

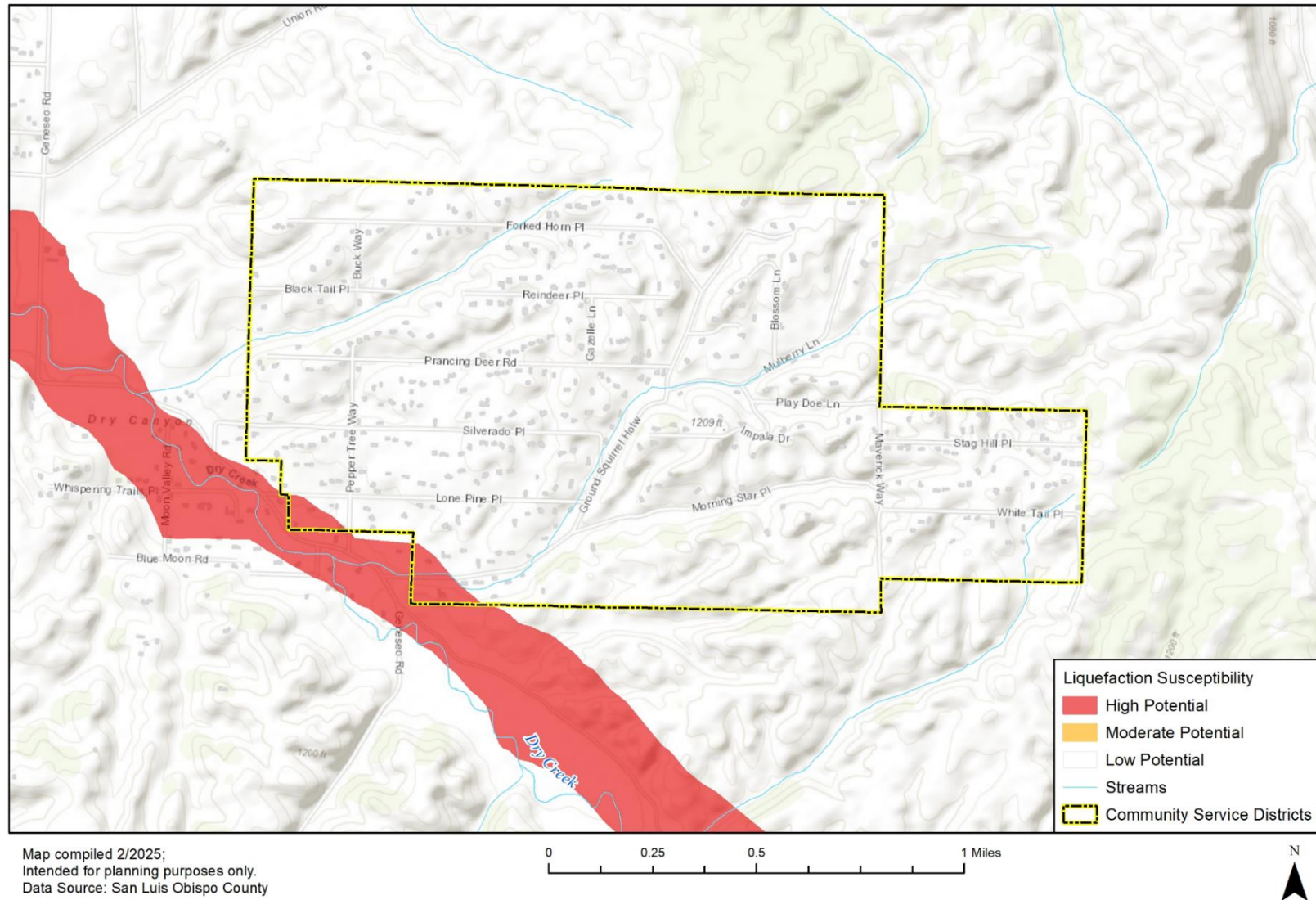
Extreme heat poses several challenges to the CSD's operations. Prolonged high temperatures can cause asphalt to soften and degrade, leading to cracking, and faster deterioration of paved roads, while unpaved roads can become increasingly dusty and unstable, increasing road maintenance needs. Solid waste facilities and operations can also be affected, as heat accelerates the decomposition of organic materials, increasing the risk of fire, particularly at landfills and transfer stations. Fire hazards also increase along collection routes and storage areas under dry, hot conditions. Additionally, extreme heat presents health risks for field crews working outdoors which can lead to heat-related illness, potentially disrupting routine services, delaying maintenance, waste collection, and emergency response operations.

### *J.3.3.4 Earthquake and Liquefaction*

Earthquake hazards, specifically liquefaction was rated as **Medium Significance** for the District. There are no mapped active or potentially active faults in the Ground Squirrel Hollow planning area. Despite this, the area is exposed to seismic hazards from movement along several regional faults and is at more or less the same level of risk for damage as other communities in San Luis Obispo County from ground shaking triggered by any earthquakes that impact the county. As shown in Figure J-2, the southwestern corner of the CSD's boundaries near Dry Creek is at high risk of liquefaction as a result of an earthquake event.



Figure J-2 Liquefaction Risk in Ground Squirrel Hollow Community Services District





Residential properties are the only properties at risk of liquefaction. There are six residential properties in total within the high-risk liquefaction zone which have an improved value of over \$1.5 million.

### *J.3.3.5 Landslides and Debris Flows*

Landslides and debris flow were rated as a **medium** significance for the Ground Squirrel Hollow CSD and noted by the Planning team as being highly likely to occur. The entire community service district besides areas along the Dry Creek has a moderate potential for landslides. All properties located in the moderate landslide potential zone are detailed in Figure J-3 below. The areas that do not have landslide risk do however have high liquefaction risk, as shown in Figure J-2 in the Earthquake and Liquefaction section.

As shown in Table J-9 about one-third of the district, particularly the eastern portion, is at moderate a risk of landslide. According to the GIS analysis, 377 properties with a total value of over \$174 million are at moderate risk of landslides. Of those properties, 357 residential properties are most vulnerable to landslides events. There is also 1 critical facility in Ground Squirrel Hollow that is moderately exposed to landslides.

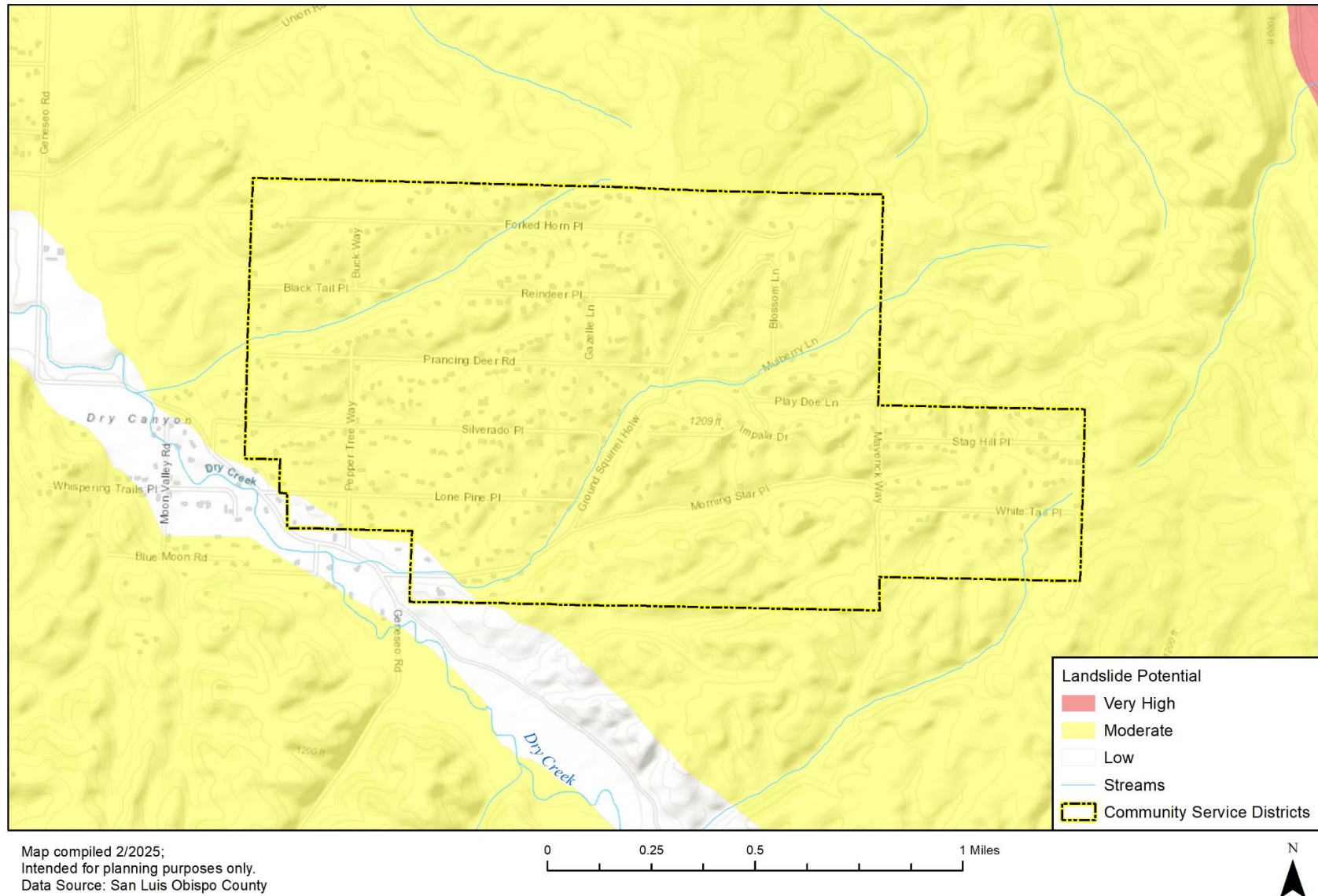
**Table J-9 Ground Squirrel Hollow Improved Properties Exposed to Exposed to Landslide Potential by Property Type**

PROPERTY TYPE	TOTAL STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATION
Mobile/Manufactured Homes	18	\$3,097,524	\$1,548,762	\$4,646,286	44
Residential	357	\$112,811,012	\$56,405,506	\$169,216,518	882
Vacant Improved	2	\$171,002	\$0	\$171,002	-
Total	377	\$116,079,538	\$57,954,268	\$174,033,806	926





Figure J-3 Landslide Potential Areas in Ground Squirrel Hollow Community Services District





### **J.3.3.6 Wildfire**

The San Luis Obispo County's 2019 Community Wildfire Protection Plan (CWPP) divides the County into multiple planning areas to facilitate localized pre-fire planning efforts. The Ground Squirrel Hollow community is within Planning Area 5. The main fuel type in this planning area is grassland and the CWPP states that there no history of large fires or extended attack. The overall significance rating for wildfire in Ground Squirrel Hollow CSD is rated as a high significance.

GIS analysis shows the critical facilities in Ground Squirrel Hollow CSD that are exposed to fire hazard severity, categorizing them by severity level and facility type. The exposure of these critical assets to wildfire hazards poses significant risks to communications. GIS analysis shows that there is a total of one (1) critical facilities that fall in the very high fire severity zone rating and none that fall into the high or moderate fire hazard severity zone rating.

In Ground Squirrel Hollow CSD, 383 properties are situated within wildfire hazard exposure zones ranging from moderate to very high risk. Of these, all properties are located in the High Fire Severity Zone, while none are located in the very high or moderate fire hazard severity zone. These properties represent a total assessed value of \$176,377,637 and impact approximately 941 residents across the fire hazard severity zones. Table J-10 shows the properties in the district exposed to Fire Hazard Severity Zones. Figure J-4 depicts the Fire Hazard Severity Zones in Ground Squirrel Hollow CSD.



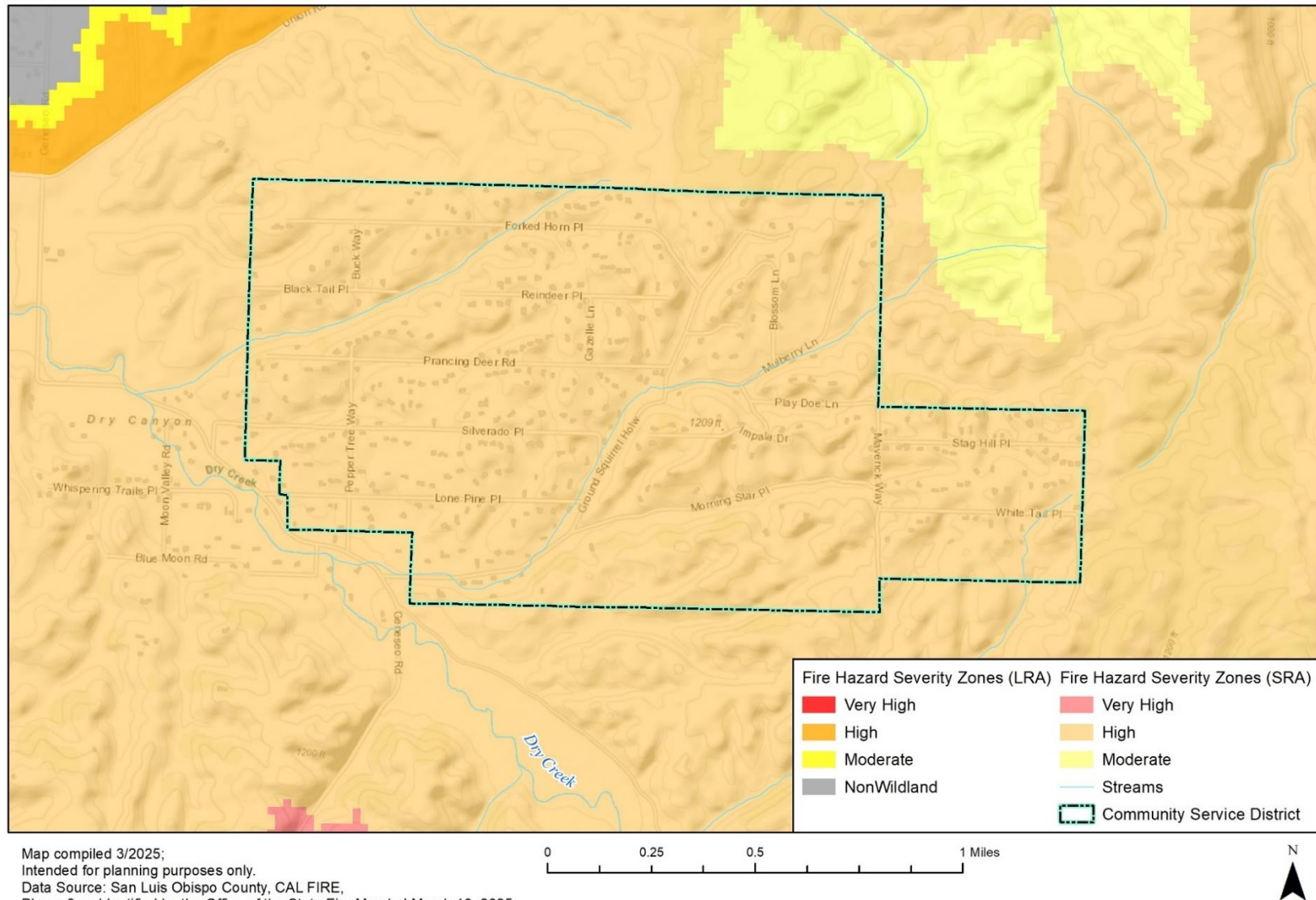
**Table J-10 Ground Squirrel Hollow CSD Improved Properties Exposed to Fire Hazard Severity Zones by Property Type**

PROPERTY TYPE	STRUCTURE COUNT VERY HIGH	STRUCTURE COUNT HIGH	STRUCTURE COUNT MODERATE	TOTAL STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATION
Mobile/Manufactured Homes	-	18	-	<b>18</b>	\$3,097,524	\$1,548,762	\$4,646,286	44
Residential	-	363	-	<b>363</b>	\$114,373,566	\$57,186,783	\$171,560,349	897
Vacant Improved	-	2	-	<b>2</b>	\$171,002	\$0	\$171,002	-
<b>Total</b>	<b>0</b>	<b>383</b>	<b>0</b>	<b>383</b>	<b>\$117,642,092</b>	<b>\$58,735,545</b>	<b>\$176,377,637</b>	<b>941</b>

Source: San Luis Obispo Assessor Data November 15, 2024, CAL FIRE - FHSZ Phase 3 March 10, 2025, WSP GIS Analysis



Figure J-4 Fire Hazard Severity Zones in Ground Squirrel Hollow Community Services District





## J.4 Capability Assessment

Capabilities are the programs and policies currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. This capability assessment is divided into five sections: regulatory mitigation capabilities, administrative and technical mitigation capabilities, fiscal mitigation capabilities, mitigation outreach and partnerships, and other mitigation efforts.

To develop this capability assessment, the jurisdictional planning representatives used a matrix of common mitigation activities to inventory which of these policies or programs were in place. The team then supplemented this inventory by reviewing additional existing policies, regulations, plans, and programs to determine if they contributed to reducing hazard-related losses.

During the plan update process, this inventory was reviewed by the jurisdictional planning representatives and Wood consultant team staff to update information where applicable and note ways in which these capabilities have improved or expanded. In summarizing current capabilities and identifying gaps, the jurisdictional planning representatives also considered their ability to expand or improve upon existing policies and programs as potential new mitigation strategies. The Ground Squirrel Hollow CSD capabilities are summarized below.

### J.4.1 Regulatory Mitigation Capabilities

Table J-11 identifies existing regulatory capabilities the District has in place to help with future mitigation efforts. Note, many of the regulatory capabilities that can be used for the District are within the County's jurisdiction. Refer to Section 6 Capability Assessment of the Base Plan for specific information related to the County's mitigation capabilities.

**Table J-11 Ground Squirrel Hollow CSD Regulatory Mitigation Capabilities**

REGULATORY TOOL	YES/NO	COMMENTS
General plan	Yes	County
Zoning ordinance	Yes	County
Subdivision ordinance	No	
Growth management ordinance	No	County has land use authority.
Floodplain ordinance	Yes	County
Other special purpose ordinance (stormwater, water conservation, wildfire)	No	
Building code	Yes	County
Fire department ISO rating	No	Refer to County Fire/Cal Fire.
Erosion or sediment control program	No	County may have authority for program.
Stormwater management program	No	County may have authority for program.
Site plan review requirements	Yes	County is supposed to refer development plans to us for review, but it almost never happens.
Capital improvements plan	Yes	We have a draft road system master plan, which we use as a guide for spending maintenance moneys.
Economic development plan	No	
Local emergency operations plan	Yes	County
Other special plans	Yes	Ground Squirrel Hollow Specific Plan
Flood Insurance Study or other engineering study for streams	Yes	County





REGULATORY TOOL	YES/NO	COMMENTS
Elevation certificates (for floodplain development)	Yes	County

#### J.4.2 Discussion on Existing Building Codes, Land Use and Development Regulations

Ground Squirrel Hollow CSD operates within the framework of county-adopted building codes and land use regulations, as it does not have its own municipal code or planning authority. Building construction in the area must comply with the California Building Standards Code (Title 24), which is adopted and enforced by the San Luis Obispo County Planning and Building Department. Land use within GSHCSD is governed by the San Luis Obispo County General Plan and the Land Use Ordinance (Title 22), which designates zoning, allowable land uses, and development standards for rural residential and agricultural properties. Development proposals in the district typically require county review for compliance with zoning, grading, and environmental standards. As a community services district, GSHCSD's primary responsibilities are limited to road maintenance and drainage within its service area, but it works in coordination with the county on broader planning and infrastructure issues that affect the community.

#### J.4.3 Administrative/Technical Mitigation Capabilities

Table J-12 identifies the District personnel responsible for activities related to mitigation and loss prevention.

**Table J-12 Ground Squirrel Hollow CSD Administrative/Technical Mitigation Capabilities**

PERSONNEL RESOURCES	YES/NO	DEPARTMENT/POSITION
Planner/engineer with knowledge of land development/land management practices	Yes	General Manager
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Yes	General Manager
Planner/engineer/scientist with an understanding of natural hazards	Yes	General Manager
Personnel skilled in GIS	No	
Full time building official	No	
Floodplain manager	No	
Emergency manager	Sort of	Board President
Grant writer	Yes	General Manager
Other personnel	No	
GIS Data Resources (Hazard areas, critical facilities, land use, building footprints, etc.)	No	
Warning systems/services (Reverse 9-11, outdoor warning signals)	Yes	Signs, barricades, cones, sand stockpile, cold-mix asphalt stockpile

#### J.4.4 Fiscal Mitigation Capabilities

Table J-13 identifies financial tools or resources that the CSD could potentially use to help fund mitigation activities.

**Table J-13 Ground Squirrel Hollow CSD Fiscal Mitigation Capabilities**

FINANCIAL RESOURCES	ACCESSIBLE/ELIGIBLE TO USE (YES/NO)
Community Development Block Grants	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
Fees for water, sewer, gas, or electric services	No
Impact fees for new development	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activities	Yes
Withhold spending in hazard prone areas	No

### J.4.5 National Flood Insurance Program

Ground Squirrel Hollow does not participate separately in the National Flood Insurance Program (NFIP), nor is it required to, and does not have any mapped special flood hazard areas. Accordingly, there are no repetitive loss or severe repetitive loss properties, as defined by the NFIP, located within the District.

### J.4.6 Opportunities for Enhancement

Based on the capability assessment, the Ground Squirrel Hollow Community Services District has several existing mechanisms in place that help to mitigate hazards. There are also opportunities for the District to expand or improve on these policies and programs to further protect the community. Future improvements may include providing training for staff members related to hazards or hazard mitigation grant funding in partnership with the County and Cal OES. Additional training opportunities will help to inform District staff and board members on how best to integrate hazard information and mitigation projects into the District policies and ongoing duties of the District. Continuing to train District staff on mitigation and the hazards that pose a risk to the Ground Squirrel Hollow Community Services District will lead to more informed staff members who can better communicate this information to the public.

## J.5 Mitigation Strategy

### J.5.1 Mitigation Goals and Objectives

The Ground Squirrel Hollow CSD adopts the hazard mitigation goals and objectives developed by the HMPC and described in Section 7 Mitigation Strategy of the Base Plan.

### J.5.2 Completed and Deleted 2019 Mitigation Actions

During the 2024 planning process Ground Squirrel Hollow CSD Planning Team reviewed all the mitigation actions from the 2019 plan. During the 2024 planning process the Planning Team identified that of their six mitigation actions from 2019, two are completed and one is deleted as shown in table.

**Table J-14 Ground Squirrel Hollow Community Services District Completed and Deleted Actions**

2019 ACTION ID	HAZARD(S) ADDRESSED	MITIGATION ACTION TITLE	LEAD AGENCY	ACTION STATUS NOTES
GSH.1	Adverse Weather: Thunderstorm/ Heavy Rain/ Hail/ Lightning/ Dense Fog/ Freeze, Adverse Weather: High Wind/Tornado, Adverse Weather: Extreme Heat, Landslides and Debris Flow, Wildfire	Improve drainage on "Mud Corner" near 5661 Ground Squirrel Hollow Road to mitigate debris flow on road.	GSHCSD, with property owner and County	Completed
GSH.4	Wildfire	Implement "Replacement Financing" to build District funding capabilities for hazard mitigation and help ensure the District can maximize funding available for on-going maintenance of the road system.	GSHCSD	Deleted. GSHCSD only does road maintenance. This item would fall under County responsibility for the Ground Squirrel Hollow area.
GSH.6	Landslides and Debris Flow, Earthquake/ Liquefaction, Wildfire	Build an emergency shelter with power generator and water well.	GSHCSD	Deleted - District decided not to pursue

### J.5.3 Mitigation Actions

The Planning Team for the Ground Squirrel Hollow Community Services District identified and prioritized the following mitigation actions based on the risk assessment. Background information and information on how each action will be implemented and administered, such as ideas for implementation, responsible office, potential funding, estimated cost, and timeline are also included. Actions with an '\*' are those that mitigate losses to future development.



Table J-15 Ground Squirrel Hollow Community Services District's Mitigation Action Plan

MITIGATION ACTION NUMBER	PRIMARY HAZARD(S) MITIGATED	DESCRIPTIONS/BACKGROUND/BENEFITS	LEAD AGENCY & PARTNERS	ESTIMATED COST & POTENTIAL FUNDING SOURCES	2025 PRIORITY	TIMELINE	STATUS/IMPLEMENTATION NOTES
GSH.1	Adverse Weather: Thunderstorm/ Heavy Rain/ Hail/ Lightning/ Dense Fog/ Freeze, Adverse Weather: High Wind/Tornado Adverse Weather: Extreme Heat	Chip Seal Overlays to extend the life and strengthen chip seal roads during extreme heat and other adverse weather. This will also help support access from emergency vehicles needed for firefighting	GSHCSD, perhaps coop purchasing with County	\$300,000-\$400,000. Grants	High	5 Years	Annual Implementation. Pothole repair and "skin patching" usually takes place each summer, as possible with available funding.
GSH.2	Adverse Weather: Thunderstorm/ Heavy Rain/ Hail/ Lightning/ Dense Fog/ Freeze, Adverse Weather: High Wind/Tornado Adverse Weather: Extreme Heat, Landslides and	Implement road edge erosion control to mitigate undermining and failure of the road.	GSHCSD	Could be \$20,000 per year ongoing. GSHCSD, Grants	High	2 Years	Annual Implementation. Pothole repair and "skin patching" usually takes place each summer, as possible with available funding.



MITIGATION ACTION NUMBER	PRIMARY HAZARD(S) MITIGATED	DESCRIPTIONS/BACKGROUND/BENEFITS	LEAD AGENCY & PARTNERS	ESTIMATED COST & POTENTIAL FUNDING SOURCES	2025 PRIORITY	TIMELINE	STATUS/IMPLEMENTATION NOTES
	Debris Flow, Wildfire						
GSH.3	Landslides and Debris Flow, Earthquake/ Liquefaction, Wildfire	Mitigate landslide risk through improvements to the Stagg Hill Road edge cribbing.	GSHCSD	\$350,000. GSHCSD, FEMA HMA Grants	High	10 Years	Annual Implementation. Pothole repair and "skin patching" usually takes place each summer, as possible with available funding.
GSH.4	Wildfire	Coordinate with County on project SLO-14 Create and maintain fuel breaks in strategic locations.	County Fire, GSHCSD,	Low; HMA Grants, Staff Time, Dept. Budget, Prop 4 funding	Medium	1-5 years	New in 2025





## **J.6 Implementation and Maintenance**

Moving forward, the Ground Squirrel Hollow Community Services District will use the mitigation action table in the previous section to track progress on implementation of each project. Implementation of the plan overall is discussed in Section 7 in the Base Plan.

### ***J.6.1.1 Incorporation into Existing Planning Mechanisms***

The information contained within this plan, including results from the Vulnerability Assessment and the Mitigation Strategy, will be used by the District to help inform updates of the Ground Squirrel Hollow Community Plan and in the development of additional local plans, programs and policies. Understanding the hazards that pose a risk and the specific vulnerabilities to the jurisdiction will help in future capital improvement planning for the District. The County Planning and Building Department may utilize the hazard information when reviewing a site plan or other type of development applications with the boundaries of the Ground Squirrel Hollow Community Services District area.

As noted in Section 8 Implementation and Monitoring the HMPC representatives from the Ground Squirrel Hollow Community Services District will report on efforts to integrate the hazard mitigation plan into local plans, programs and policies and will report on these efforts at the annual HMPC plan review meeting.

### ***J.6.1.2 Monitoring, Evaluation and Updating the Plan***

The Ground Squirrel Hollow Community Services District will follow the procedures to review and update this plan in accordance with San Luis Obispo County as outlined in Section 8 of the Base Plan. The CSD General Manager will be responsible for representing the Community Services District in the County HMPC, and for coordination with County staff and departments during plan updates. The Ground Squirrel Hollow Community Services District realizes it is important to review the plan regularly and update it every five years in accordance with the Disaster Mitigation Act Requirements as well as other State of California requirements.



## Annex K Heritage Ranch Community Services District

### K.1.1 District Profile

### K.1.2 Mitigation Planning History and 2025 Process

This annex was updated in 2025 to build upon the previous version created for the 2019 San Luis Obispo Hazard Mitigation Plan update. The previous MJHMP has been partially integrated into other planning documents by implementation of the vertical intake project in 2022. A second vertical intake was incorporated into the most recent Capital Improvement Plan (CIP) and it scheduled for implementation in 2025. The General Manager of the Heritage Ranch Community Services District (HRCSD) was the representative on the County-wide HMPC and took the lead for developing the plan and this annex in coordination with the HRCSD Planning Team. The HRCSD Planning Team will be responsible for implementation and maintenance of the plan. See Table K-1 for more information on the local Planning Team.

**Table K-1 Heritage Ranch CSD Hazard Mitigation Plan Planning Team**

DEPARTMENT	TITLE
Administration	General Manager
Administration	Administrative Manager
Administration	District Engineer
Operations	Operations Manager

Additionally, the plan must document opportunities for neighboring communities, local and regional agencies involved in hazard mitigation activities, agencies with the authority to regulate development, as well as businesses, academia, and other private and non-profit interests, to actively participate in the planning process. Stakeholder groups are listed below in Table K-2.

More details on the planning process and how the jurisdictions, service districts and stakeholders participated can be found in Chapter 3 of the Base Plan (Planning Process), as well as how the public was involved during the 2025 update.

**Table K-2 Heritage Ranch CSD Stakeholder Groups, Neighboring Communities, and Local Agencies**

STAKEHOLDER CATEGORY	ORGANIZATION
Agencies involved in hazard mitigation activities:	County of San Luis Obispo
	CalFire
Agencies that have the authority to regulate development:	County Planning and Building
Neighboring Communities:	County Planning and Building
Representatives of business academia, and other private orgs:	Heritage Ranch Owners Association Heritage Village Seniors
Representatives supporting underserved communities:	None Known



### K.1.3 District Overview

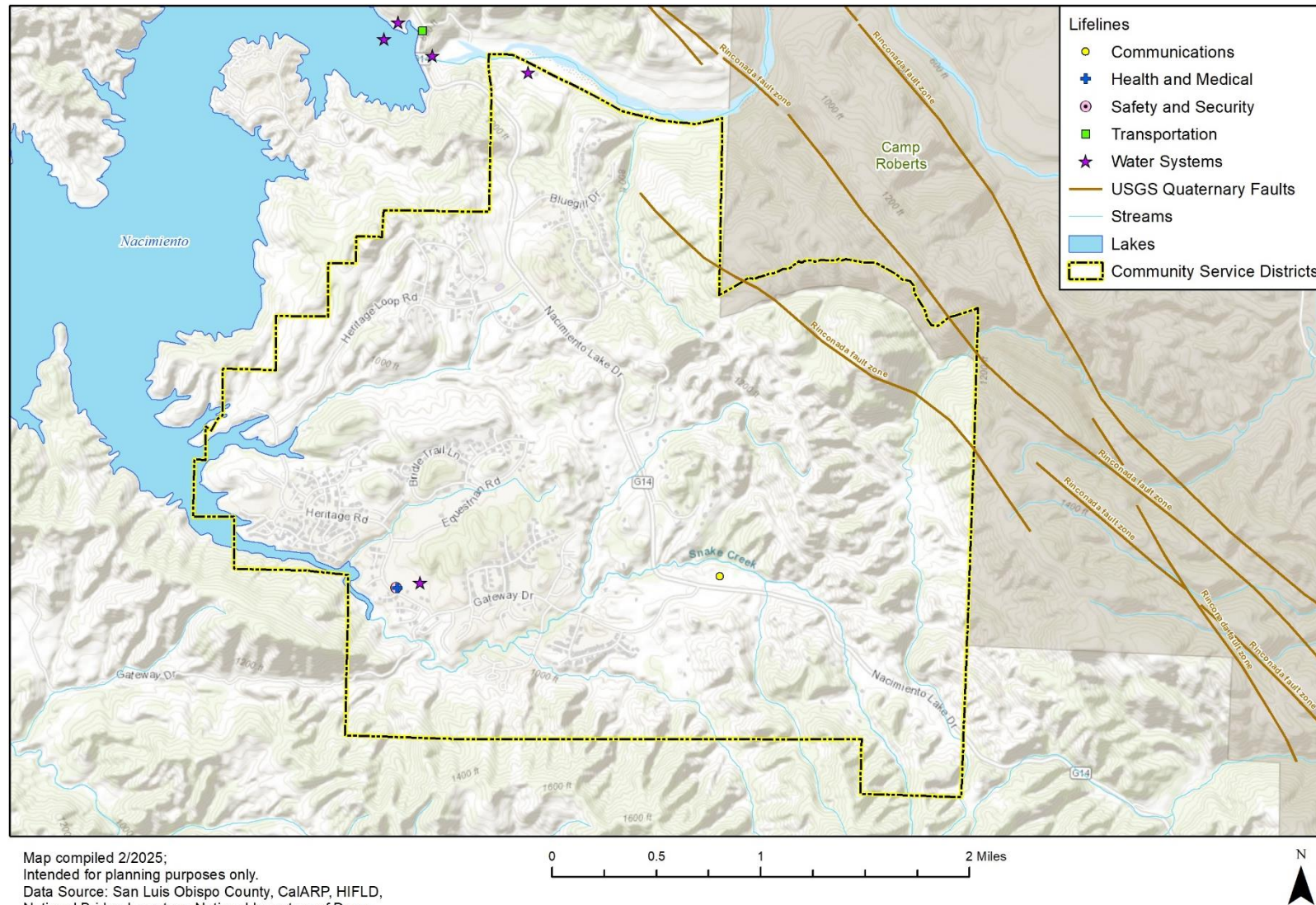
The Village of Heritage Ranch was established in 1972 as a vacation and retirement community, and the Heritage Ranch Community Services District (HRCSD) was formed in 1990 to provide local control of water and sewer services. Heritage Ranch is located in the North County planning area and is one of two village reserve areas situated around Lake Nacimiento. The HRCSD service area is bounded on the west by Lake Nacimiento, on the north by the Nacimiento River, on the east by the Camp Roberts National Guard post, and on the south by private property.

The Village of Heritage Ranch includes both Heritage Ranch, a home and recreation community originally planned for 6,800 dwelling units, and Lake Nacimiento Resort, a complete resort facility with 1,500 campground spaces and day use facilities. The resort is privately owned on land leased from the Monterey County Water and Flood Control District. There is also a marina and campground, dude ranch, and recreation and equestrian centers.

Figure K-1 below shows the boundary of the Heritage Ranch Community Service District.



Figure K-1 Heritage Ranch Community Services District





### K.1.4 Development Trends

Future residential development is anticipated to continue to be oriented primarily toward construction of homes, but a modest continuing increase is expected in permanent residents, primarily the retired. Infrastructure improvements are being considered to accommodate the growing population of Heritage Ranch and increased recreational use of Lake Nacimiento. Because of existing concerns about overcrowding at Lake Nacimiento, the most current San Luis Obispo County Inland Area Plan recommends focusing on limiting current recreational use of the reservoir rather than accommodating expansion.

Rural refuse container stations have been recommended in the Inland Area Plan to mitigate illegal dumping in rural areas surrounding the Village of Heritage Ranch.

According to the Heritage Ranch CSD Municipal Service Review as of 2020 HRCSD had an estimated 1,932 housing units and was at 69% of its estimated build-out population of 4,274. With the population at 3,464 in 2023, it went up to 81% of its estimated build-out population. This development trend has slightly increased exposure to wildfire since the plan update in 2019.

### K.1.5 Other Community Planning Efforts

Coordination and synchronization with other community planning mechanisms and efforts are vital to the success of this plan. To have a thorough evaluation of hazard mitigation practices already in place, appropriate planning procedures should also involve identifying and reviewing existing plans, policies, regulations, codes, tools, and other actions are designed to reduce a community's risk and vulnerability from natural hazards.

As an unincorporated community, the Village of Heritage Ranch is referenced in other County planning documents and regulated by County policies and planning mechanisms. Integrating existing planning efforts, mitigation policies, and action strategies into this annex establishes a credible, comprehensive document that weaves the common threads of a community's values together. The development of this jurisdictional annex involved a comprehensive review of existing plans, studies, reports, and initiatives from San Luis Obispo County and the Village of Heritage Ranch community that relate to hazards or hazard mitigation. A high-level summary of the key plans, studies and reports can be found in Table K-3 below. Information on how they informed the update are noted and incorporated where applicable.

In addition to the development standards within the Heritage Ranch Specific Plan, there are County planning mechanisms that regulate future and existing development within the Village of Heritage Ranch planning area. Refer to Section K.4 Capability Assessment as well as the Base Plan for more information on the plans, policies, regulations and staff that govern the Village of Heritage Ranch.

**Table K-3 Summary of Review of Key Plans, Studies and Reports**

PLAN, STUDY, REPORT NAME	HOW DOCUMENT INFORMED THE ANNEX
Heritage Ranch Village Plan (2014)	Pulled community background information as well as hazard details
North County Area Plan (2014)	Incorporated hazard information related to water supply
County of San Luis Obispo Local Hazard Mitigation Plan (2019)	Informed past hazard event history, hazard profile and background, and mitigation strategy information.
San Luis Obispo County 2019 Integrated Regional Water Management Plan	Obtained information on water use in the CSD, water management regions, and the drought/water scarcity hazard.





PLAN, STUDY, REPORT NAME	HOW DOCUMENT INFORMED THE ANNEX
State of California's Hazard Mitigation Plan – Updated 2023	General information on hazards, events, and vulnerability assessments.
2016-2018 Resource Summary Report for San Luis Obispo County's General Plan	Pulled information about water resources, reliability, and ongoing efforts to increase resilience in the county and district of Heritage Ranch as related to drought.

## K.2 Hazard Identification and Summary

The Heritage Ranch CSD planning team identified the hazards that affect the HRCSD and summarized their frequency of occurrence, spatial extent, potential magnitude, and significance specific to the HRCSD (see Table K-4). Note that the dam failure and dam incidents hazards will be combined in the description of this annex's loss estimation summaries, as they are in the Base Plan's Hazard Identification and Risk Assessment (HIRA). In addition, debris flows, and slope stability/landslide are related hazards that will be dealt with together in this annex (as they also were in the HIRA chapters of the Base Plan). Finally, hazardous trees are discussed within the adverse weather, drought, and wildfire chapters given these tree related issues are usually cascading from other natural events/hazards.

**Table K-4 Heritage Ranch CSD Hazard Risk Summary**

HAZARD	GEOGRAPHIC AREA	PROBABILITY OF FUTURE OCCURRENCE	MAGNITUDE/ SEVERITY (EXTENT)	OVERALL SIGNIFICANCE
Adverse Weather: Thunderstorm/ Heavy Rain/ Lightning/ Freeze/ Hail/ Dense Fog	Extensive	Highly Likely	Critical	High
Adverse Weather: High Wind and Tornado	Extensive	Highly Likely	Critical	High
Adverse Weather: Extreme Heat	Extensive	Highly Likely	Critical	High
Dam Incidents	Extensive	Likely	Catastrophic	High
Drought and Water Shortage	Extensive	Highly Likely	Critical	High
Earthquake	Extensive	Occasional	Catastrophic	High
Flooding	Extensive	Likely	Critical	High
Landslide/Debris Flow	Significant	Likely	Critical	High
Wildfire	Extensive	Likely	Catastrophic	High
<b>Geographic Area</b> Limited: Less than 10% of planning area Significant: 10-50% of planning area Extensive: 50-100% of planning area Probability of Future Occurrences Highly Likely: Near 100% chance of occurrence in next year or happens every year. Likely: Between 10 and 100% chance of occurrence in next year or has a recurrence interval of 10 years or less.		<b>Magnitude/Severity (Extent)</b> Catastrophic—More than 50 percent of property severely damaged; shutdown of facilities for more than 30 days; and/or multiple deaths Critical—25-50 percent of property severely damaged; shutdown of facilities for at least two weeks; and/or injuries and/or illnesses result in permanent disability Limited—10-25 percent of property severely damaged; shutdown of facilities for more than a week; and/or		



HAZARD	GEOGRAPHIC AREA	PROBABILITY OF FUTURE OCCURRENCE	MAGNITUDE/ SEVERITY (EXTENT)	OVERALL SIGNIFICANCE
Occasional: Between 1 and 10% chance of occurrence in the next year or has a recurrence interval of 11 to 100 years. Unlikely: Less than 1% chance of occurrence in next 100 years or has a recurrence interval of greater than every 100 years.			injuries/illnesses treatable do not result in permanent disability Negligible—Less than 10 percent of property severely damaged, shutdown of facilities and services for less than 24 hours; and/or injuries/illnesses treatable with first aid Significance Low: minimal potential impact Medium: moderate potential impact High: widespread potential impact	

### K.3 Vulnerability Assessment

The intent of this section is to assess the HRCSD vulnerability separate from that of the planning area, which has already been assessed in Section 5 Hazard Identification and Risk Assessment (HIRA) in the Base Plan. This vulnerability assessment analyzes the population, property, and other assets at risk to hazards ranked of medium or high significance.

The information to support the HIRA portion of this Annex was collected through a Plan Update Guide, which was distributed to each participating municipality or district to complete during the planning process. Information collected was analyzed and summarized in order to identify and rank all the hazards that could impact anywhere within the County, as well as to rank the hazards and identify the related vulnerabilities unique to each jurisdiction/district. In addition, the Heritage Ranch CSD planning team members were asked to share information on past significant hazard events that have affected the HRCSD.

Each participating jurisdiction were in support of the main hazard summary identified in the Base Plan (See Section 5 of the Base Plan). However, the hazard summary rankings for each jurisdictional annex may vary slightly due to specific hazard risk and vulnerabilities unique to that jurisdiction (See Figure K-1 Heritage Ranch Community Services District). Identifying these differences helps the reader to differentiate the jurisdiction's risk and vulnerabilities from that of the overall County.

Note: The hazard "significance" reflects overall ranking for each hazard and is based on the Heritage Ranch CSD planning team input from the Data Collection Guide and the risk assessment results compiled during the planning process (see Section 5 of the Base Plan), which included more detailed quantitative analyses with best available data.



### K.3.1 Other Hazards

The following hazards identified in the base plan HIRA are not identified within this jurisdictional annex due to low or no risk or insignificant anticipated impacts and are not considered further for vulnerability assessment or mitigation actions:

- Agricultural Pest Infestation and Disease
- Biological Agents
- Coastal Storm/ Coastal Erosion/ Sea Level Rise
- Subsidence
- Tsunami
- Hazardous Materials

### K.3.2 Assets at Risk

This section considers assets at risk within the District and Village of Heritage Ranch, including values at risk, critical facilities and infrastructure, historic assets, economic assets, and growth and development trends. See Section 5.2 of the Base Plan for more details and background on the parcel summarization, analysis, and datasets available.

#### K.3.2.1 Values at Risk

This section considers Heritage Ranch CSD's assets at risk, including an inventory of improved properties and critical facilities and Community Lifelines, and historic, economic, cultural, and environmental assets. Please refer to Section 5.2.2 of the base plan for a detailed description of the methodology used. Table K-5 summarizes the exposure of properties (e.g., the values at risk based on improvement values, content values, and total values as an addition of these two types of values) broken down by property type for the Heritage Ranch Community Services District.

**Table K-5 Heritage Ranch Total Exposure by Property Type**

PROPERTY TYPE	STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE
Commercial	191	\$9,355,073	\$9,355,073	<b>\$18,710,146</b>
Exempt	3	\$461,068	\$461,068	<b>\$922,136</b>
Mobile Home	674	\$86,763,222	\$43,381,611	<b>\$130,144,833</b>
Multi-Family Residential	1	\$1,074,057	\$537,029	<b>\$1,611,086</b>
Residential	1,062	\$332,210,567	\$166,105,284	<b>\$498,315,851</b>
Vacant Improved	10	\$1,164,133	\$1,164,133	<b>\$2,328,266</b>
<b>Total</b>	<b>1,941</b>	<b>\$431,028,120</b>	<b>\$221,004,197</b>	<b>\$652,032,317</b>

Source: San Luis Obispo County Assessor Data November 15, 2024, WSP GIS Analysis



### K.3.2.2 Critical Facilities and Infrastructure

A critical facility is defined as one that is essential in providing utility or direction either during the response to an emergency or during the recovery operation. See Section 5 of the Base Plan for more details on the definitions and categories of critical facilities.

An inventory of critical facilities in the Heritage Ranch Community Services District is provided in Table K-6 and illustrated in Figure K-1. Refer to Section 5.2 of the Base Plan for more information on the Assets used throughout this annex and the county-wide analyses.

**Table K-6 Heritage Ranch Critical Facilities Assets Summary by FEMA Lifeline**

FEMA LIFELINE CATEGORY	COUNTS
Communications	1
Energy	-
Food, Hydration, Shelter	-
Hazardous Material	-
Health and Medical	1
Safety and Security	1
Transportation	-
Water Systems	2
Total	5

Source: San Luis Obispo County, CalARP, HIFLD, National Bridge Inventory, National Inventory of Dams, FCWCD, WSP Analysis

### K.3.2.3 Additional Critical Facilities

Additional critical facilities as identified by the Heritage Ranch CSD Planning Team are as follows:

- Water Treatment and Distribution System - \$30 million replacement value
- Wastewater Collection and Treatment System - \$25 million replacement value
- Administration Building - \$2 million replacement value

### K.3.2.4 Emergency Service Facilities

The CSD contains 2 Emergency Services facilities aimed at providing for the health and welfare of the entire community. It is technically one fire station that serves the two purposes of providing fire protection and firefighting capabilities as well as emergency medical services, as stated in Table K-6.

### K.3.2.5 Transportation Systems, High Potential Loss Facilities, and Lifeline Facilities

No critical transportation systems were specifically identified in the District, nor were high potential loss facilities. However, two lifeline facilities were noted, one of which is the Heritage Ranch CSD Water Treatment Plant and the other a combination facility containing the Heritage Ranch CSD Wastewater Treatment Plant, the Operations Yard, and the Administrative Building. In addition,



it is worth noting that the Village of Heritage Ranch is only accessible via Lake Nacimiento Drive, which links to Highway 101 (a notable transportation route) at two locations. If development occurs to the levels projected for the Village of Heritage Ranch and nearby communities, traffic levels could far exceed the roadway capacity. Upgrades to Lake Nacimiento Drive have been proposed, as has a new collector road that would encircle Lake Nacimiento, passing through the Village of Heritage Ranch and nearby communities.

The only source of potable water for HRCSD is the Nacimiento Reservoir that is dammed by the Nacimiento Dam, which hence impounds Lake Nacimiento. The Monterey County Water Resources Agency (MCWRA) operates the dam (also worth noting as an important facility for the District) for flood protection and water distribution. The HRCSD water treatment facility is located about ¼ mile downstream of the dam and receives water via three shallow infiltration gallery wells several feet under the bed of the Nacimiento River. Native material and engineered bedding above and around the gallery wells provide some natural turbidity reduction, which is further reduced by a plate settler before water is processed through sand filters.

#### *K.3.2.6 Historic and Cultural Resources*

Historical assets include local, county, state, and potentially federally listed historic sites. Based on data provided by the County of San Luis Obispo and LAFCO, it was found that there are no historic and cultural resources in or near the Heritage Ranch CSD.

#### *K.3.2.7 Natural Resources*

Natural resources are important to include in benefit-cost analyses for future projects and may be used to leverage additional funding for projects that also contribute to community goals for protecting sensitive natural resources. Awareness of natural assets can lead to opportunities for meeting multiple objectives. For instance, protecting wetlands areas protects sensitive habitat as well as attenuates and stores floodwaters. The Heritage Ranch Village Plan (2014) designated the following combining designations that apply to the protection of special resources in the Heritage Ranch community:

- **Nacimiento River and Canyon; Dip, Franklin, Las Tablas, Snake and Town Creeks; and Lake Nacimiento** – These water courses are identified as susceptible to potential flood hazards. Future development proposals must incorporate mitigation measures. All are natural drainage courses which should be maintained in their natural state with native vegetation and habitats retained. At Lake Nacimiento, the 800-foot elevation constitutes the lake's high-water level and no habitable structures are permitted below the 825-foot elevation.
- **The Santa Lucia Range and Foothill Areas** – Portions of this Geologic Study Area (GSA) are exposed to moderately high and high landslide risk potential.
- **Lake Nacimiento Drive Interlake Road** – The portion of this route from Chimney Rock Road northwest to the Monterey County line is an adopted State scenic highway route. All development in this corridor must be sited to minimize visual impacts as this interlake road was classified as a Sensitive Resource Area.





### **K.3.2.8 Economic Assets**

According to the Inland Area Plan, prior to the creation of Lake Nacimiento, the population of the sub-area was widely dispersed with most residing and employed on farms and ranches. Despite the rugged terrain of most of the area and the concentration of recreational activities at the lake, the economy of the region surrounding Lake Nacimiento remains agriculture based. Grazing is the primary agricultural pursuit, though some dry farming occurs in limited areas. Commercial activities around the lake are mostly visitor-serving and oriented toward peak use periods.

### **K.3.3 Estimating Potential Losses**

Note: This section details vulnerability to specific hazards of high or medium significance, where quantifiable, and/or where (according to Planning Team input) it significantly differs from that of the overall County.

Table K-5 under Section K.3.2 summarizes the Village of Heritage Ranch's exposure in terms of number and value of parcels falling within the district's boundaries. San Luis Obispo County's parcel and assessor data was used to calculate the improved value of parcels, using Parcel Quest's spatial layers on parcel geometry. The most vulnerable structures are those in the parcels within hazard threat areas, unreinforced masonry buildings, and buildings built prior to the introduction of modern-day building or land regulatory codes. Impacts of past events and vulnerability to specific hazards are further discussed below as particular to each hazard. See Section 5 of the Base Plan for more information on assets, parcel analysis methodology, and hazard profiles.

#### **K.3.3.1 Adverse Weather: Thunderstorm/ Heavy Rain/ Lightning/ Freeze/ Hail/ Dense Fog**

Adverse weather for the Village of Heritage Ranch includes thunderstorms, heavy rain, hail, lightning, dense fog, and freeze depending on the time of year. This hazard has been identified as posing **High** significance for HRCSD. Common problems associated with severe storms include the loss of utilities or immobility. Loss of life is uncommon but can occur during severe storms depending on secondary effects or impacts. Immobility can occur when roads become impassable due to dense fog, heavy rains causing flooding, and downed trees (often referred to as hazardous trees due to the threat they pose).

Being in the northern portion of the county, the Village of Heritage Ranch experiences heavier rainfall compared to the southern portion of the county. Climate change is expected to further increase rainfall in winter months, while decreasing rainfall in spring months. A changing climate will also likely lead to more extreme temperatures, particularly hotter weather in the warmer months. Heavy rain may lead to more debris flows and landslides, as well as erosion and flash or localized flooding, especially over areas that have been impacted by wildfire or other hazards affecting the local landscape. See the Landslide section below for more on this related hazard. Increased seasonal variability in precipitation will likely have an impact on releases from the Nacimiento Dam as well. The potential for downed trees is also a significant concern of the community. The tables below shows key climate variables such as extreme temperatures, precipitation totals, and frequency of specific weather events. Note that Paso Robles weather station is the nearest official reporting site to Heritage Ranch. Section 5 of the Base Plan contains additional information on past adverse weather events in San Luis Obispo County and the Village of Heritage Ranch/Nacimiento Area.

**Table K-7 Paso Robles Municipal Airport Climate Summary Table – Weather (Period of Record: 03/18/1952 - 04/20/2025)**

SUMMARY PERIOD	MONTHLY MEAN MAXIMUM TEMP.	MONTHLY MEAN MINIMUM TEMP.	DAILY EXTREME HIGH TEMP	DAILY EXTREME HIGH DATE	DAILY EXTREME LOW TEMP	DAILY EXTREME LOW DATE	MAXIMUM TEMP. ≥ 90°F MEAN # DAYS	MINIMUM TEMP. ≤ 32°F MEAN # DAYS
Winter	61.9 °F	33.9 °F	87 °F	12/4/1958	0 °F	1/6/1913	0	41.7
Spring	73.2 °F	41 °F	110 °F	5/31/1910	20 °F	3/2/1971	6.5	7.9
Summer	90.8 °F	49.6 °F	117 °F	8/13/1933	31 °F	6/15/1973	54.5	0
Fall	79.7 °F	41.8 °F	115 °F	9/7/2020	14 °F	11/17/1958	21.1	12.6
Annual	76.5 °F	41.6 °F	117 °F	8/13/1933	0 °F	1/6/1913	82.4	63.2

Source: Western Regional Climate Center (WRCC) <https://wrcc.dri.edu/>

\* Winter is defined as December, January, and February

\*\* Summer is defined as June, July, and August

**Table K-8 Paso Robles Municipal Airport Climate Summary Table – Precipitation (Period of Record: 03/18/1952 - 04/20/2025)**

SUMMARY PERIOD	PRECIP. MEAN	PRECIP. HIGH	PRECIP. HIGH YEAR	PRECIP. LOW	PRECIP. LOW YEAR	PRECIP. 1 DAY MAXIMUM	PRECIP. 1 DAY MAXIMUM DATE	PRECIP. ≥ 1.00 IN. MEAN # DAYS
Winter	9.06 in.	26.18 in.	1969	2.03 in.	1964	5.25 in.	12/6/1966	2.4
Spring	3.77 in.	12.84 in.	1995	0 in.	1997	4.7 in.	3/10/1995	0.7
Summer	0.13 in.	2.82 in.	2015	0 in.	1900	2.29 in.	7/19/2015	0
Fall	2.07 in.	7.64 in.	1900	0.02 in.	1980	3.88 in.	10/14/2009	0.3
Annual	14.88 in.	29.19 in.	1941	2.78 in.	2013	5.25 in.	12/6/1966	3.5

Source: Western Regional Climate Center (WRCC) <https://wrcc.dri.edu/>

\* Winter is defined as December, January, and February

\*\* Summer is defined as June, July, and August

### **K.3.3.2 Adverse Weather: High Wind and Tornado**

The overall significance rating of high wind and tornadoes is Heritage Ranch CSD is rated **High**. The district is located near Lake Nacimiento, which has open terrains and rolling hills. These features can channel and amplify wind speeds during storm events, leading to more severe wind impacts compared to other areas in the county. Many structures and utility lines in the area may not be fully equipped to withstand strong wind gusts, especially older buildings or infrastructure not built to current standards. While tornadoes are rare throughout the planning area, the occurrence of an EF1 tornado near Los Osos in 2024 demonstrates that tornadoes, though uncommon, are possible and should be considered in planning.

### **K.3.3.3 Adverse Weather: Extreme Heat**

Extreme heat is a **high** significance hazard for the Heritage Ranch CSD. The monthly mean high summer temperature for the Paso Robles Municipal Airport, the closest NOAA weather station with recent data, is 90.8°F; however, temperatures up to 117°F have



been recorded (see Table K-7). Additionally, rising temperatures and more frequent heat waves are increasing the likelihood of more extreme heat events in the future.

The Heritage Ranch CSD relies solely on Lake Nacimiento for its water supply. During periods of extreme heat, evaporation rates from the lake increase significantly, contributing to reduced reservoir levels. Combined with prolonged drought, this heightens the risk of insufficient water availability for residential commercial, and irrigation use.

Lower lake levels can compromise the CSD's ability to extract water due to limitations of pumping infrastructure, even with the installations of vertical intakes and an emergency intertie. Reduced inflows and hotter temperatures also exacerbate water quality issues, leading to higher sedimentation, increased concentrations of contaminants, and warmer source water. These conditions could require more intensive treatment, raising operation costs and potentially triggering water use restrictions. Prolonged extreme heat accelerates wear on above-ground utility infrastructure, including pump stations and treatment facilities, by increasing cooling demands and exposing equipment to thermal stress.

Tree mortality linked to drought and extreme heat also increases the likelihood of falling trees impacting critical facilities or disrupting access routes. These factors also contribute to drier vegetation and soil conditions, increasing wildfire risk. The 2016 Chimney Fire, which caused widespread destruction near the district, was influenced by severe drought and high temperatures.

#### *K.3.3.4 Dam Incidents*

HRCSD exists immediately downstream of Nacimiento Dam and Lake (Figure K-2) and rated dam incidents a Highly Significant hazard. The Nacimiento Dam is managed by Monterey County. Though total failure is unlikely, damaging release incidents occurred in 1969, 2006, 2011, and 2017. These events were caused by heavy rains that filled Lake Nacimiento to capacity, prompting Monterey County Water Resources Agency (MCWRA) to lower the spillway, dramatically increasing flows downstream. The 1969 release damaged downstream property and would have destroyed the HRCSD water treatment facility had it existed at the time.

The 2011 release of the Nacimiento Dam increased flows downstream from 400 to 8,100 cubic feet per second (cfs) in less than three hours with sustained flow over 6,000 cfs. This destroyed the HRCSD gallery well system, requiring emergency repairs to be made at a cost of approximately \$375,000. The new gallery wells were lowered three feet, but the system was still incapable of handling flows over 5,000 cfs and was damaged again by releases in 2017. Flows over 5,000 cfs are highly likely to occur in the future according to MCWRA. If the gallery well system cannot be maintained, the water treatment facility will need to be converted to a conventional water treatment plant or receive water through a different intake method. Photos of the Nacimiento Dam uncontrolled releases, spills, and failures are included in Figure K-3.

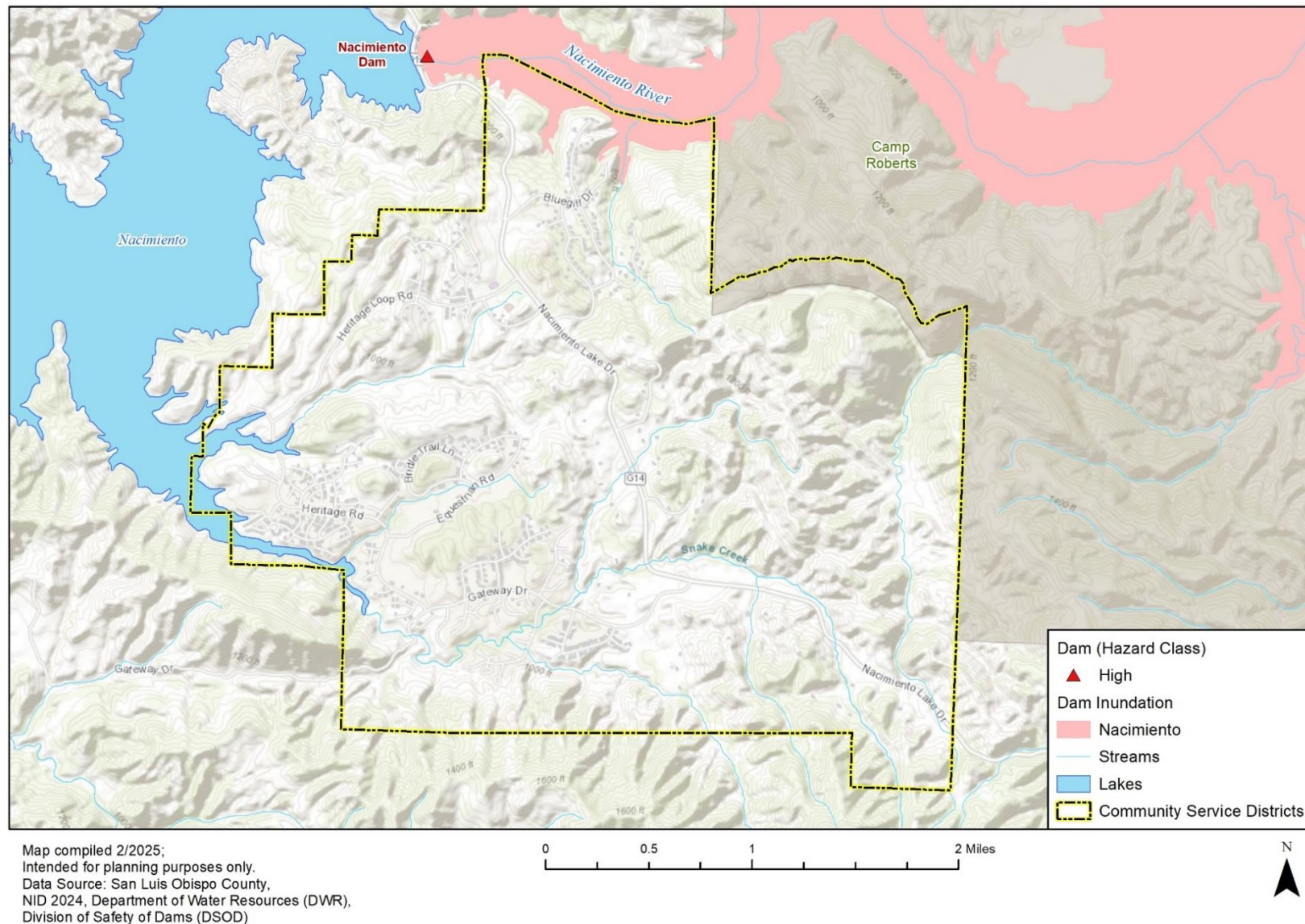


To alleviate the issues that have occurred in the past with the dam, and because the Nacimiento Reservoir (with water controlled by the Nacimiento Dam) is the only source of potable water to the HRCSD, the Planning Team set goals to prevent dam failure and dam incidents:

- Continue actively engaging with the MCWRA to operate the Nacimiento Dam in a manner more conducive to preventing dam related hazards
- Construction of a vertical well or wells to provide mitigation for both low and high flows related to this and drought hazards.



Figure K-2 Dam Inundation Extents in the Heritage Ranch CSD





**Figure K-3 Nacimiento Dam Incidents throughout the Years**



Source: Heritage Ranch CSD Planning Team, 2019



In the previous HMP update, only one parcel and no people existed within the potential dam failure inundation zone. Updated information regarding structures on that one parcel and people living within the inundation zone was unavailable for the 2025 update. However, the critical facility analysis indicates one critical facility exists within the potential dam inundation zone, the Heritage Ranch CSD Water Treatment Plant, located on the northwest corner of the CSD's boundary (Table K-9). See Appendix G for additional details of this facility. Refer to Section 5.3.8 Dam Incidents of the Base Plan for additional discussion on the potential impacts of dam incidents in the County.

**Table K-9 Heritage Ranch CSD's Potential Exposure to Nacimiento Dam Inundation Extents**

COMMUNICATIONS	ENERGY	FOOD, HYDRATION, SHELTER	HAZARDOUS MATERIAL	HEALTH AND MEDICAL	SAFETY AND SECURITY	TRANSPORTATION	WATER SYSTEMS	TOTAL COUNT
-	-	-	-	-	-	-	1	1

Source: San Luis Obispo County, Division of Safety of Dams, Department of Water Resources, CalARP, HIFLD, NBI, NID, FCWCD, WSP Analysis

#### **K.3.3.5 Drought and Water Shortage**

HRCSD sources its water from Lake Nacimiento. Water is pumped from the lake via a pump station on the southern bank of the Nacimiento River, then treated, stored, and delivered to residential units, businesses, and greenbelts within the district. San Luis Obispo County has an annual entitlement to 17,500 acre-feet of water from Lake Nacimiento, of which HRCSD is currently under contract for 889 acre-feet. In total, the County has set aside a maximum allotment of 1,100 acre-feet for the area, with the remaining 211 acre-feet held by private landowners and the County.

Since the district relies on Lake Nacimiento for water, drought conditions or reduced reservoir levels could limit the available water supply. If lake levels drop too low, pumping infrastructure may struggle to extract sufficient water, leading to restrictions on residential, commercial, and irrigation use. Lower water levels in Lake Nacimiento can lead to higher concentrations of contaminants, increased sedimentation, and warmer water temperatures, potentially compromising water quality. This can result in the need for additional treatment measures, raising operational costs and possibly leading to temporary water advisories.

In 2016 HRCSD constructed an emergency intertie with the Nacimiento Water Project to allow for water intake in conditions where water cannot be released through the dam outlet works. A recycled water study was also completed in 2017 to evaluate water and wastewater treatment and determine the feasibility of recycled water usage. Additionally, a vertical intake project was implemented in 2022, while a second vertical intake was added to the most recent CIP and is scheduled to be implemented in 2025.

This drought hazard, along with adverse weather conditions, was deemed a likely contributing factor to the very destructive 2016 Chimney Fire, which is described in the Wildfire chapter of this annex. As a related drought impact, tree mortality has resulted in potentially vulnerable critical infrastructure property as these vulnerable trees become more susceptible to falling with time and could affect properties in the planning area. Drought and water shortage hazards have been identified as posing **high significance** for the Heritage Ranch CSD.



#### **K.3.3.6 Earthquake**

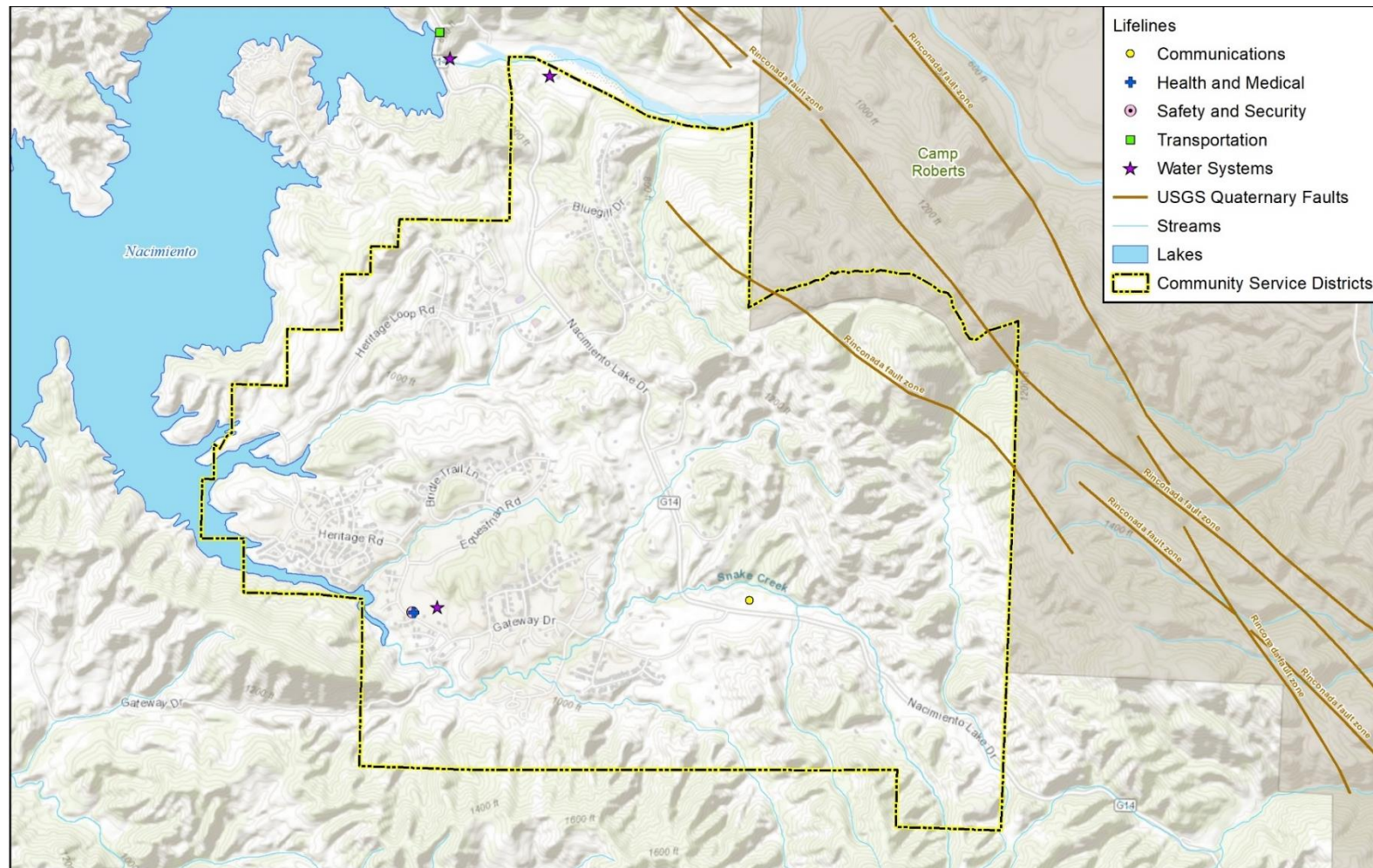
Overall, the earthquake hazard has been identified as posing **High Significance** for the Heritage Ranch CSD.

The nearest fault zone to Heritage Ranch is the Rinconada fault zone (see Figure K-4). This regional fault zone is considered to be potentially active and has moderate ground shaking potential. The structure most vulnerable to an earthquake in Heritage Ranch is the Nacimiento Dam which is about three miles from the fault. Failure of the dam due to seismic activity could inundate a small portion of the community and perhaps heavily damage or even destroy the HRCSD water intake system and water treatment plant, eliminating the HRCSD ability to provide safe drinking water to its residents. In addition, seiches could be an issue nearby because of the Lake, which could cause flooding of the community and nearby structures, properties, and facilities. No moderate or high liquefaction risk has been identified within the district. Despite this, the area is exposed to seismic hazards from movement along several regional faults and is at more or less the same level of risk for damage as other communities in San Luis Obispo County from ground shaking triggered by any earthquakes that impact the county.





Figure K-4 Earthquake Fault Zones in and near the Heritage Ranch CSD



Map compiled 2/2025;  
Intended for planning purposes only.  
Data Source: San Luis Obispo County, CalARP, HIFLD,  
National Bridge Inventory, National Inventory of Dams,  
Department of Conservation, USGS



### K.3.3.7 Flooding

Lake Nacimiento, the Nacimiento River, and its associated tributaries have been identified as posing flood hazards. The 2011 dam incident caused significant flooding of the Nacimiento River below the dam. Three to four feet of riverbed material was removed in this incident, blocking some channels and scouring others. This “re-carving” of the channel will likely impact the way future flows are routed through the river. Overall, flood hazards have been identified as posing **High Significance** for the Heritage Ranch CSD.

Heritage Ranch does not participate separately in the National Flood Insurance Program (NFIP) but will continue to support the County’s participation in and compliance with the NFIP.

#### Structures and Population at Risk

A flood vulnerability assessment was completed during the update of the county hazard mitigation plan, following the methodology described in Section 5 of the Base Plan. Table K-10 below summarizes the values at risk in the Village of Heritage Ranch 100-year floodplain (which corresponds to 1% chance of flooding in a 100-year period). Based on this analysis, the Village of Heritage Ranch has only one parcel at risk of flooding in a 100-year event.

**Table K-10 Village of Heritage Ranch FEMA 1% Annual Chance Flood Hazard by Property Type**

PROPERTY TYPE	PARCEL COUNT	IMPROVED VALUE	CONTENT VALUE	TOTAL VALUE	LOSS ESTIMATE	POPULATION AT RISK
Residential	1	\$295,800	\$147,900	\$443,700	\$110,925	2

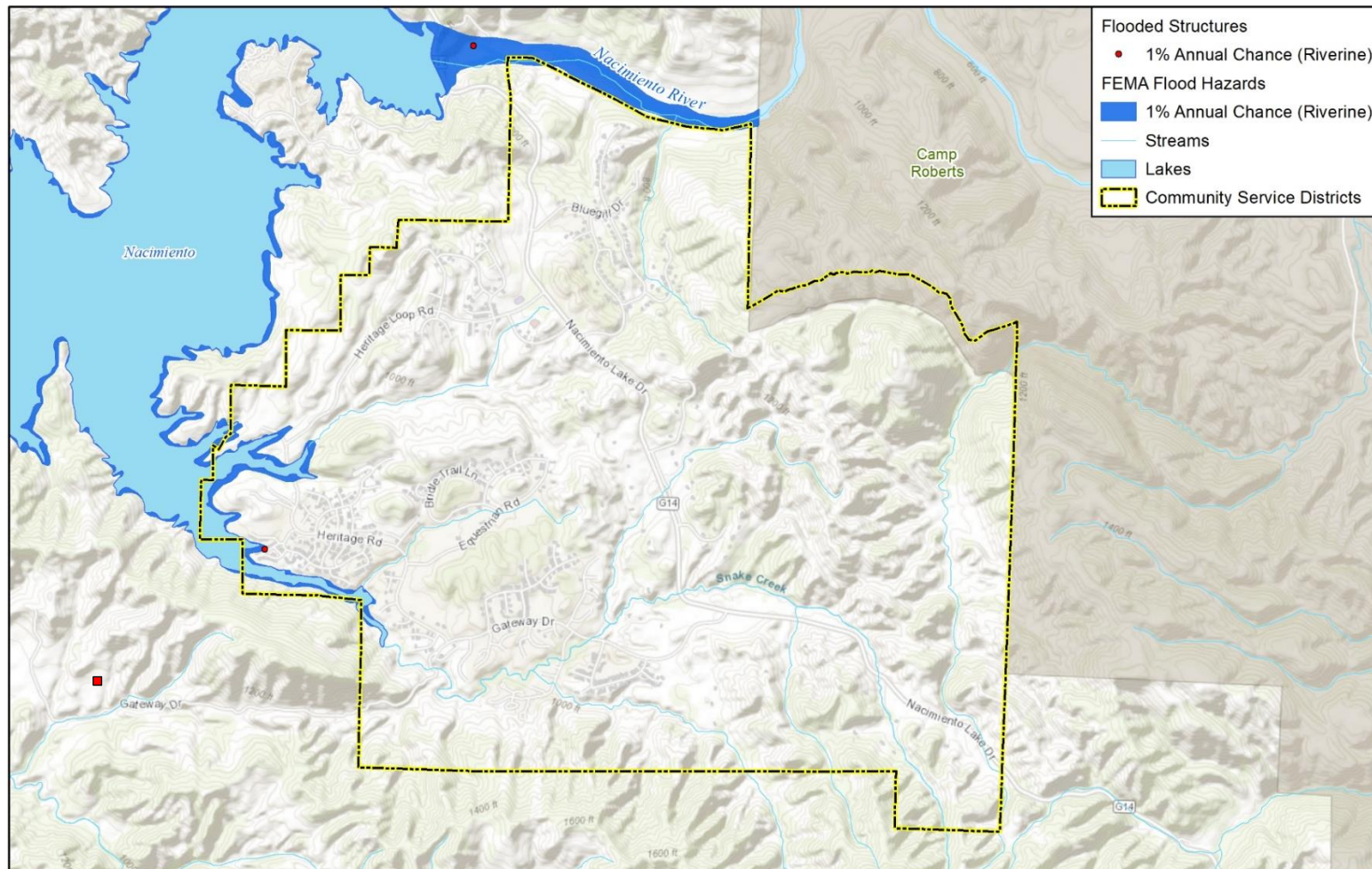
Source: San Luis Obispo County Planning and Building Dept., Assessor’s Office, WSP Parcel Analysis, FEMA NFHL

The figure below displays the parcel flooded by the 100-year event, located on the west side of the district, shown as a purple dot. No population is at risk of flooding from this parcel (as no people are likely to reside in an exempt or miscellaneous property). The Heritage Ranch planning team also noted that the CSD’s intake facilities and water treatment facility properties are located approximately where the red square is on, towards the northwest of the CSD boundary. No 500-year floodplains have been identified.





Figure K-5 Heritage Ranch CSD DWR & FEMA Flood Hazards with Flooded Structures



Map compiled 2/2025;  
Intended for planning purposes only.  
Data Source: San Luis Obispo County,  
FEMA NFHL Effective 6/6/2024,  
DWR, USACE Comprehensive Study

0 0.5 1 2 Miles





### Critical Facilities at Risk

Based on the GIS analysis performed there are no critical facilities located in the 100-year or 500-year flood hazard areas, though the Heritage Ranch CSD's Water Treatment Facility is located in the dam inundation extent of the Nacimiento Dam (see the Dam Incidents section of this document for additional details).

#### K.3.3.8 Landslides and Debris Flow

Landslide potential and debris flow hazards have been ranked by the Planning Team as posing **High Overall Significance** to the Heritage Ranch CSD.

Heavy rain in the year following the Chimney Fire of 2016 led to a significant debris flow into Lake Nacimiento and the Nacimiento Reservoir. This degraded the quality of water entering the HRCSD water treatment facilities, thus increasing treatment costs which is of high importance as the Nacimiento Reservoir water is the only source of potable water for the community. Such debris flows can also add stress to the dam and require costly removal of sediment and debris. New projects as of January 2024 include upgrading the existing Heritage Ranch Community Services District (HRCSD) water treatment plant and spray field and includes demolition of the existing HRCSD wastewater treatment plant elements and construction of new water resource recovery facility elements.

A similar debris flow is highly likely to occur in the future, as is a landslide. Figure K-6 summarize the parcel values in zones of moderate, high, and extremely high landslide potential. Most properties exist in areas of moderate landslide potential. There is one area near the Nacimiento River in the Northern part of Heritage Ranch with a high potential for a landslide as shown in Figure K-6 below.

### Structures at Risk

A vulnerability assessment was completed during the update of the county hazard mitigation plan. Landslide potential was determined for the Village of Heritage Ranch by overlaying the county's parcel layers with the landslide potential zones, all in GIS. Within Heritage Ranch there are 1,941 structures with a value of over \$650 million exposed to landslide potential. Out of these structures residential properties have the highest count at 1,062 with 2,623 people within the district exposed as shown in Table K-11. Based on the GIS analysis performed there are also 5 critical facilities located in high landslide potential areas.

**Table K-11 Improved Properties Exposed to Landslide Potential**

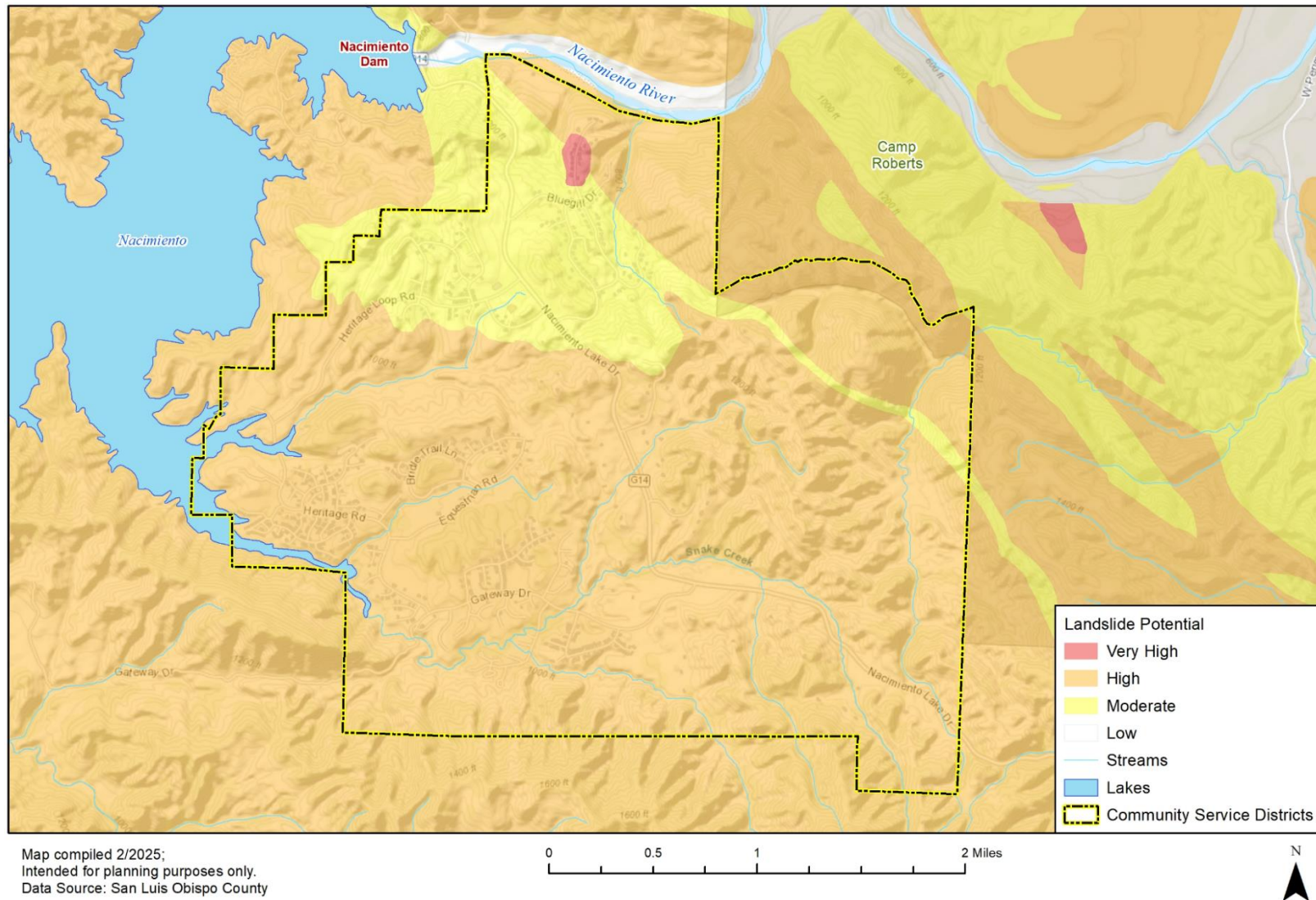
PROPERTY TYPE	TOTAL STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATION
Commercial	191	\$9,355,073	\$9,355,073	\$18,710,146	-
Exempt	3	\$461,068	\$461,068	\$922,136	-
Mobile/Manufactured Homes	674	\$86,763,222	\$43,381,611	\$130,144,833	1,665
Multi-Family Residential	1	\$1,074,057	\$537,029	\$1,611,086	2
Residential	1,062	\$332,210,567	\$166,105,284	\$498,315,851	2,623
Vacant Improved	10	\$1,164,133	\$0	\$1,164,133	-
Total	1,941	\$431,028,120	\$219,840,064	\$650,868,184	4,290

Source: San Luis Obispo Assessor Data November 15, 2024, WSP GIS Analysis





Figure K-6 Landslide Potential Hazard Areas in the Village of Heritage Ranch





#### K.3.3.9 Wildfire

The overall hazard rating for Heritage Ranch CSD is rated as a **high** significance. Heritage Ranch Village has a dry summer climate, which can affect the cause of wildfires in the area. The climate coupled with highly flammable vegetation (including hazardous trees that were flammable or downed and hence dangerous) as well as rugged terrain, fire hazard in Heritage Ranch is high, and fire control is difficult. The Chimney Fire in 2016 injured one person, destroyed 49 residences and 21 other structures, and damaged 8 structures. Drought contributed to this fire which was caused by the ignition of dry grass adjacent to a dirt road. Increased recreation uses will likely intensify the fire hazard in developed areas as well as along the miles of Lake Nacimiento's shoreline accessible by boat.

GIS analysis shows the critical facilities in Heritage Ranch CSD that are exposed to fire hazard severity, categorizing them by severity level and facility type. The exposure of these critical assets to wildfire hazards poses significant risks to communications. GIS analysis shows that there is a total of one (1) critical facilities that fall in the very high fire severity zone rating, four (4) that fall into the high and none moderate fire hazard severity zone rating.

In Heritage Ranch CSD, 1,941 properties are situated within wildfire hazard exposure zones ranging from moderate to very high risk. Of these, 288 properties are located in the Very High Fire Severity Zone, 1,653 are located in the high and none are located in the moderate fire hazard severity zone. These properties represent a total assessed value of \$650,868,184 and impact approximately 4,290 residents across the fire hazard severity zones. Table K-12 shows the properties in the district exposed to Fire Hazard Severity Zones. Figure K-7 depicts the Fire Hazard Severity Zones in Heritage Ranch CSD.

**Table K-12 Heritage Ranch CSD Improved Properties Exposed to Fire Hazard Severity Zones**

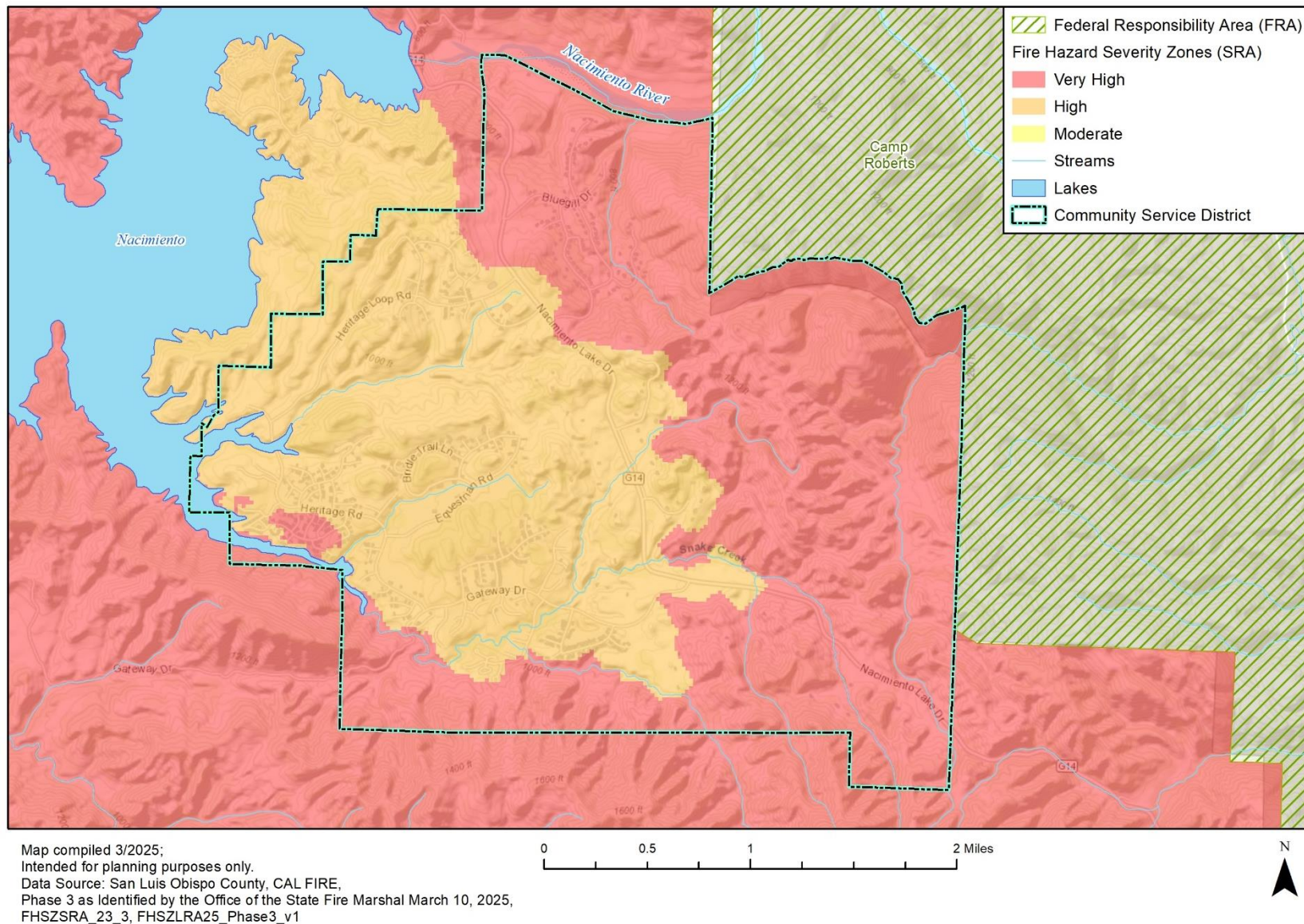
PROPERTY TYPE	STRUCTURE COUNT VERY HIGH	STRUCTURE COUNT HIGH	STRUCTURE COUNT MODERATE	TOTAL STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATION
Commercial	17	174	-	<b>191</b>	\$9,355,073	\$9,355,073	\$18,710,146	-
Exempt	-	3	-	<b>3</b>	\$461,068	\$461,068	\$922,136	-
Mobile/Manufactured Homes	124	550	-	<b>674</b>	\$86,763,222	\$43,381,611	\$130,144,833	1,665
Multi-Family Residential	-	1	-	<b>1</b>	\$1,074,057	\$537,029	\$1,611,086	2
Residential	145	917	-	<b>1,062</b>	\$332,210,567	\$166,105,284	\$498,315,851	2,623
Vacant Improved	2	8	-	<b>10</b>	\$1,164,133	\$0	\$1,164,133	-
<b>Total</b>	<b>288</b>	<b>1,653</b>	<b>0</b>	<b>1,941</b>	<b>\$431,028,120</b>	<b>\$219,840,064</b>	<b>\$650,868,184</b>	<b>4,290</b>

Source: San Luis Obispo Assessor Data November 15, 2024, CAL FIRE - FHSZ Phase 3 March 10, 2025, WSP GIS Analysis





Figure K-7 Heritage Ranch CSD Fire Hazard Severity Zone





## K.4 Capability Assessment

Capabilities are the programs and policies currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. This capability assessment is divided into five sections: regulatory mitigation capabilities, administrative and technical mitigation capabilities, fiscal mitigation capabilities, mitigation outreach and partnerships, and other mitigation efforts.

To develop this capability assessment, the jurisdictional planning representatives used a matrix of common mitigation activities to inventory policies or programs that are in place. The team then supplemented this inventory by reviewing additional existing policies, regulations, plans, and programs to determine if they contributed to reducing hazard-related losses. During the plan update process, this inventory was reviewed by the jurisdictional planning representatives and Wood consultant team staff to update information where applicable and note ways in which these capabilities have improved or expanded. In summarizing current capabilities and identifying gaps, the jurisdictional planning representatives also considered their ability to expand or improve upon existing policies and programs as potential new mitigation strategies. The Heritage Ranch CSD capabilities are summarized below.

### K.4.1 Regulatory Mitigation Capabilities

Table K-13 identifies existing regulatory capabilities the HRCSD has in place to help with future mitigation efforts. Note: many of the regulatory capabilities that can be used for the HRCSD are within the County's jurisdiction. Refer to Section 6 Capability Assessment of the Base Plan for specific information related to the County's mitigation capabilities.

**Table K-13 Heritage Ranch CSD Regulatory Mitigation Capabilities**

REGULATORY TOOL	YES/NO	COMMENTS
General plan	Yes	By the County
Zoning ordinance	Yes	By the County
Subdivision ordinance	Yes	By the County
Growth management ordinance	Yes	By the County
Floodplain ordinance	Yes	By the County
Other special purpose ordinance (stormwater, water conservation, wildfire)	Yes	By the County
Building code	Yes	By the County
Fire department ISO rating	Yes	By the County
Erosion or sediment control program	Yes	By the County
Stormwater management program	Yes	By the County
Site plan review requirements	Yes	
Capital improvements plan	Yes	
Economic development plan	No	
Local emergency operations plan	Yes	
Other special plans	Yes	
Flood Insurance Study or other engineering study for streams	Yes	By the County
Elevation certificates (for floodplain development)	Yes	By the County

Source: Wood Data Collection Guide, 2019



## K.4.2 Discussion on Existing Building Codes, Land Use and Development Regulations

Heritage Ranch Community Services District operates under the county's jurisdiction building codes, land use, and development regulations. The area is governed by the California Building Standards Code (title 24), adopted and enforced by San Luis Obispo County Planning and Building Department. Land use and zoning in Heritage Ranch are guided by the San Luis Obispo County Land Use Ordinance (Title 22), particularly Article 10. Additionally, the Heritage Ranch Plan provides detailed policies and programs tailored to the community. This plan works in conjunction with the North County Area Plan.

## K.4.3 Administrative/Technical Mitigation Capabilities

Table K-14 identifies the personnel responsible for activities related to mitigation and loss prevention in the Heritage Ranch Community Services District.

**Table K-14 Heritage Ranch CSD Administrative/Technical Mitigation Capabilities**

PERSONNEL RESOURCES	YES/NO	DEPARTMENT/POSITION/COMMENTS
Planner/engineer with knowledge of land development/land management practices	Yes	General Manager, District Engineer
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Yes	General Manager, District Engineer
Planner/engineer/scientist with an understanding of natural hazards	No	By the County
Personnel skilled in GIS	Yes	District Engineer
Full time building official	No	By the County
Floodplain manager	No	By the County
Emergency manager	Yes	General Manager
Grant writer	No	Would be able to do if need-driven
Other personnel	Yes	Water and Wastewater Operators; Office Staff
GIS Data Resources - (Hazard areas, critical facilities, land use, building footprints, etc.)	No	By the County
Warning systems/services (Reverse 9-11, outdoor warning signals)	No	By the County

Source: Wood Data Collection Guide, 2019

## K.4.4 Fiscal Mitigation Capabilities

Table K-15 identifies financial tools or resources that the CSD could potentially use to help fund mitigation activities.

**Table K-15 Heritage Ranch CSD Fiscal Mitigation Capabilities**

FINANCIAL RESOURCES	ACCESSIBLE/ELIGIBLE TO USE (YES/NO)
Community Development Block Grants	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
Fees for water, sewer, gas, or electric services	Yes
Impact fees for new development	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activities	Yes



FINANCIAL RESOURCES	ACCESSIBLE/ELIGIBLE TO USE (YES/NO)
Withhold spending in hazard prone areas	No

Source: Wood Data Collection Guide, 2019

### K.4.5 Mitigation Outreach and Partnerships

The Heritage Ranch Community Services District and the Heritage Ranch Owners Association (HROA) generally have the same boundary. The HROA has a safety committee which has Safety Plan separate from those of the HRCSD. Both entities coordinate on water, wastewater, and facility planning and management efforts to operate effectively during an emergency. They additionally maintain a responsible water use policy and disseminate relevant information periodically. For example, the HRCSD recently completed a project in 2016 connecting the HRCSD water system intake facility to the Nacimiento Water Project pipeline for emergency uses, which highlights the community's outreach and partnership/collaboration intents and efforts.

**Table K-16 Heritage Ranch CSD Mitigation Outreach and Partnerships**

CAPABILITY TYPE	YES/NO	NOTES
Hazard Awareness/Education Campaigns		
Firewise	No	
Storm Ready	No	
Severe Weather Awareness Week	No	
School programs	No	
Other		
Methods Used to Communicate Hazard Info. to the Public		
Local News	No	
Social media	Yes	
Community Newsletters	Yes	
Utility Bill Inserts	Yes	
Community Events	Yes	
Other		
Organizations that represent or work with underserved or vulnerable communities		
American Red Cross	No	
Salvation Army	No	
Veterans Groups	No	
Environmental/Conservation Groups	No	
Homeowner/Neighborhood Associations	Yes	
Chamber of Commerce	No	
Community Organizations (Lions, Kiwanis, etc.)	Yes	Heritage Village Seniors





### K.4.6 Opportunities for Enhancement

Based on the capabilities assessment, the Heritage Ranch Community Services District has several existing mechanisms in place that already help to mitigate hazards, such as those mentioned in this Annex's hazard profiles and summary sections and in existing planning and community organization mechanisms such as the Heritage Ranch Village Plan. There are also opportunities for the HRCSD to expand or improve on these policies and programs to further protect the community. Future improvements may include providing training for staff members related to hazards or hazard mitigation grant funding in partnership with the County and Cal OES. Additional training opportunities will help to inform HRCSD staff and board members on how best to integrate hazard information and mitigation projects into the District policies and ongoing duties of the HRCSD. Continuing to train HRCSD staff on mitigation and the hazards that pose a risk to the HRCSD will lead to more informed staff members who can better communicate this information to the public.

## K.5 Mitigation Strategy

### K.5.1 Mitigation Goals and Objectives

The Heritage Ranch CSD adopts the hazard mitigation goals and objectives developed by the County Planning Team and described in Section 7 of the Base Plan: Mitigation Strategy.

### K.5.2 Completed and Deleted 2019 Mitigation Actions

During the 2024 planning process Heritage Ranch Planning Team reviewed all the mitigation actions from the 2019 plan. During the 2024 planning process the Planning Team identified that of their five actions from 2019, one has been completed, and one has been deleted.

**Table K-17 Heritage Ranch CSD Completed and Deleted Actions**

2019 ACTION ID	HAZARD(S) ADDRESSED	MITIGATION ACTION TITLE	LEAD AGENCY	ACTION STATUS NOTES
HR.2	Dam Incidents; Drought; Flooding; Landslide /Debris Flow	The District currently has a vertical well project identified to mitigate low flows from the Dam during outages and/or drought, as well as to provide redundancy (mitigate) for high flow releases that have historically damaged or destroyed the current gallery well system. A vertical well(s) would provide mitigation for both low and high flows (drought and Dam incidents). A vertical well(s) would improve raw water quality if debris flow occurs within Nacimiento Reservoir and River like it did after the Chimney Fire.	HRCSD	Completed. Project design 2024/25; Construct 2025. The District completed the vertical well project previously identified to mitigate low flows from the Dam during outages and/or drought, as well as to provide redundancy (mitigate) for high flow releases that have historically





2019 ACTION ID	HAZARD(S) ADDRESSED	MITIGATION ACTION TITLE	LEAD AGENCY	ACTION STATUS NOTES
				damaged or destroyed the current gallery well system. A second vertical well would provide additional mitigation for both low and high flows and would further improve raw water quality.

### K.5.3 Mitigation Actions

The Planning Team for the Heritage Ranch Community Services District identified and prioritized the following mitigation actions based on the conducted risk assessment. Background information and information on how each action will be implemented and administered, such as ideas for implementation, responsible office, potential funding, estimated cost, and timeline are also included. Actions were prioritized using the process described in Section 7.2.1 of the Base Plan. Actions with an asterisk (\*) are those that mitigate losses to future development.

**Table K-18 Heritage Ranch CSD's Mitigation Action Plan**

ID	HAZARD(S) MITIGATED	DESCRIPTION/BACKGROUND /BENEFITS	LEAD AGENCY& PARTNERS	COST ESTIMATE & POTENTIAL FUNDING	2025 PRIORITY	TIMELINE	STATUS/ IMPLEMENTATION NOTES
HR.1	Dam Incidents; Drought; Flooding	Continue to engage with San Luis Obispo County Flood Control & Water Conservation District, and Monterey County Water Resources Agency to operate the Dam in a manner more conducive to preventing these hazards.	HRCSD Administration; SLOFCWCD; MCWRA	Little to no cost. Staff Time/ Dept. Budget	Low	1-2 years	Annual Implementation
HR.2	Earthquake	Increase risk awareness of the potential impacts of earthquakes to water and wastewater systems and conduct outreach to residents of same; Continue to partner with the Heritage Ranch Owners Association and their Emergency Services Committee on emergency planning.	HR Owners Association, HRCSD Administration	Little to no cost. Staff Time/ Dept. Budget	Low	1-2 years	Annual Implementation
HR.3	Wildfire	Continue wildfire public education and awareness programs to advise residents of risk to life, health and safety; include information on defensible space and safe evacuation; Continue to partner with the Heritage Ranch Owners Association and their Emergency Services Committee on emergency planning.	HR Owners Association, HRCSD Administration	Little to no cost. Staff Time/ Dept. Budget	Low	1-2 years	Annual Implementation
HR.4	Adverse Weather: Thunderstorm/ Heavy Rain/ Hail/ Lightning/ Dense Fog/ Freeze, Adverse Weather: High Wind/Tornado,	Consider support for communication towers and other communication infrastructure to be built within the HRCSD Boundary/property to provide expanded warning	Communication companies, HRCSD Administration	Little to no cost. Staff Time/ Dept. Budget; Communication company budgets	Low	1-5 years	As deemed necessary



ID	HAZARD(S) MITIGATED	DESCRIPTION/BACKGROUND /BENEFITS	LEAD AGENCY& PARTNERS	COST ESTIMATE & POTENTIAL FUNDING	2025 PRIORITY	TIMELINE	STATUS/ IMPLEMENTATION NOTES
	Adverse Weather: Extreme Heat	capabilities related to adverse weather.					
HR.5	Adverse Weather: Extreme Heat; Drought and Water Shortage	Continue to review and analyze water quality and availability and consider additional vertical intake facilities or similar projects to mitigate low flows from the Dam during outages and/or drought.	HRCSD Operations	Little to no cost. Staff Time/ Dept. Budget	Low	1-5 years	As deemed necessary
HR.6	Landslide and Debris Flow; Wildfire	Continue to review and analyze if additional projects could improve raw water quality if debris flow occurs within Nacimiento Reservoir and River like it did after the Chimney Fire.	HRCSD Operations, RCDs, CalFire	Little to no cost. Staff Time/ Dept. Budget	Low	1-5 years	As deemed necessary
HR.7	Flood; Dam Incident	Continue to review and analyze if additional vertical intake facilities or similar projects to mitigate high flows from the Dam that have historically damaged or destroyed the current gallery well system.	HRCSD Operations	Little to no cost. Staff Time/ Dept. Budget	Low	1-5 years	As deemed necessary



## **K.6 Implementation and Maintenance**

Moving forward, the Heritage Ranch Community Services District will use the mitigation action table in the previous section to track progress on implementation of each project. Implementation of the plan overall is discussed in Section 7 in the Base Plan: Implementation and Monitoring.

### **K.6.1 Incorporation into Existing Planning Mechanisms**

The information contained within this Annex and the Base Plan, including results from the Vulnerability Assessments and the Mitigation Strategy will be used by the HRCSD to help inform updates of the Heritage Ranch CSD's existing plans (e.g. 2014 Village Plan) as well as in the development of additional local plans, programs, regulations, and policies. Understanding the hazards which pose a risk and the specific vulnerabilities to the HRCSD and its sphere of influence will help in future capital improvement planning and development for the HRCSD. The San Luis Obispo County Planning & Building Department may utilize the hazard information when reviewing a site plan or other type of development applications within or nearby the boundaries of the Heritage Ranch Community Services District area.

As noted in Section 8 Implementation and Monitoring, the Planning Team representative/s from the Heritage Ranch CSD will report on efforts to integrate the hazard mitigation plan into local plans, programs, regulations, and policies and will report on these efforts at the annual Hazard Mitigation Plan and Planning Team review meeting.

### **K.6.2 Monitoring, Evaluation and Updating the Plan**

The Heritage Ranch Community Services District will follow the procedures to monitor, review, and update this plan in accordance with San Luis Obispo County as outlined in Section 8 of the Base Plan. The District will continue to involve the public in mitigation, as described in Section 8.3 of the Base Plan. The HRCSD General Manager will be responsible for representing the HRCSD in related County Hazard Mitigation Plan meetings or events, and for coordination with County staff and departments during plan updates. The Heritage Ranch CSD realizes it is important to review the plan regularly and update it every five years in accordance with the FEMA Disaster Mitigation Act Requirements as well as other State of California requirements.



## Annex L Los Osos Community Services District

### L.1 District Profile

#### L.1.1 Mitigation Planning History and 2025 Process

This annex was updated in 2025 to build upon the previous version created for the 2019 San Luis Obispo County Hazard Mitigation Plan update. This Jurisdictional Annex also builds upon the previous version of the Local Hazard Mitigation Plan for the Los Osos Community Services District; approved by FEMA in August 2005. The 2005 plan was not incorporated into the District's Emergency Services Plan. However, the updated 2019 version was successfully incorporated, and the upcoming 2025 update is also planned for inclusion.

The General Manager of the Los Osos Community Services District was the representative on the county HMPC and took the lead for developing this annex in coordination with the Los Osos Community Services District Local Planning Team (LPT). The LPT will be responsible for implementation and maintenance of the plan. Table L-1 summarizes the District's planning team for the plan revision process, and Table L-2 summarizes various stakeholder groups, neighboring communities, and local agencies which supported or coordinated on this HMP update.

**Table L-1 Los Osos CSD Hazard Mitigation Plan Planning Team**

DEPARTMENT	TITLE
Administration	General Manager
Administration	Admin Services Mgr.
Utilities	Utilities System Manager
Fire	Battalion Chief

**Table L-2 Los Osos CSD Stakeholder Groups, Neighboring Communities, and Local Agencies**

STAKEHOLDER CATEGORY	ORGANIZATION
Agencies involved in hazard mitigation activities:	SLO County Fire
Agencies that have the authority to regulate development:	SLO County Planning & Building
Neighboring Communities:	City of Morro Bay
Representatives of business, academia, and other private orgs:	Los Osos/Baywood Park Chamber of Commerce
Representatives supporting underserved communities:	People Helping People

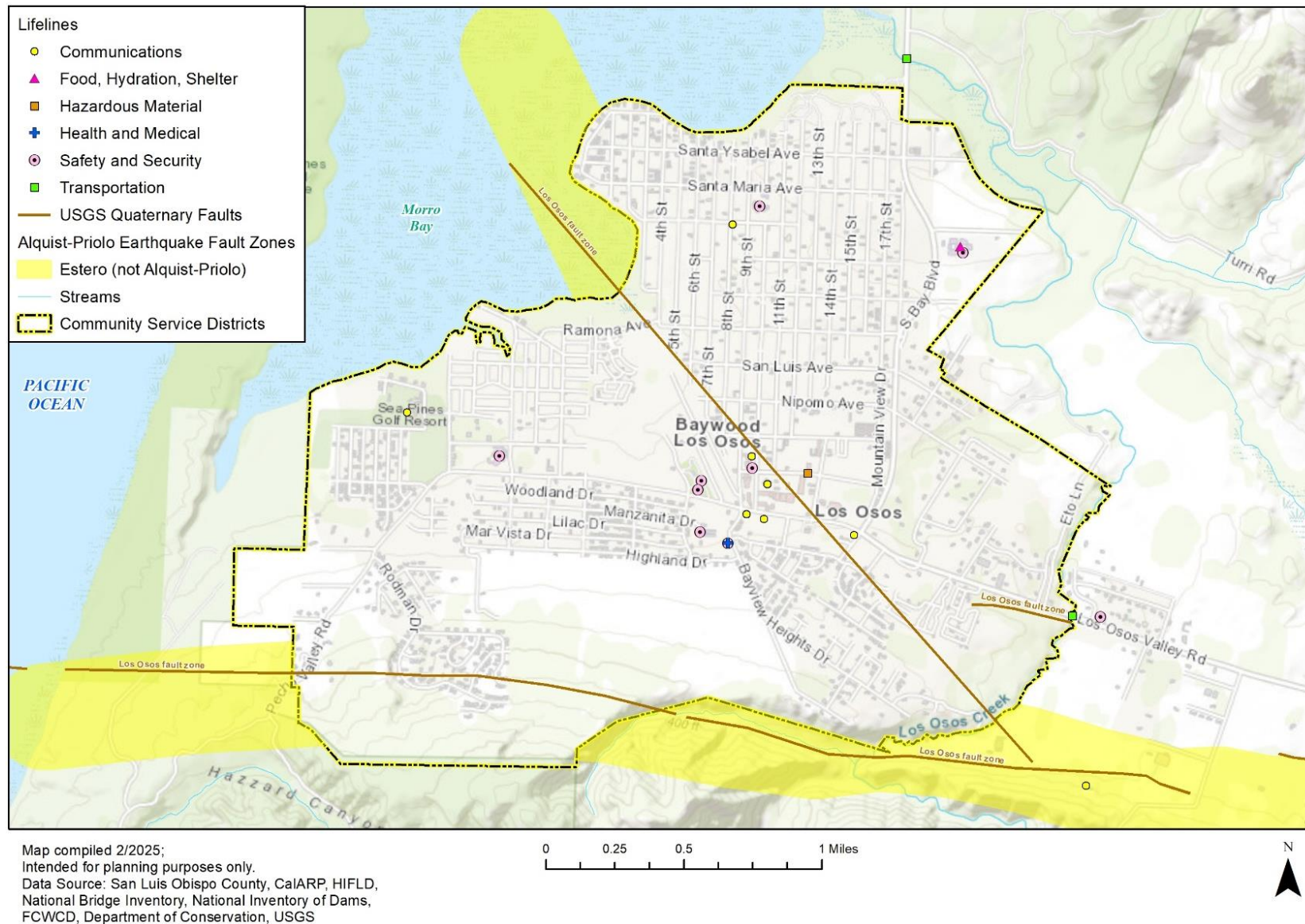
More details on the planning process and how the jurisdictions, service districts and stakeholders participated can be found in Chapter 3 of the Base Plan, as well as how the public was involved during the 2025 update.

Figure L-1 below shows the Los Osos planning area.





Figure L-1 Los Osos Community Service District





### L.1.1 District Overview

The Los Osos Community Services District (District) is located south of the City of Morro Bay and west of the City of San Luis Obispo. The District provides multiple services to the unincorporated coastal area including, water, fire protection services among other services. The Morro Bay Estuary and Morro Bay State Park border the District on the northwest, while the Los Osos Creek is on the eastern border of the District and the prominent topographic feature, Irish Hills, as well as Montano de Oro State Park lies to the south and southwest.

The District was created on November 3, 1998, replacing the old County Service Area 9 with Los Osos' first public agency governed by community residents. District services include fire protection and emergency response, storm water drainage management, solid waste management, water supply for the Baywood area, parks and recreation, and street lighting.

The Los Osos Community Services District is governed by an elected Board of Directors with the authority to make decisions about various public utilities and services. The Board's primary responsibilities are water, solid waste management, drainage, and emergency services. The Board meets on the first Thursday of each month. All Board Meetings are public meetings, and any member of the public can speak to the Board regarding any matter of District authority during the public comment period.

The Los Osos Community Services District has established four advisory committees (Emergency Services Advisory Committee, Finance, Water Utilities and Parks and Recreation) to advise the Board on various aspects of its operations. The Board may create standing committees at its discretion.

Community service districts are prohibited by law from engaging in land use planning. Thus, a volunteer group, the Los Osos Community Advisory Council (LOCAC) has been formed to advise the San Luis Obispo County Board of Supervisors on land use planning, parks, transportation, and other issues that affect the community of Los Osos. LOCAC is an advisory council only; it does not have the authority to make decisions.

### L.1.2 Development Trends

According to the planning team, there has been limited new development in the community since the last plan update, mostly individual single-family homes; this has not notably increased or decreased hazard vulnerability. As mentioned previously, the community is largely built out and bounded on all sides by geographic features and the Los Osos Oaks State Natural Reserve, leaving very limited undeveloped areas within the district. New development will mostly occur on infill lots distributed throughout the community.

The U.S. Census Bureau estimated the Los Osos Census Designated Place's (CDP) 2023 population as 15,048, a decrease from 16,292 in 2018; this represents a 7.6 percent decrease in five years. Table L-3 shows an overview of key social and demographic characteristics of the CDP taken from the U.S. Census Bureau's American Community Survey.

**Table L-3 Los Osos CDP Demographic and Social Characteristics, 2018-2023**

LOS OSOS CDP	2018	2023	% CHANGE
Population	16,292	15,048	-7.6%
Median Age	47.5	47.3	-.4%
Total Housing Units	6,829	6,571	-3.8%
Housing Occupancy Rate	95%	94.6%	-.4%
% of Housing Units with no Vehicles Available s2504	1.1%	2.1%	+90.9%



LOS OSOS CDP	2018	2023	% CHANGE
Median Home Value dp04	\$498,200	\$728,000	+46.1%
Unemployment dp03	2.4%	3%	+25%
Mean Travel Time to Work (minutes) s0801	23.2	20.9	-9.9%
Median Household Income s2506	\$97,004	\$115,000	+18.6%
Per Capita Income dp03	\$39,810	\$51,593	+29.6%
% of Individuals Below Poverty Level s1701	10.3%	8.4%	-18.4%
# of Households s1101	6,482	6,217	-4.1%
Average Household Size	2.49	2.40	+3.6%
% of Population Over 25 with High School Diploma s1501	92.7%	94.2%	+1.6%
% of Population Over 25 with Bachelor's Degree or Higher	41.7%	31%	-25.7%
% with Disability	14.7%	13.4%	-8.8%

Source: U.S. Census Bureau American Community Survey 2018-2023 5-Year Estimates, [www.census.gov/](http://www.census.gov/)

Note: Data is for the Los Osos Census Designated Place (CDP) which may not have the same boundaries as the Cambria Community Service District.

The following tables show how the Los Osos CDP's labor force breaks down by occupation and industry estimates from the U.S. Census Bureau's 2023 American Community Survey. The industries with the most employees are educational services, health care and social assistance (21.8%) as shown below in Table L-4. The most common occupations in Cambria are those in management, business, science, and the arts (43.63%) as shown in Table L-3.

**Table L-4 Los Osos CPD Employment by Industry (2023)**

INDUSTRY	# EMPLOYED	%
Population (2017)	12,461	
In Labor Force	7,602	61%
Agriculture, forestry, fishing and hunting, and mining	170	2.4%
Armed Forces	0	0%
Construction	841	11.6%
Manufacturing	377	5.2%
Wholesale trade	26	.4%
Retail trade	673	9.3%
Transportation and warehousing, and utilities	377	5.2%
Information	184	2.5%
Finance and insurance, and real estate and rental and leasing	281	3.9%
Professional, scientific, and management, and administrative and waste management services	732	10.1%
Educational services, health care and social assistance	1,578	21.8%
Arts, entertainment, recreation, and accommodation and food services	979	13.5%
Other services, except public administration	587	8.1%
Public administration	429	5.9%
Unemployed	368	3%

Source: U.S. Census Bureau American Community Survey 2018-2023 5-Year Estimates, [www.census.gov/](http://www.census.gov/)

**Table L-5 Los Osos CPD Employment by Occupation (2023)**

OCCUPATION	# EMPLOYED	% EMPLOYED
Sales and Office Occupations	1,293	17.9%
Management, Business, Science, and Arts Occupations	3,153	43.63%
Service Occupations	1,653	22.9%
Production, Transportation, and Material Moving Occupations	540	7.5%
Natural Resources, Construction, and Maintenance Occupations	595	8.2%
Total	7,234	

Source: U.S. Census Bureau American Community Survey 2018-2023 5-Year Estimates, [www.census.gov/](https://www.census.gov/)

Note: Data is for the Los Osos Census Designated Place (CDP) which may not have the same boundaries as the Cambria Community Service District

### L.1.3

### L.1.4 Other Community Planning Efforts

The coordination and synchronization of this plan with other community planning mechanisms and efforts are vital to the success of this plan. To have a thorough evaluation of hazard mitigation practices already in place, appropriate planning procedures should also involve identifying and reviewing existing plans, policies, regulations, codes, tools, and other actions are designed to reduce a community's risk and vulnerability from natural hazards.

As an unincorporated community, Los Osos and the Los Osos Community Services District are referenced in other County planning documents and regulated by County policies and planning mechanisms. Integrating existing planning efforts, mitigation policies, and action strategies into this annex establishes a credible, comprehensive document that weaves the common threads of a community's values together. The development of this jurisdictional annex involved a comprehensive review of existing plans, studies, reports, and initiatives from San Luis Obispo County and the Los Osos community that relate to hazards or hazard mitigation, as summarized in the table below. Information on how they informed the update are noted and incorporated where applicable.

**Table L-6 Summary of Review of Key Plans, Studies and Reports**

PLAN, STUDY, REPORT NAME	HOW DOCUMENT INFORMED THE ANNEX
Los Osos Community Plan (December, 2024)	Incorporated background information on the community and CSD.
2019 SLO County HMP - Los Osos Annex	Informed assets at risk, past hazard events, and background information on the District and the community.
Estero Area Plan (2009)	Informed natural assets section on the Sensitive Areas in the Los Osos community

In addition to the development standards within the Los Osos Community Plan, there are County planning mechanisms that regulate future and existing development within the Los Osos CSD planning area. Refer to Section L.4 Capability Assessment for more information on the plans, policies, regulations and staff that govern the Los Osos planning area.



## L.2 Hazard Identification and Summary

The Los Osos CSD planning team identified the hazards that affect the District and summarized their frequency of occurrence, spatial extent, potential magnitude, and significance specific to the Los Osos CSD (see Table L-7). There are no hazards that are unique to Los Osos.

**Table L-7 Los Osos CSD Hazard Risk Summary**

HAZARD	GEOGRAPHIC AREA	PROBABILITY OF FUTURE OCCURRENCE	MAGNITUDE/ SEVERITY (EXTENT)	OVERALL SIGNIFICANCE
Adverse Weather: Thunderstorm, Heavy Rain, Lightening, Freeze, Hail, Dense Fog,	Significant	Likely	Limited	Medium
Adverse Weather: High Wind and Tornado	Significant	Likely	Limited	Medium
Adverse Weather: Extreme Heat	Significant	Likely	Limited	Low
Coastal Storm/Coastal Erosion/Sea Level Rise	Significant	Likely	Limited	Low
Drought and Water Shortage	Significant	Likely	Limited	High
Earthquake	Extensive	Likely	Critical	High
Flood	Limited	Likely	Limited	Low
Landslide and Debris Flow	Limited	Occasional	Limited	Low
Tsunami and Seiche	Significant	Occasional	Limited	Low
Wildfire	Significant	Likely	Limited	High
<b>Geographic Area</b> Limited: Less than 10% of planning area Significant: 10-50% of planning area Extensive: 50-100% of planning area <b>Probability of Future Occurrences</b> Highly Likely: Near 100% chance of occurrence in next year or happens every year. Likely: Between 10 and 100% chance of occurrence in next year or has a recurrence interval of 10 years or less. Occasional: Between 1 and 10% chance of occurrence in the next year or has a recurrence interval of 11 to 100 years. Unlikely: Less than 1% chance of occurrence in next 100 years or has a recurrence interval of greater than every 100 years.		<b>Magnitude/Severity (Extent)</b> Catastrophic—More than 50 percent of property severely damaged; shutdown of facilities for more than 30 days; and/or multiple deaths Critical—25-50 percent of property severely damaged; shutdown of facilities for at least two weeks; and/or injuries and/or illnesses result in permanent disability Limited—10-25 percent of property severely damaged; shutdown of facilities for more than a week; and/or injuries/illnesses treatable do not result in permanent disability Negligible—Less than 10 percent of property severely damaged, shutdown of facilities and services for less than 24 hours; and/or injuries/illnesses treatable with first aid <b>Significance</b> Low: minimal potential impact Medium: moderate potential impact High: widespread potential impact		





## L.3 Vulnerability Assessment

The intent of this section is to assess the Los Osos Community Services District's vulnerability separate from that of the planning area, which has already been assessed in Section 5 Hazard Identification and Risk Assessment in the Base Plan. This vulnerability assessment analyzes the population, property, and other assets at risk to hazards ranked of medium or high significance that may vary from other parts of the planning area.

The information to support the hazard identification and risk assessment for this Annex was collected through a Data Collection Guide, which was distributed to each participating municipality or special district to complete during the planning process. Information collected was analyzed and summarized in order to identify and rank all the hazards that could impact anywhere within the County, as well as to rank the hazards and identify the related vulnerabilities unique to each jurisdiction. In addition, the Los Osos CSD planning team members were asked to share information on past hazard events that have affected the Community Services District.

Each participating jurisdiction was in support of the main hazard summary identified in the Base Plan (See Table 5.2). However, the hazard summary rankings for each jurisdictional annex may vary slightly due to specific hazard risk and vulnerabilities unique to that jurisdiction (See Table L-7. Identifying these differences helps the reader to differentiate the jurisdiction's risk and vulnerabilities from that of the overall County.

Note: The hazard "Significance" reflects overall ranking for each hazard and is based on the Los Osos CSD planning team input from the Data Collection Guide and the risk assessment developed during the planning process (see Chapter 5 of the Base Plan), which included a more detailed qualitative analysis with best available data.

### L.3.1 Other Hazards

Los Osos is not required to participate separately in the National Flood Insurance Program (NFIP) but will continue to support the County's participation in and compliance with the NFIP.

The following hazards identified in the base plan are not identified within jurisdictional annex due to no risk or insignificant anticipated impacts and are not considered further for mitigation actions:

- Agricultural Pest Infestation and Disease
- Biological Agents (naturally occurring)
- Dam Incidents (no exposure to dam inundation zones)
- Landslides and Debris Flow
- Subsidence
- Hazardous Materials

### L.3.2 Assets at Risk

This section considers the district's assets at risk, including an inventory of improved properties and critical facilities and Community Lifelines, and historic, economic, cultural, and environmental assets. Please refer to Section 5.2.2 of the base plan for a detailed description of the methodology used.

#### L.3.2.1 Values at Risk

Table L-8 shows the total exposure of properties (e.g., the values at risk) broken down by property type for the Los Osos Community Services District.

**Table L-8 Los Osos CSD Total Exposure by Property Type**

PROPERTY TYPE	STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE
Agricultural	1	\$8,766	\$8,766	\$17,532
Commercial	120	\$62,521,031	\$62,521,031	\$125,042,062
Exempt	18	\$4,952,566	\$4,952,566	\$9,905,132
Industrial	9	\$12,613,337	\$18,920,006	\$31,533,343
Mixed Use	55	\$10,111,144	\$10,111,144	\$20,222,288
Mobile Home	9	\$12,686,166	\$6,343,083	\$19,029,249
Multi-Family Residential	185	\$65,126,126	\$32,563,063	\$97,689,189
Residential	4,903	\$1,205,322,760	\$602,661,380	\$1,807,984,140
Vacant Improved	24	\$5,916,725	\$5,916,725	\$11,833,450
Total	5,324	\$1,379,258,621	\$743,997,764	\$2,123,256,385

Source: San Luis Obispo County Assessor Data November 15, 2024, WSP GIS Analysis

### L.3.2.2 Critical Facilities and Infrastructure

A critical facility may be defined as one that is essential in providing utility or direction either during the response to an emergency or during the recovery operation.

An inventory of critical facilities in the District based on County GIS data is provided in Table L-9 and illustrated in Figure L-1 Refer to Section 5.2 of the Base Plan for more information on the Assets used throughout this annex, including the definitions and categories of critical facilities, and the County-wide analyses.

**Table L-9 Los Osos CSD Critical Facility Assets Summary by FEMA Lifeline**

FEMA LIFELINE CATEGORY	COUNTS
Communications	7
Energy	-
Food, Hydration, Shelter	1
Hazardous Material	1
Health and Medical	1
Safety and Security	8
Transportation	-
Water Systems	-
Total	18

Source: San Luis Obispo County, CalARP, HIFLD, National Bridge Inventory, National Inventory of Dams, FCWCD, WSP Analysis

### L.3.2.3 Essential Facilities

Essential facilities as identified by the Los Osos CSD Planning Team are as follows:

- Sheriff Sub-Station – 2099 10<sup>th</sup> Street
- South Bay Fire Department – 2315 Bayview Heights
- Water Treatment Facilities
- Water Tanks
- Water Pumping Facilities
- Groundwater Supply Sites



#### *L.3.2.4 Transportation and Lifeline Facilities*

The Los Osos CSD is situated in proximity to the regional transportation routes of Highway 101 and Highway 1 via Los Osos Valley Road and South Bay Boulevard. These are also the main arterial roads to access the planning area. The lack of alternative transportation routes during an evacuation was noted as a significant concern for many residents in the Los Osos Community. The District's lifeline facilities include those listed in the essential facilities above.

#### *L.3.2.5 Historic and Cultural Resources*

No historic or cultural resources have been identified in the Los Osos CSD.

#### *L.3.2.6 Natural Resources*

Natural resources are important to include in benefit-cost analyses for future projects and may be used to leverage additional funding for projects that also contribute to community goals for protecting sensitive natural resources. Awareness of natural assets can lead to opportunities for meeting multiple objectives. For instance, protecting wetlands areas protects sensitive habitat as well as attenuates and stores floodwaters. The Los Osos CSD Planning Team identified the following significant natural assets:

- Los Osos Oak State Reserve
- Baywood Park
- Audubon Overlook
- Elfin Forest
- Sweet Springs Nature Preserve
- Montana De Oro State Park
- Los Osos Community Park
- Los Osos School 1872
- Morro Bay Estuary

Some of natural assets listed above are also areas designed in the Estero Area Plan (2009) combining designations for Sensitive Reserve Areas, which apply to the protection of special resources in the Los Osos community and its vicinity:

- Los Osos Oaks State Reserve (SRA) - The Los Osos Forest is an 86-acre state park reserve containing outstanding examples of California pygmy oaks--stunted coast live oaks, growing in a stabilized dune area. Other oaks are also present, making this area an outstanding example of an oak woodland. The forest also includes a strip of open space preserved by the developer of Tract 527, but it is not open to public access.
- Los Osos Creek (SRA) - The lower eight miles of the creek are an anadromous fish stream (primarily steelhead), and adjacent riparian areas are rich in wildlife. Environmental concerns include contamination and excessive siltation of both the creek and the bay by development or other adverse uses occurring too close to the creek and its tributaries.
- Eto and Warden Lakes (SRA) - These are two of the few remaining isolated freshwater marshes in the county. Both lie within the Los Osos Creek drainage. The freshwater marshes, along with the associated riparian habitat, are important sites for migratory birds.
- Hazard Canyon and Vicinity (SRA) - The threatened Morro manzanita occurs only in the area between Baywood Park and Hazard Canyon. In addition, two of the six known stands of the endangered Indian Knob Mountain balm occur in Hazard Canyon. Many other endemic plant species are found in the dunes near the mouth of the canyon. This area is an excellent example of the successive stages of dune stabilization. Much of this area is within Montaña de Oro State Park.



- Montaña de Oro Grassland (SRA) - The marine terrace between Islay and Coon Creeks is a mosaic of the Stipa grassland community and the northern coastal scrub and coastal sage scrub. The terrace also supports numerous wildflowers.
- Coon Creek (SRA). Several natural plant communities occur in this area. The most interesting is the Bishop pine forest located on steep slopes just outside Montaña de Oro State Park. This is a large conifer forest where specimens of the Bishop pine may have been first collected scientifically and used to describe the species. Coast live oak is intermixed with the conifer forest. The county's only native population of *Ceanothus griseus* is found in this area (Source: California Native Plant Society).

### L.3.2.7 Economic Assets

Los Osos is a residential area, and there is very little commercial development.

## L.3.3 Estimating Potential Losses

Note: This section details vulnerability to specific hazards of high or medium significance, where quantifiable, and/or where (according to HMPC member input) it differs from that of the overall County.

Table L- above shows Los Osos' exposure to hazards in terms of number and value of structures. San Luis Obispo County parcel and assessor data was used to calculate the improved value of parcels. The most vulnerable structures are unreinforced masonry buildings, and buildings built prior to the introduction of modern-day building codes. Impacts of past events and vulnerability to specific hazards are further discussed below. (See Section 5 of the Base Plan for more detailed information about these hazards and their impacts on San Luis Obispo County as a whole.)

### L.3.3.1 Adverse Weather: Thunderstorms/ Heavy Rain/ Lightning/ Freeze/ Hail/ Dense Fog

Adverse weather in the Los Osos Community Services District includes thunderstorms, heavy rain, lightning, freeze, hail, and dense fog. The overall significance rating for Los Osos is **Medium**. Heavy rainfall events affect the District annually and the community's proximity to the Pacific Ocean tends to exaggerate adverse weather compared to inland communities. The district receives approximately 17 inches of precipitation annually. Combined with soil conditions and the presence of shallow-rooted Eucalyptus trees, heavy rains and moderate winds cause numerous tree-toppling events each year. Downed trees knock down power and communications lines, bringing disruptions lasting from a few hours to days in some locales in the District. The tables below show key climate variables such as extreme temperatures, precipitation totals, and the frequency of specific weather events.

Note that Morro Bay Fire Department and the Los Osos Landfill weather stations are the nearest official reporting site to Los Osos. Refer to Section 5 of the Base Plan for information on past adverse weather events in San Luis Obispo County.

**Table L-10 Morro Bay Fire Department Climate Summary Table - Weather (Period of Record: 02/03/1959 - 12/31/2015)**

SUMMAR Y PERIOD	MONTHLY MEAN MAXIMU M TEMP.	MONTHLY MEAN MINIMUM TEMP.	DAILY EXTREME HIGH TEMP	DAILY EXTREME HIGH DATE	DAILY EXTREME LOW TEMP	DAILY EXTREME LOW DATE	MAXIMU M TEMP. ≥ 90°F MEAN # DAYS	MINIMUM TEMP. ≤ 32°F MEAN # DAYS
Winter	62.7°F	43.4°F	89°F	1/17/1976	22°F	12/22/1990	0	3



SUMMARY PERIOD	MONTHLY MEAN MAXIMUM TEMP.	MONTHLY MEAN MINIMUM TEMP.	DAILY EXTREME HIGH TEMP	DAILY EXTREME HIGH DATE	DAILY EXTREME LOW TEMP	DAILY EXTREME LOW DATE	MAXIMUM TEMP. $\geq 90^{\circ}\text{F}$ MEAN # DAYS	MINIMUM TEMP. $\leq 32^{\circ}\text{F}$ MEAN # DAYS
Spring	63.8°F	46.1°F	100°F	4/7/1989	28°F	3/4/1969	0.3	0.1
Summer	66.0°F	52.3°F	94°F	8/28/1962	39°F	6/14/1992	0	0
Fall	68.3°F	50.2°F	106°F	10/4/1987	31°F	11/28/1989	1.4	0.1
Annual	64.9°F	47.8°F	106°F	10/4/1987	22°F	12/22/1990	1.8	3.6

Source: Western Regional Climate Center (WRCC) <https://wrcc.dri.edu/>

\* Winter is defined as December, January, and February

\*\* Summer is defined as June, July, and August

**Table L-11 Morro Bay Fire Department Climate Summary Table – Precipitation (Period of Record: 02/01/1959 - 03/30/2025)**

SUMMARY PERIOD	PRECIP. MEAN	PRECIP. HIGH	PRECIP. HIGH YEAR	PRECIP. LOW	PRECIP. LOW YEAR	PRECIP. 1 DAY MAXIMUM	PRECIP. 1 DAY MAXIMUM DATE	PRECIP. $\geq 1.00$ IN. MEAN # DAYS
Winter	8.43 in.	19.91 in.	1969	2.09 in.	1964	3.7 in.	1/1/2006	2.1
Spring	4.48 in.	21.01 in.	1995	0.3 in.	1959	8.82 in.	3/11/1995	1
Summer	0.17 in.	1.82 in.	2015	0 in.	1959	1.82 in.	7/19/2015	0
Fall	2.53 in.	6.58 in.	1982	0.13 in.	1980	2.1 in.	10/17/2016	0.5
Annual	15.65 in.	34.63 in.	1983	3.95 in.	2013	8.82 in.	3/11/1995	3.8

Source: Western Regional Climate Center (WRCC) <https://wrcc.dri.edu/>

\* Winter is defined as December, January, and February

\*\* Summer is defined as June, July, and August

### L.3.3.2 Adverse Weather: High Wind and Tornado

Los Osos CSD overall significance rating for high wind and tornadoes is **medium**. While the region typically experiences a mild coastal climate, certain factors elevate its vulnerability to these hazards. High wind events in Los Osos are primarily associated with winter storm systems. These storms can produce gusty winds capable of causing minor damage, such as downed tree limbs and power lines. The area's coastal location can sometimes amplify wind speeds, especially strong frontal passages.

Tornadoes are rare in San Luis Obispo County; however, Los Osos experiences a notable event on February 7, 2024, when an EF1 tornado touched down in the area. The tornado had estimated peak winds of 95 mph, a path length of 5 miles, and a maximum width of 50 yards. This event was significant because it marked the first tornado in the county since 2004. The combination of occasional high wind events and the rare but impactful tornado occurrence contributes to the medium hazard rating in Los Osos CSD.

### L.3.3.3 Adverse Weather: Extreme Heat

Extreme heat is a **low** significance hazard for the Los Osos CSD. The monthly mean maximum fall temperature for the Morro Bay Fire Department, the closest NOAA weather station to the CSD, is 68.3°F; however, temperatures up to 106°F have been recorded (see Table L-10). Additionally, rising temperatures and more frequent heat waves are increasing the likelihood of more extreme heat events in the future.





High temperatures lead to increased water demand for irrigation and cooling, which can strain pumping systems, reduce well yields, and potentially degrade water quality through reduced dilution capacity and bacterial contamination. Additionally, sustained heat can overheat pumps and increase the likelihood of equipment failures. Field staff working outdoors also face heat-related illness, which can lead to reduced staffing and slower response times.

Emergency services face greater demand during heat waves, as the risk of wildfires intensify and heat-related medical emergencies become more frequent. These conditions can place additional pressure on the CSD's contracted fire and EMS providers. Solid waste operations can also be impacted, with sanitation workers exposed to higher risk and waste decomposing more quickly which can result in sanitation issues. Parks and recreation assets may also suffer from stressed vegetation and reduced public use. Power outages caused by heat-induced grid strain can disrupt nearly all services.

#### ***L.3.3.4 Coastal Storm/Coastal Erosion/Sea Level Rise***

The District is located in a coastal lowland area adjacent to Morro Bay, with several neighborhoods, roadways, and utility infrastructure in proximity to estuarine and oceanfront zones potentially vulnerable to sea level rise. While direct inundation under current sea level conditions ranks this hazard category as low significance, the presence of back bay waters, tidal marshlands, and episodic coastal flooding events presents increasing risk over time.

The combination of storm surge, king tides, and long-term sea level rise may gradually elevate flood risks, especially in lower-elevation areas near Cuesta-by-the-Sea and along the tidal edges of Los Osos Valley. The District continues to monitor shoreline and drainage dynamics and will rely on regional sea level rise vulnerability assessments and planning efforts by San Luis Obispo County, State Parks, and other partners to guide future adaptation strategies and infrastructure investments. Further details, including methodology and modeling assumptions, are provided in the Base Plan, Section 5.3.4, Coastal Storm, Coastal Erosion, and Sea Level Rise.

#### **Values at Risk**

A sea level rise risk assessment was completed to evaluate potential impacts on coastal jurisdictions, critical facilities, and flood hazards. Table L-12 and Table L-13 summarize the properties projected to be at risk from sea level rise alone and from sea level rise combined with a 1% annual chance flood event. The areas of potential inundation are illustrated in Figure L-2 and Figure L-3, respectively. No critical facilities were identified as being at risk under the sea level rise scenarios assessed. Additional details regarding the modeling assumptions, scenarios, and data sources are provided in Section 5.3.4 of the Base Plan.

**Table L-12 Los Osos Properties Inundated by Sea Level Rise and Sea Level Rise with 1% Annual Chance Flood**

PROPERTY TYPE	25-CM SLR	75-CM SLR	300-CM SLR	25-CM SLR W/1% FLOOD	75-CM SLR W/1% FLOOD	300-CM SLR W/1% FLOOD
Commercial	1	4	16	6	8	19
Exempt	1	1	1	1	1	1
Mixed Use	-	-	4	1	1	7
Mobile/Manufactured Homes	-	-	1	-	-	1
Multi-Family Residential	-	-	4	-	-	10
Residential	4	25	225	45	89	292
Vacant Improved	-	-	2	1	2	2
Total	6	30	253	54	101	332

Source: San Luis Obispo County Assessor Data November 15, 2024, USGS CoSMoS v3.1, WSP GIS Analysis

**Table L-13 Los Osos Improved Values of Properties Inundated by Sea Level Rise and Sea Level Rise with 1% Annual Chance Flood**

PROPERTY TYPE	25-CM SLR	75-CM SLR	300-CM SLR	25-CM SLR W/1% FLOOD	75-CM SLR W/1% FLOOD	300-CM SLR W/1% FLOOD
Commercial	\$109,242	\$2,655,266	\$8,182,517	\$4,434,554	\$4,789,794	\$8,599,580
Exempt	\$3,444	\$3,444	\$3,444	\$3,444	\$3,444	\$3,444
Mixed Use	-	-	\$1,067,127	\$637,500	\$637,500	\$1,266,258
Mobile/Manufactured Homes	-	-	\$69,324	-	-	\$69,324
Multi-Family Residential	-	-	\$1,476,959	-	-	\$3,926,280
Residential	\$1,806,596	\$7,464,643	\$58,936,259	\$13,233,820	\$23,785,693	\$74,642,803
Vacant Improved	-	-	\$1,103,604	\$11,604	\$1,103,604	\$1,103,604
Total	\$1,919,282	\$10,123,353	\$70,839,234	\$18,320,922	\$30,320,035	\$89,611,293

Source: San Luis Obispo County Assessor Data November 15, 2024, USGS CoSMoS v3.1, WSP GIS Analysis

Sea level rise modeling for Los Osos shows limited exposure under lower sea level rise scenarios, with risk increasing significantly at higher levels. Under the 25-centimeter scenario, six properties are projected to be inundated, including commercial and residential parcels. By the 75-centimeter scenario, 30 properties are at risk, primarily residential. Under the 300-centimeter sea level rise scenario, exposure expands to 253 parcels, including a substantial number of residential, commercial, mixed-use, and multi-family properties.

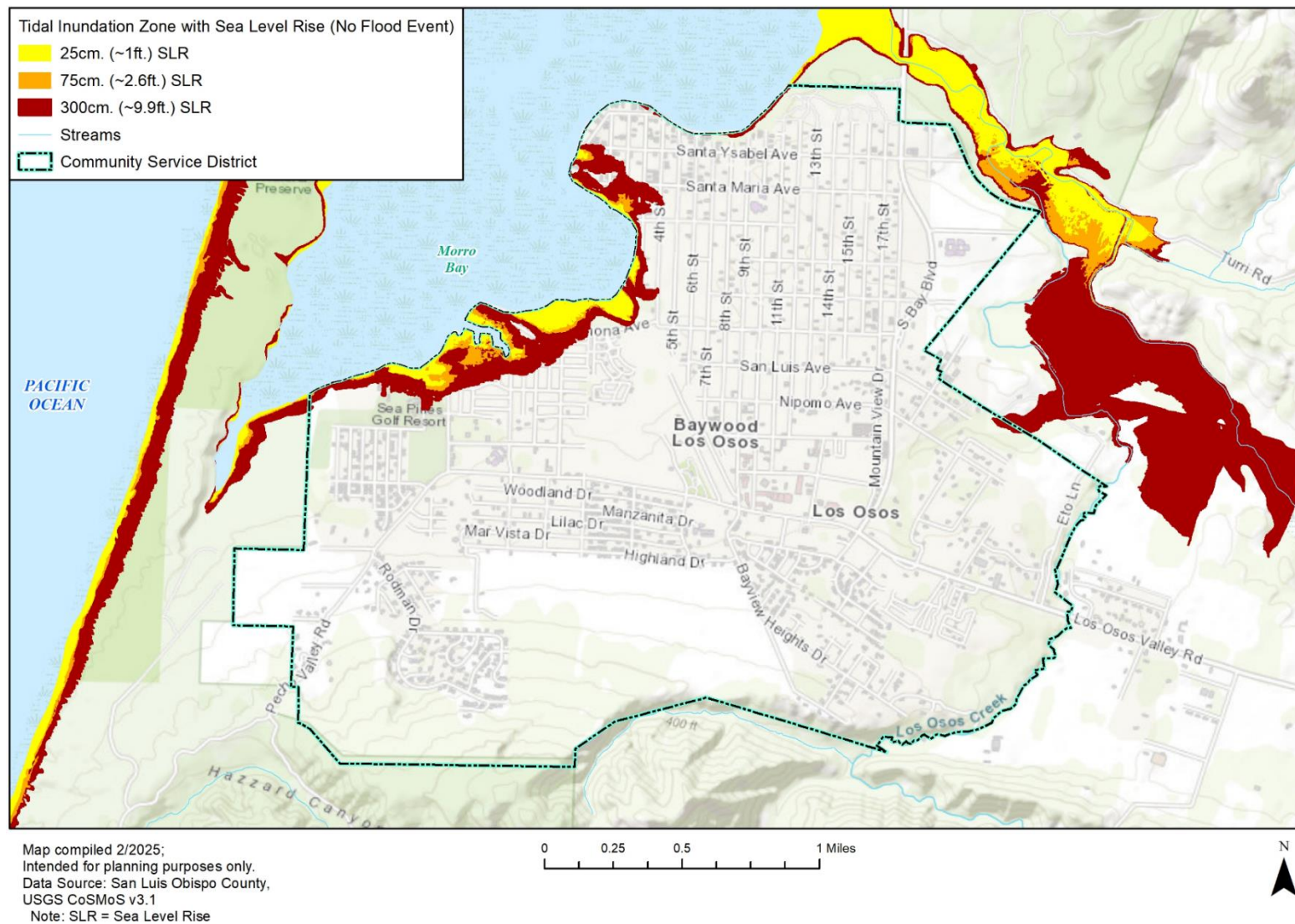
When sea level rise is combined with a FEMA 1% annual chance flood event, the number of affected properties increases across all scenarios. Under the combined 300-centimeter scenario, 332 properties are at risk, including 292 residential parcels and 19 commercial parcels, with additional exposure to mixed-use, mobile home, multi-family residential, exempt, and vacant improved parcels. Residential parcels represent the majority of exposure across all scenarios.

Under the 25-centimeter sea level rise scenario, the total improved value of properties at risk is approximately \$1.9 million. This increases to \$10.1 million under the 75-centimeter scenario and to approximately \$70.8 million under the 300-centimeter scenario. Residential properties make up the largest share of value at risk, particularly under the higher sea level rise conditions.

When sea level rise is combined with a FEMA 1% annual chance flood event, the total improved value at risk increases to approximately \$18.3 million under the 25-centimeter scenario, \$30.3 million under the 75-centimeter scenario, and \$89.6 million under the 300-centimeter scenario. Residential properties again represent the majority of total value exposed, followed by commercial, multi-family residential, and mixed-use parcels.



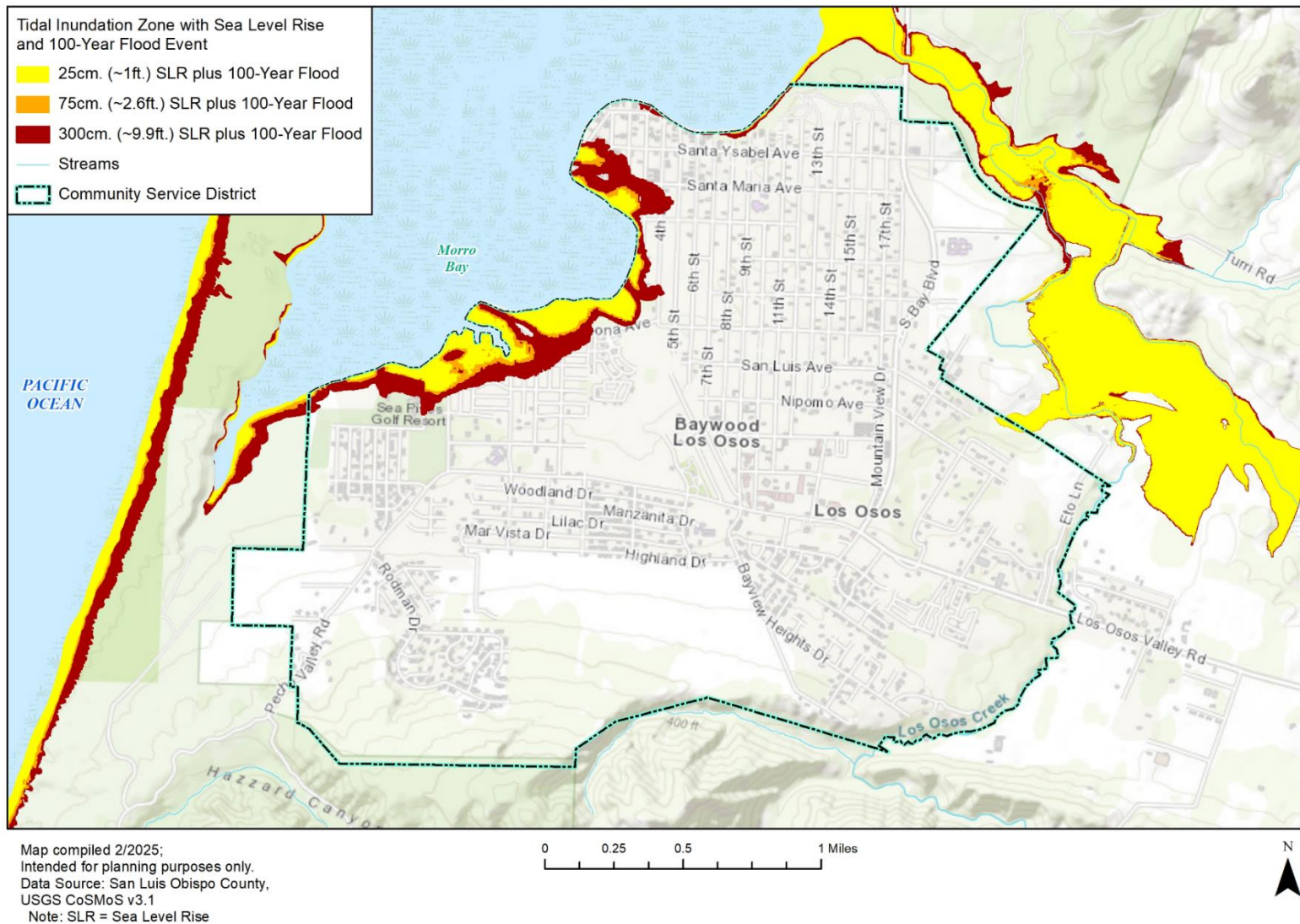
**Figure L-2 Los Osos Sea Level Rise Scenario Analysis: Tidal Inundation Only**







**Figure L-3 Los Osos Sea Level Rise Scenario Analysis: Tidal Inundation and 1% Annual Chance Flood**





### Populations at Risk

Table L-14 provides information on Los Osos CSD population exposed to sea level rise scenario hazards with and without the 1% annual chance flood, below.

**Table L-14 Los Osos CSD Population Exposed to Sea Level Rise Scenario Hazards**

CSD	25-CM SLR	75-CM SLR	300-CM SLR	25-CM SLR W/ 1% FLOOD	75-CM SLR W/1% FLOOD	300-CM SLR W/1% FLOOD
Los Osos CSD	10	62	568	111	220	748
Total	10	62	568	111	220	748

Source: San Luis Obispo County Assessor Data November 15, 2024, USGS CoSMoS v3.1, WSP GIS Analysis

As sea level rise projections increase, so does the potential population exposure within the Los Osos CSD. Under the 25-centimeter sea level rise scenario, approximately 10 residents are exposed, with that number rising to 62 under the 75-centimeter scenario. At 300 centimeters of sea level rise, the population exposed increases significantly to 568. When storm surge and 1% annual chance flooding are combined with these sea level rise scenarios, the exposure becomes more severe, with 111 people impacted at 25 cm, 220 at 75 cm, and up to 748 residents potentially exposed under the 300 cm scenario. This escalating pattern highlights the growing vulnerability of low-lying neighborhoods, particularly near coastal and estuarine areas, and underscores the importance of proactive adaptation and planning.

#### L.3.3.5 Drought and Water Shortage

Drought and Water Shortage is considered to be of high significance for the Los Osos CSD. The Los Osos CSD is one of the three water purveyors in the Los Osos community. The District supplies water for domestic service and fire protection. The CSD's service area encompasses 633 acres of predominately residential land uses. The CSD utility department is responsible for maintaining and operating their water distribution system, which includes six groundwater supply wells, over 27 miles of water main lines, three water storage tanks, approximately 2,780 water service lines and meters, 167 fire hydrants, four submersible pump stations, and five drainage basins. The District has a daily production capacity of approximately 1,580 gallons per minute when all wells are active.

The Los Osos Groundwater Basin is the only source of water for residential, commercial, institutional, and agricultural uses in the Los Osos community. In 2014, the basin was identified by the State as a high priority groundwater basin due to seawater intrusion and nitrate contamination, which required compliance with the Sustainable Groundwater Management Act (SGMA).

In 2019, the Department of Water Resources reclassified the Los Osos Basin as a very low-priority basin under SGMA. However, it remains designated as being in a state of critical overdraft due to ongoing seawater intrusion. Currently, Los Osos is under a building moratorium due to water supply limitations. The moratorium can only be lifted if key factors within the Basin Management Plan (such as seawater intrusion mitigation and sustainable yield) are met.

The 2023 Los Osos Basin Plan Groundwater Monitoring Program Annual report showed improvement in precipitation and groundwater conservation. Purveyor production (from Los Osos CSD, Golden State Water Company, and S&T Mutual Water Company) decreased by 3% from 2022, and total basin production declined by 18% due largely to reduced pumping from domestic, community, and agricultural wells. While above-average rainfall in 2023 improved overall water availability, seawater intrusion advanced in some sections of the basin.





Additionally, chloride levels worsened, while nitrate levels improved but remained above the target level.

While water levels are increasing, continued drought conditions in Los Osos may lead to increased pumping, leading to wells requiring rehabilitation and increasing maintenance costs. Aging or overused infrastructure may experience increased breakdowns or inefficiencies, requiring emergency repairs. To manage any future crisis, the CSD may need to invest in additional groundwater monitoring and testing, infrastructure upgrades or emergency well drilling, and public outreach and enforcement programs.

Drought impacts are wide-reaching and may be economic, environmental, and/or societal. The most significant impacts associated with drought in the planning area are those related to water intensive activities such as wildfire protection, jurisdictional usage, commerce, tourism and recreation. Drought conditions can also cause soil to compact and not absorb water well, potentially making an area more susceptible to flooding.

#### *L.3.3.6 Earthquake and Liquefaction*

Earthquakes and Liquefaction are considered to be **High Significance** for the Los Osos CSD. Like all jurisdictions in the county, Los Osos is exposed to seismic hazards from movement along several regional faults and is at more or less the same level of risk for damage as other communities in San Luis Obispo County from ground shaking triggered by any earthquakes that impact the county. Previous iterations of the HMP have identified three fault zones (Los Osos, Edna and Indian Knob) as those most likely to cause impacts to the Los Osos Community Services District. The Los Osos fault poses the greatest risk to the CSD and its facilities. The fault is considered active and has the potential to generate a 6.8 magnitude earthquake. The San Simeon earthquake in 2003 which had impacts countywide caused significant damage to the Los Osos Community Services District's 16th Street North water storage tank. The tank was not anchored and endured what is referred to as "elephant foot" damage. The District repaired the tank with the assistance of FEMA and the California Office of Emergency Services (Cal OES). The improvements to the 16th Street tank secured the tank by anchoring it and repairing the lower shell where major damage had occurred. Other critical infrastructure, including the fire station, suffered damage that was repaired.

Los Osos Community Services District is located in a geologically complex and seismically active region that is subject to earthquakes and potentially strong groundshaking. Portions of the District are located on sand in-fill areas. These areas and those areas underlain by young, poorly consolidated, saturated granular alluvial sediments, would be most susceptible to the effects of liquefaction. These soil conditions are most frequently found in areas underlain by recent river and flood plain deposits, which have increased vulnerability to liquefaction when groundshaking occurs.

The following tables (Table L-15 and Table L-16) display the types and values of properties and the types of critical facilities located in low, moderate, or high liquefaction risk areas. Based on this analysis there are 5,321 properties exposed to liquefaction risk with a total value of over \$2.1 billion. Residential properties are the most vulnerable property type to liquefaction in Los Osos, with a combined total of 5,094 properties (including multi-family residential and mobile homes) with a total value of over \$1.9 billion.

It is important to note that the overwhelming majority of exposed properties are located in low risk areas, 3,851 in total. However, analysis shows there are still 973 properties at moderate risk of liquefaction and 497 at high risk.

The following map depicts the areas of the Los Osos CSD that are at risk of liquefaction. The areas along the coastline to the District's east and north are at high risk of liquefaction, while the eastern portion of the District's boundaries are designated as moderate risk of liquefaction, including Los Osos Valley Road, the only major road out of the Los Osos CSD limits.

**Table L-15 Los Osos CSD's Improved Properties Exposed to Liquefaction Potential by Property Type**

PROPERTY TYPE	STRUCTURE COUNT HIGH	STRUCTURE COUNT MODERATE	STRUCTURE COUNT LOW	TOTAL STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATION
Agricultural	-	1	-	1	\$8,766	\$8,766	\$17,532	-
Commercial	14	72	34	120	\$62,521,031	\$62,521,031	\$125,042,062	-
Exempt	1	7	10	18	\$4,952,566	\$4,952,566	\$9,905,132	-
Industrial	2	7	-	9	\$12,613,337	\$18,920,006	\$31,533,343	-
Mixed Use	4	40	11	55	\$10,111,144	\$10,111,144	\$20,222,288	-
Mobile/Manufactured Homes	-	2	7	9	\$12,686,166	\$6,343,083	\$19,029,249	22
Multi-Family Residential	14	86	85	185	\$65,126,126	\$32,563,063	\$97,689,189	457
Residential	456	753	3,691	4,900	\$1,204,166,976	\$602,083,488	\$1,806,250,464	12,103
Vacant Improved	6	5	13	24	\$5,916,725	\$0	\$5,916,725	-
Total	497	973	3,851	5,321	\$1,378,102,837	\$737,503,147	\$2,115,605,984	12,582

Source: San Luis Obispo Assessor Data November 15, 2024, WSP GIS Analysis

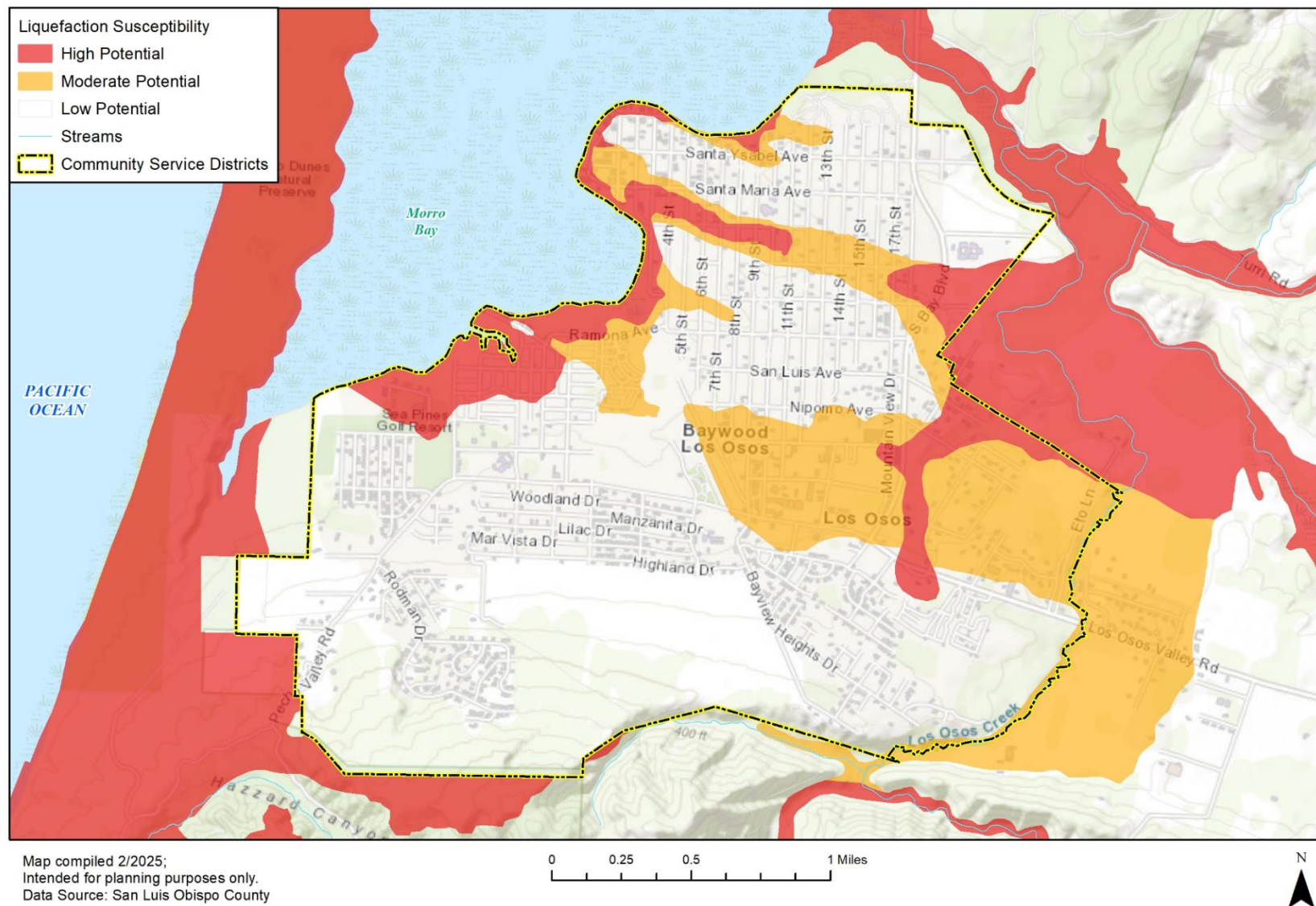
**Table L-16 Critical Facility Assets Exposed to Liquefaction Susceptibility by FEMA Lifeline**

LIQUEFACTION SUSCEPTIBILITY	COMMUNICATIONS	ENERGY	FOOD, HYDRATION, SHELTER	HAZARDOUS MATERIAL	HEALTH AND MEDICAL	SAFETY AND SECURITY	TRANSPORTATION	WATER SYSTEMS	TOTAL COUNT
High Liquefaction Susceptibility	2	-	-	-	-	-	-	-	2
Medium Liquefaction Susceptibility	4	-	-	1	-	1	-	-	6
Low Liquefaction Susceptibility	1	-	1	-	1	7	-	-	10

Source: San Luis Obispo County, CalARP, HIFLD, NBI, NID, FCWCD, WSP Analysis



Figure L-4 Los Osos Areas of Potential Liquefaction Risk





### *L.3.3.7 Flooding*

The Los Osos Community Services District is exposed to localized flooding hazards, particularly during periods of heavy rainfall. The community's topography, limited drainage infrastructure, and proximity to coastal and estuarine environments increase its susceptibility to stormwater-related flooding. Flood hazards in Los Osos are generally associated with surface water runoff accumulation rather than large riverine systems.

In January 2023, a significant flood event occurred when a stormwater retention basin failed in the Vista de Oro neighborhood. The failure resulted in critical infrastructure damage, road closures, and flooding of 19 single-family residences. Insured property losses were estimated at approximately \$4.5 million, with federal and state disaster relief funding requests submitted. While this event was severe, the likelihood of recurrence is considered low given planned improvements to stormwater infrastructure.

Outside of isolated incidents like the 2023 event, flood risks in Los Osos remain primarily related to localized flooding in low lying areas, minor stream overflows, and tidal influences. Future development is expected to remain limited to infill lots, minimizing the expansion of flood exposure. However, the community continues to work with regional agencies to assess vulnerabilities, including potential impacts from future climate change and sea level rise, particularly along key transportation corridors such as South Bay Boulevard and Los Osos Valley Road.

**The Los Osos Community Services District is actively pursuing hazard mitigation efforts, including working with FEMA and Cal OES to secure funding for improvements to the failed stormwater basin. These actions are part of broader efforts to reduce future flood risk, protect critical facilities, and enhance community resilience. Figure L-5**

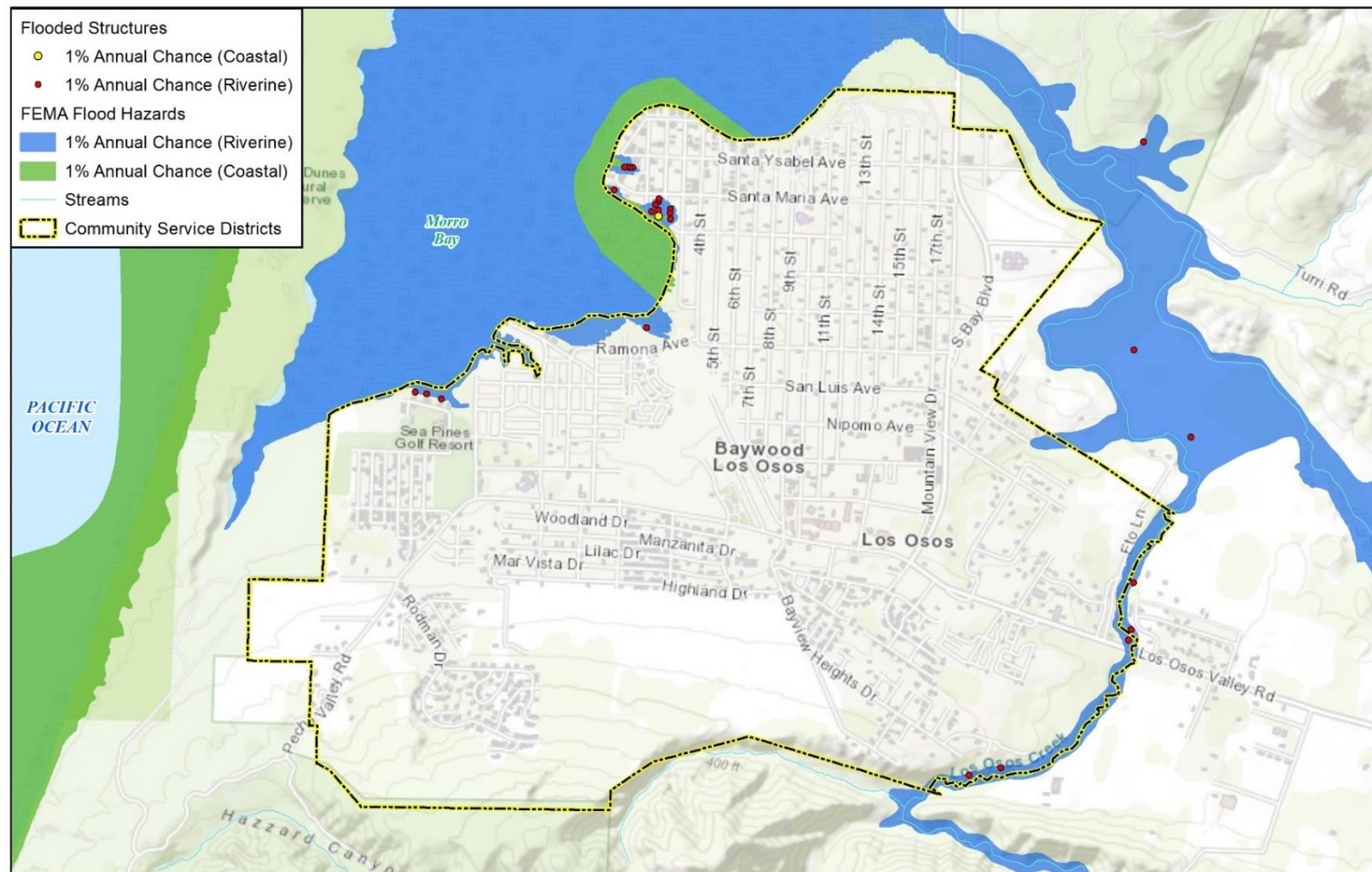


Figure L-5 shows the FEMA flood hazards with flooded structures for Los Osos.





Figure L-5 Los Osos CSD DWR & FEMA Flood Hazards with Flooded Structures



Map compiled 2/2025;  
Intended for planning purposes only.  
Data Source: San Luis Obispo County,  
FEMA NFHL Effective 6/6/2024,  
DWR, USACE Comprehensive Study



Table L-17 show improved properties and populations exposed to the 1% annual chance flood hazard.

**Table L-17 Los Osos Improved Properties Exposed to FEMA 1% Flood Hazard by Property Type**

PROPERTY TYPE	STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	ESTIMATED LOSS
Commercial	6	\$4,467,293	\$4,467,293	\$8,934,586	\$2,233,647
Exempt	1	\$3,444	\$3,444	\$6,888	\$1,722
Mixed Use	1	\$637,500	\$637,500	\$1,275,000	\$318,750
Residential	11	\$3,420,183	\$1,710,092	\$5,130,275	\$1,282,569
Vacant Improved	1	\$1,092,000	-	\$1,092,000	\$273,000
Total	20	\$9,620,420	\$6,818,329	\$16,438,749	\$4,109,687

Source: San Luis Obispo Assessor Data November 15, 2024, FEMA NFHL Effective Date 6/6/2024, WSP GIS Analysis

In Los Osos, a total of 20 improved properties are exposed to the FEMA 1% annual chance (100-year) flood hazards (note: there is no 0.2 annual chance flood zone mapped in the community). The total improved value of these properties is approximately \$9.6 million, with an additional estimated content value of \$6.8 million. Combined, the total exposure is approximately \$16.4 million. Properties at risk include six commercial structures, eleven residential structures, one mixed-use property, one exempt property, and one vacant improved parcel.

The estimated population exposed to flood hazards in Los Osos is approximately 27 residents. Residential structures account for the majority of this population at risk, with additional contributions from mixed-use properties and limited exposure associated with commercial and exempt parcels.

#### *L.3.3.8 Landslide and Debris Flow*

The Los Osos Community Service District has rated landslide and debris flow as **low** within its jurisdiction.

The atmospheric river event that took place in 2023 that affected a lot of the county also impacted the Los Osos Community Service District and water basin levee. On January 9<sup>th</sup>, 2023, hundreds of volunteers in Los Osos gathered to help residents on Vista Court dig out their homes from a mudslide. This mudslide happened when stormwater pushed through a Los Osos Community Services District water basin levee. Similar to the Arroyo Grande creek levee, the Los Osos levee was not equipped to handle the level of rainfall that hit the surrounding cities. More mudslides and debris flow similar to this could occur without proper levee maintenance and updated infrastructure.

#### *L.3.3.9 Tsunami*

Tsunami inundation poses a risk to all coastal communities in the County of San Luis Obispo. Offshore faults and related seismic activity could generate a tsunami event off the coast of Los Osos, even if the fault rupture occurs thousands of miles away. Due to the majority of the district's development being located further inland and sheltered by the dunes of Morro Bay State Park, this area has relatively lower tsunami risk than other tsunami-exposed portions of the county. However, there are still vital portions of the district which are vulnerable, including Morro Beach State Park and development hugging the coastline along the southern reaches of Morro Bay. These areas are illustrated in Figure L-6 below.

The following table breaks down the tsunami risk for Los Osos CSD by property type.

**Table L-18 Los Osos Improved Properties Exposed to Exposed to Tsunami Hazard Areas by Property Type**

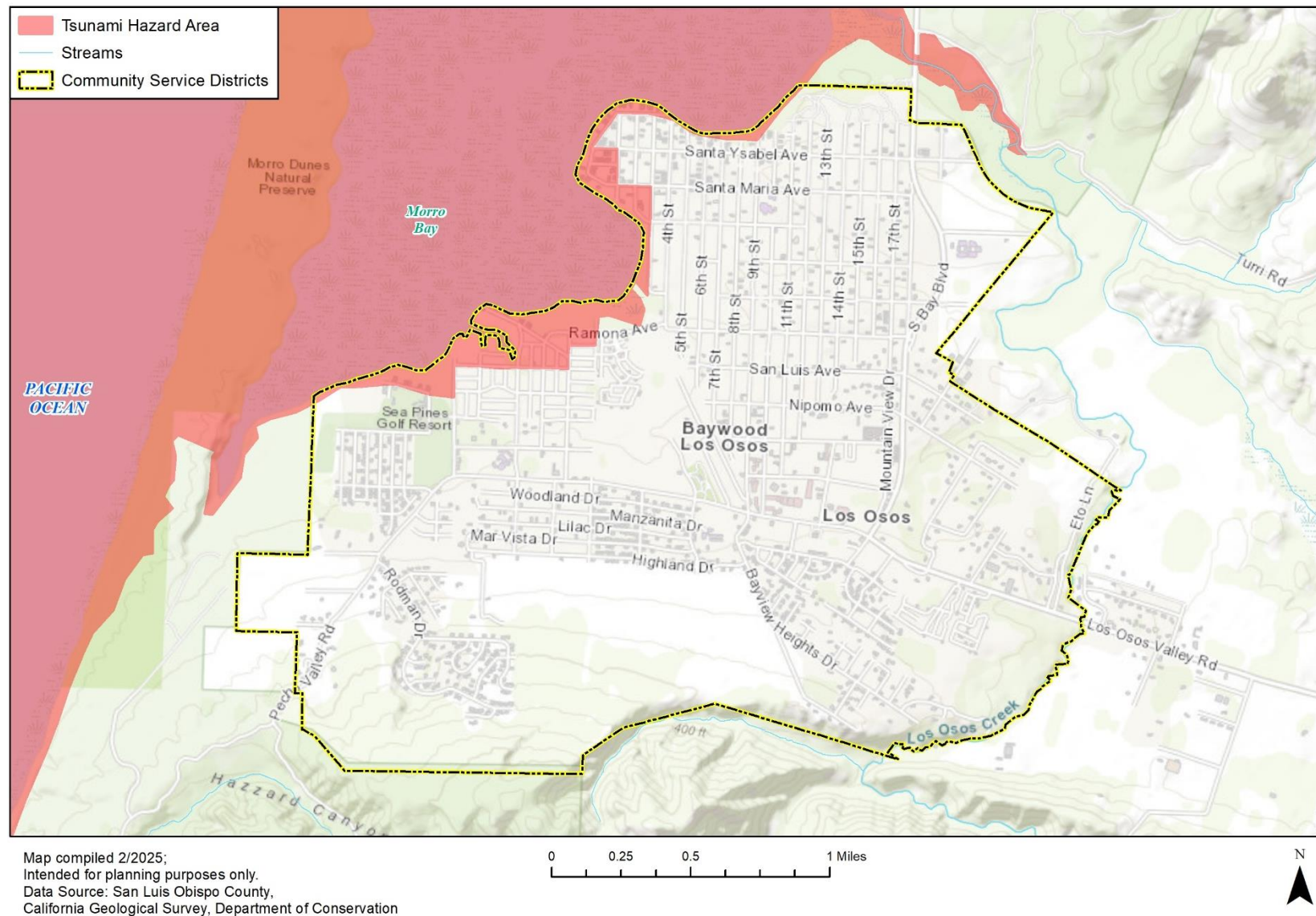
PROPERTY TYPE	STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATION
Commercial	12	\$6,268,530	\$6,268,530	\$12,537,060	-
Exempt	1	\$3,444	\$3,444	\$6,888	-
Mixed Use	2	\$845,580	\$845,580	\$1,691,160	-
Residential	183	\$57,452,255	\$28,726,128	\$86,178,383	452
Vacant Improved	3	\$1,185,425	\$0	\$1,185,425	-
Total	201	\$65,755,234	\$35,843,682	\$101,598,916	452

Source: San Luis Obispo Assessor Data November 15, 2024, California Geological Survey, Dept. of Conservation, WSP GIS Analysis

Based on this analysis there are 201 structures vulnerable to the impacts of a tsunami with a combined value of over \$101.6 million. Of the properties at risk the majority are residential properties, with 183 residential structures valued at approximately \$86.2 million.



Figure L-6 Los Osos CSD Areas of Potential Tsunami Inundation







### L.3.3.10 Wildfire

The climate in Los Osos Community Services District planning area is generally referred to as Mediterranean with warm dry summers and relatively cool, moderately wet winters. Rainfall throughout the District occurs primarily between November and April, and about 15 inches per year. Because summers are generally warm and dry, the risk of wildfires is highest in late summer and early fall. Fog and cool weather that are common in the coastal regions help to maintain moisture levels in vegetation along the coast, which helps to minimize fire risk. Other factors such as wind, topography and overgrown vegetation may counteract the fog and cool weather climate in the planning area and increase in the risk of ignition. Residential development is intermixed with native vegetation which results in a high-value, high-risk area.

Table L-19 shows critical facilities in Los Osos CSD that are exposed to fire hazard severity, categorizing them by severity level and facility type. The exposure of these critical assets to wildfire hazards poses significant risks to safety and security. The table below shows that there is a total of nine (9) critical facilities exposed to fire hazard severity zones, three (3) of which fall in the very high fire severity zone rating.

**Table L-19 Los Osos CSD Critical Facility Assets Exposed to Fire Hazard Severity Zones**

FIRE HAZARD SEVERITY ZONE	COMMUNICATIONS	ENERGY	FOOD, HYDRATION, SHELTER	HAZARDOUS MATERIAL	HEALTH AND MEDICAL	SAFETY AND SECURITY	TRANSPORTATION	WATER SYSTEMS	TOTAL COUNT
Very High	-	-	-	-	1	2	-	-	3
High	2	-	-	-	-	-	-	-	2
Moderate	-	-	1	-	-	3	-	-	4
<b>Total</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>9</b>

Source: San Luis Obispo County, CAL FIRE - FHSZ Phase 3 March 10, 2025, CalARP, HIFLD, NBI, NID, WSP Analysis

Several areas of the Los Osos community are within the high to very high severity wildfire hazard zones. Analysis using GIS was used to create the following tables, which quantify the potential losses by wildfire severity zones and property type. Based on the analysis 1,927 properties are situated within wildfire hazard exposure zones ranging from moderate to very high risk. Of these, 1,326 properties are located in the Very High Fire Severity Zone, while 273 properties fall within the High Fire Severity Zone and 328 properties fall within the Moderate Fire Hazard Severity zone. Collectively, these properties represent a total assessed value of \$914,143,535 and impact approximately 4,616 residents across all fire hazard severity zones. Of those properties, 1,848 are residential properties with a combined value of \$842,526,921. In addition to the residential properties there is also a public school, Monarch Grove Elementary, located in the high wildfire hazard zone. Table L-20 shows the properties in the district exposed to Fire Hazard Severity Zones. Figure L-7 depicts the Fire Hazard Severity Zones in Los Osos CSD.



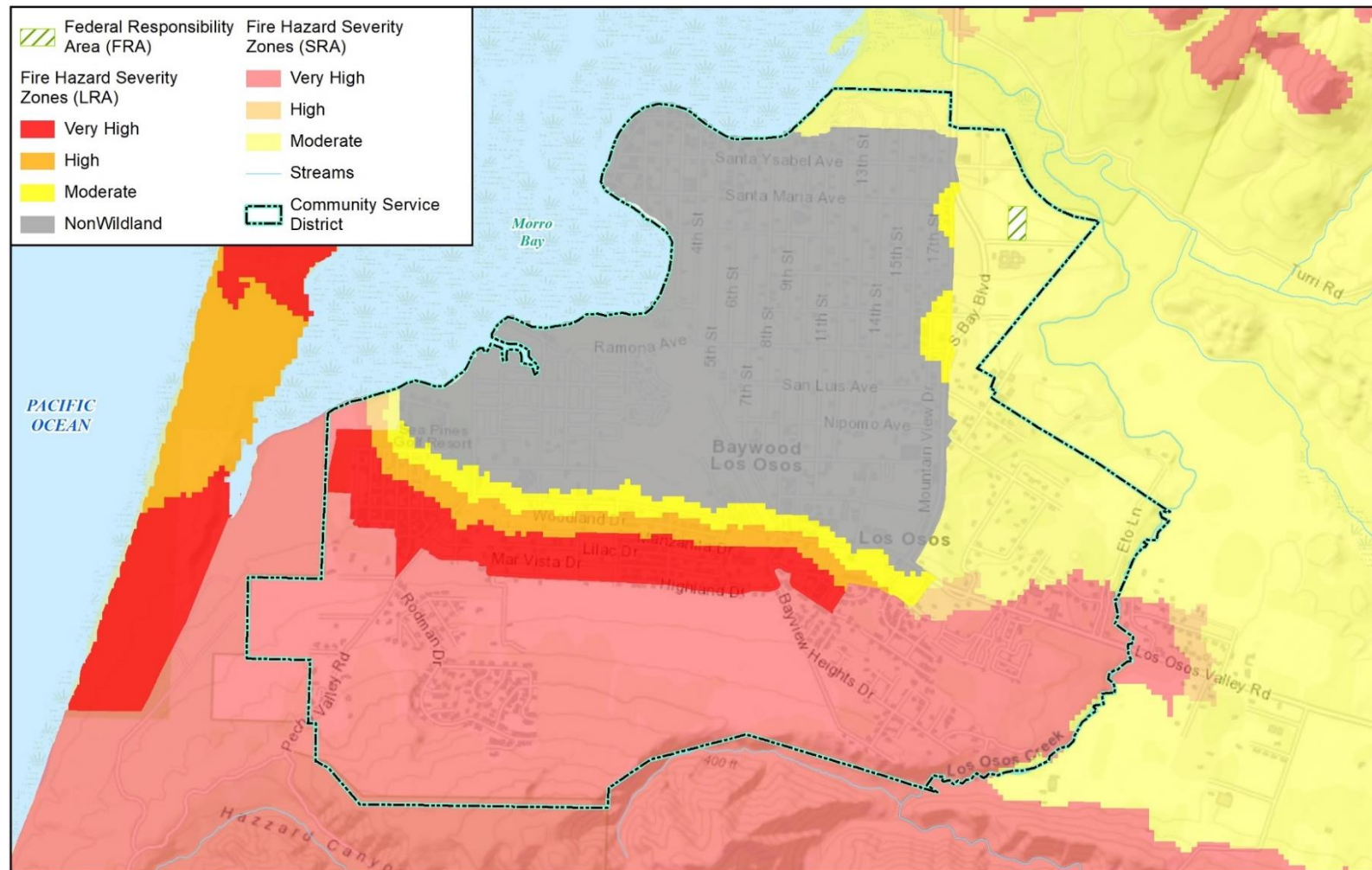
**Table L-20 Los Osos CSDs Improved Properties Exposed to Fire Hazard Severity Zones**

PROPERTY TYPE	STRUCTURE COUNT VERY HIGH	STRUCTURE COUNT HIGH	STRUCTURE COUNT MODERATE	TOTAL STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATION
Agricultural	1	-	-	<b>1</b>	\$8,766	\$8,766	\$17,532	-
Commercial	11	15	16	<b>42</b>	\$19,472,302	\$19,472,302	\$38,944,604	-
Exempt	1	-	1	<b>2</b>	\$1,692,333	\$1,692,333	\$3,384,666	-
Mixed Use	-	-	1	<b>1</b>	\$497,196	\$497,196	\$994,392	-
Mobile/Manufactured Homes	5	1	-	<b>6</b>	\$11,938,636	\$5,969,318	\$17,907,954	15
Multi-Family Residential	3	7	5	<b>15</b>	\$4,551,584	\$2,275,792	\$6,827,376	37
Residential	1,296	250	302	<b>1,848</b>	\$561,684,614	\$280,842,307	\$842,526,921	4,565
Vacant Improved	9	-	3	<b>12</b>	\$3,540,090	\$0	\$3,540,090	-
<b>Total</b>	<b>1,326</b>	<b>273</b>	<b>328</b>	<b>1,927</b>	<b>\$603,385,521</b>	<b>\$310,758,014</b>	<b>\$914,143,535</b>	<b>4,616</b>

Source: San Luis Obispo Assessor Data November 15, 2024, CAL FIRE - FHSZ Phase 3 March 10, 2025, WSP GIS Analysis



Figure L-7 Los Osos CSD Fire Hazard Severity Zones



Map compiled 3/2025;  
Intended for planning purposes only.  
Data Source: San Luis Obispo County, CAL FIRE,  
Phase 3 as Identified by the Office of the State Fire Marshal March 10, 2025,  
FHSZSRA\_23\_3, FHSZLRA25\_Phase3\_v1



## L.4 Capability Assessment

Capabilities are the programs and policies currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. This capability assessment is divided into five sections: regulatory mitigation capabilities, administrative and technical mitigation capabilities, fiscal mitigation capabilities, mitigation outreach and partnerships, and other mitigation efforts.

To develop this capability assessment, the jurisdictional planning representatives used a matrix of common mitigation activities to inventory which of these policies or programs were in place. The team then supplemented this inventory by reviewing additional existing policies, regulations, plans, and programs to determine if they contributed to reducing hazard-related losses.

During the plan update process, this inventory was reviewed by the jurisdictional planning representatives and WSP consultant team staff to update information where applicable and note ways in which these capabilities have improved or expanded. In summarizing current capabilities and identifying gaps, the jurisdictional planning representatives also considered their ability to expand or improve upon existing policies and programs as potential new mitigation strategies. The Los Osos CSD capabilities are summarized below.

### L.4.1 Regulatory Mitigation Capabilities

Table L-21 identifies existing regulatory capabilities the district has in place to help with future mitigation efforts. Note, many of the regulatory capabilities that can be used for the District are within the County's jurisdiction. Refer to Section 6 of the Base Plan for specific information related to the County's mitigation capabilities.

**Table L-21 Los Osos CSD Regulatory Mitigation Capabilities**

REGULATORY TOOL	YES/NO	COMMENTS
General plan	Yes	County, Estero Area Plan
Zoning ordinance	Yes	County
Subdivision ordinance	Yes	County
Growth management ordinance	Yes	County
Floodplain ordinance	Yes	County
Other special purpose ordinance (stormwater, water conservation, wildfire)	Yes	County
Building code	Yes	County
Fire department ISO rating	Yes	County
Erosion or sediment control program	Yes	County
Stormwater management program	Yes	County
Site plan review requirements	Yes	County
Capital improvements plan	Yes	County
Economic development plan	Yes	County
Local emergency operations plan	Yes	County
Other special plans	No	
Flood Insurance Study or other engineering study for streams	Yes	County
Elevation certificates (for floodplain development)	No	



## Discussion on Existing Building Codes, Land Use and Development Regulations

The San Luis Obispo County Planning Department is the official regulatory body governing land use and development ordinances within the District Service Area.

### L.4.2 Administrative/Technical Mitigation Capabilities

Table L-22 identifies the personnel responsible for activities related to mitigation and loss prevention in the Los Osos Community Services District.

**Table L-22 Los Osos CSD Administrative/Technical Mitigation Capabilities**

PERSONNEL RESOURCES	YES/NO	DEPARTMENT/POSITION
Planner/engineer with knowledge of land development/land management practices	Yes	County Planning and District Engineer
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Yes	County Planning and District Engineer
Planner/engineer/scientist with an understanding of natural hazards	Yes	County
Personnel skilled in GIS	Yes	County
Full time building official	Yes	County
Floodplain manager	NA	County
Emergency manager	Yes	County
Grant writer	Yes	Los Osos CSD
Other personnel	Yes	Emergency Services Advisory Committee, County; South Bay Fire Department
GIS Data Resources (Hazard areas, critical facilities, land use, building footprints, etc.)	Yes	County
Warning systems/services (Reverse 9-11, outdoor warning signals)	Yes	County Sheriff's Office

### L.4.3 Fiscal Mitigation Capabilities

Table L-23 identifies financial tools or resources that the CSD could potentially use to help fund mitigation activities.

**Table L-23 Los Osos CSD Fiscal Mitigation Capabilities**

FINANCIAL RESOURCES	ACCESSIBLE/ELIGIBLE TO USE (YES/NO)
Community Development Block Grants	No
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
Fees for water, sewer, gas, or electric services	Yes - Fees for Water
Impact fees for new development	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activities	No
Withhold spending in hazard prone areas	No



#### **L.4.4 Mitigation Outreach and Partnerships**

The Los Osos CSD has ongoing public education and information programs related to general emergency preparedness, water conservation, and wildfire mitigation practices for homeowners. The Fire Safe Council works with the District and the community on fire prevention specific to the Los Osos community. The District plans to continue to implement planned greenbelts and fuel breaks; Los Osos CSD passed a Hazardous Vegetation Abatement Ordinance to assist the South Bay Fire Department in aggressively managing the defensible space around homes and vacant properties in the community. The District's website has valuable information related to various hazards including wildfire and information on defensible spaces and residential fire sprinklers and tsunami inundation maps and evacuation information specific to Los Osos.

The Los Osos CSD Emergency Services Advisory Committee was established in 2008 to assist the District's Board of Directors in providing emergency services to the District. Advisory Committee meetings are a public forum with the ability for the public to review and provide input on issues.

#### **L.4.5 Opportunities for Enhancement**

Based on the capabilities assessment, the Los Osos Community Service District has several existing mechanisms in place that already help to mitigate hazards. There are also opportunities for the District to expand or improve on these policies and programs to further protect the community. This planning process will help to inform the District's current efforts in the development of a community wide emergency preparedness program. Other future improvements may include providing training for staff members related to hazards or hazard mitigation grant funding in partnership with the County and Cal OES. Additional training opportunities will help to inform District staff, the Emergency Services Advisory Committee and District Board members on how best to integrate hazard information and mitigation projects into the District policies and ongoing duties of the District. Continuing to train District staff on mitigation and the hazards that pose a risk to the Los Osos Community Service District will lead to more informed staff members who can better communicate this information to the public.

### **L.5 Mitigation Strategy**

#### **L.5.1 Mitigation Goals and Objectives**

The Los Osos CSD adopts the hazard mitigation goals and objectives developed by the HMPC and described in Section 7 Mitigation Strategy.

#### **L.5.2 Completed 2019 Mitigation Actions**

During the 2025 planning process the Los Osos CSD Planning Team reviewed all the mitigation actions from the previous LHMP. The review indicated no actions have been completed or deleted.

#### **L.5.3 Mitigation Actions**

The Los Osos CSD has seven mitigation actions for their 2025 Mitigation Action Plan, including two continued actions and five new or updated that are captured in Mitigation Action Plan in Table L-24. The planning team for the Los Osos Community Service District identified and prioritized the following mitigation actions based on the risk assessment. Actions were prioritized using the process described in Section 7.2.1 of the Base Plan. Background information and information on how each action will be implemented and administered, such





as ideas for implementation, responsible office, potential funding, estimated cost, and timeline are also included.

**Table L-24 Los Osos Community Service District 2025 Mitigation Action Plan**

MITIGATION ACTION NUMBER	PRIMARY HAZARD(S) MITIGATED	DESCRIPTIONS/BACKGROUND/BENEFITS	LEAD AGENCY & PARTNERS	ESTIMATED COST & POTENTIAL FUNDING SOURCES	2025 PRIORITY	TIMELINE	STATUS/ IMPLEMENTATION NOTES
LO.1	Adverse Weather: Thunderstorm/ Heavy Rain/ Lightning/ Dense Fog/ Freeze,; Adverse Weather: High Wind and Tornado; Coastal Storm/Coastal Erosion/Sea Level Rise Flood; Wildfire,	Improve drainage, public education on construction management, evacuation routes and vegetation management to improve resiliency to multiple hazards.	Los Osos CSD Administration, SLO County	\$10,000 to \$50,000. FEMA HMA	High	3-5 yrs.	In progress/ongoing. All drainage areas have been improved/ upgraded. Vegetation management is in progress.
LO.2	Wildfire	Educate the public to take precautions to prevent potentially harmful fires and be educated about surviving them. The District is encouraging local organizations to involve the residents of Los Osos and is helping coordinate town hall meetings, Community Emergency Response Team training and sending social media blasts regarding fire safety. There are many local organizations that residents can join in order to be better prepared in case of a fire; Fire Safe Council, Fire Wise Cabrillo, and the Emergency Services Advisory Committee to the Los Osos Board of Directors. Benefits: With an involved community we hope to reduce risks of wildland fires to a minimum. In case of a wildfire, we hope that the community will be prepared in order to avoid human and property loss.	Los Osos CSD Administration / South Bay Fire Dept	Little to no cost. District Budget	High	Other	Annual Implementation
LO.3	Adverse Weather: Thunderstorm/ Heavy Rain/ Lightning/ Dense Fog/ Freeze; Coastal Storm/Coastal Erosion/Sea Level Rise, Flood	Los Osos experiences periodic heavy rains that cause minor to major flooding in areas where storm water is directed by roads and drainage patterns. The LOCSO needs to partner with County Public Works to prioritize problem areas and fund improvements to improve conditions. Additional actions include public education on-site storm water detention, public information on evacuation routes,	Los Osos CSD Administration, San Luis Obispo County Public Works Department	Over \$1,000,000. FEMA Hazard Mitigation Assistance Grant, Local Funds.	High	More than 5 years	New in 2025



MITIGATION ACTION NUMBER	PRIMARY HAZARD(S) MITIGATED	DESCRIPTIONS/BACKGROUND/BENEFITS	LEAD AGENCY & PARTNERS	ESTIMATED COST & POTENTIAL FUNDING SOURCES	2025 PRIORITY	TIMELINE	STATUS/IMPLEMENTATION NOTES
		increase storm water drainage basin inspections and improvements.					
LO.4	Drought and Water Shortage	Drought conditions persist throughout California and especially in San Luis Obispo County. Currently, there is no back up water supply in the event of an extended drought. The District needs to continue to implement the Basin Plan and provide an alternative source of water like imported water to ensure the residents of a resilient and reliable water supply in future.	Los Osos CSD Administration, Utilities, Golden State Water Company, S&T Mutual Water Company	Over \$1,000,000. FEMA Hazard Mitigation Assistance Grant, Local Funds.	High	3-5 years	New in 2025
LO.5	Earthquake	In order to mitigate earthquake losses, the District needs to secure additional backup electrical generation capabilities, seismically retrofit the 10th Street water tank, complete the SCADA system project and establish supply chain contact for materials needed for repair of the water system.	Los Osos CSD Administration, Utilities	Over \$1,000,000. FEMA Hazard Assistance Grants.	High	More than 5 years	New in 2025
LO.6	Adverse Weather: Extreme Heat	Though the climate of Los Osos is cool to moderate, high temperatures are not uncommon in the summer and early fall. When high temperatures are forecasted, Los Osos CSD will develop informational materials that will assist residence to take the appropriate measures to remain safer. Additionally, informational materials will focus on conserving water both indoors and outdoors.	Los Osos CSD Administration, South Bay Fire Dept	Little to no cost. District Budget	Low	2-3 years	New 2025
LO.7	Adverse Weather: High Wind/Tornado	Los Osos experiences high winds during winter storms and spring wind events. Public education on preparedness measures will be developed and distributed to the community.	Los Osos CSD Administration, South Bay Fire Dept	Less than \$10,000	Medium	1 year	New in 2025



## **L.6 Implementation and Maintenance**

Moving forward, the Los Osos Community Service District will use the mitigation action table in the previous section to track progress on implementation of each project. Implementation of the plan overall is discussed in Section 8 in the Base Plan.

### **L.6.1 Incorporation into Existing Planning Mechanisms**

The information contained within this plan, including results from the Vulnerability Assessment and the Mitigation Strategy, will be used by the Community Service District to help inform updates of the Los Osos Community Plan and in the development of additional local plans, programs and policies. Understanding the hazard that pose a risk and the specific vulnerabilities to the jurisdiction will help in future capital improvement planning for the District. The County Planning and Building Department may utilize the hazard information when reviewing a site plan or other type of development applications with the boundaries of the Los Osos Community Service District area. As noted in Section 8 Plan Implementation and Monitoring, the HMPC representatives from the Los Osos Community Services District will report on efforts to integrate the hazard mitigation plan into local plans, programs and policies and will report on these efforts at the annual HMPC plan review meeting.

### **L.6.2 Monitoring, Evaluation and Updating the Plan**

The Los Osos Community Service District will follow the procedures to monitor, review, and update this plan in accordance with San Luis Obispo County as outlined in Section 8 of the Base Plan. The District will continue to involve the public in mitigation, as described in Section 8.3 of the Base Plan. The CSD General Manager will be responsible for representing the Community Services District in the County HMPC, and for coordination with County staff and departments during plan updates. The Los Osos Community Services District realizes it is important to review the plan regularly and update it every five years in accordance with the Disaster Mitigation Act Requirements as well as other State of California requirements.



## Annex M Nipomo Community Services District

### M.1 District Profile

#### M.1.1 Mitigation Planning History and 2025 Process

This annex was updated in 2025 to build upon the previous version created for the 2019 San Luis Obispo Hazard Mitigation Plan update. The General Manager of the Nipomo Community Services District (CSD) was the representative on the County HMPC and took the lead for developing the plan and this annex in coordination with the Nipomo Community Services District (CSD) Local Planning Team (Planning Team). The Local (District) Planning Team will be responsible for implementation and maintenance of the plan. Table M-1 summarizes the district's planning team for the plan revision process.

**Table M-1 Nipomo CSD Hazard Mitigation Local Planning Team**

DEPARTMENT	TITLE
Administration	General Manager
Operations	Director of Engineering and Operations
Operations	Operations Manager
Operations	Water Supervisor
Operations	Wastewater Supervisor

Additionally, the plan must document opportunities for neighboring communities, local and regional agencies involved in hazard mitigation activities, agencies with the authority to regulate development, as well as businesses, academia, and other private and non-profit interests, to actively participate in the planning process. Stakeholder groups are listed below in Table M-2.

**Table M-2 Nipomo Stakeholder Groups**

STAKEHOLDER GROUP	ORGANIZATION
Agencies involved in hazard mitigation activities:	SLO County Fire
Agencies that have the authority to regulate development:	SLO County Planning & Building
Neighboring Communities:	SLO County Planning & Building
Representatives of business academia, and other private orgs:	South County Chambers of Commerce
Representatives supporting underserved communities	Peoples Self Help Housing

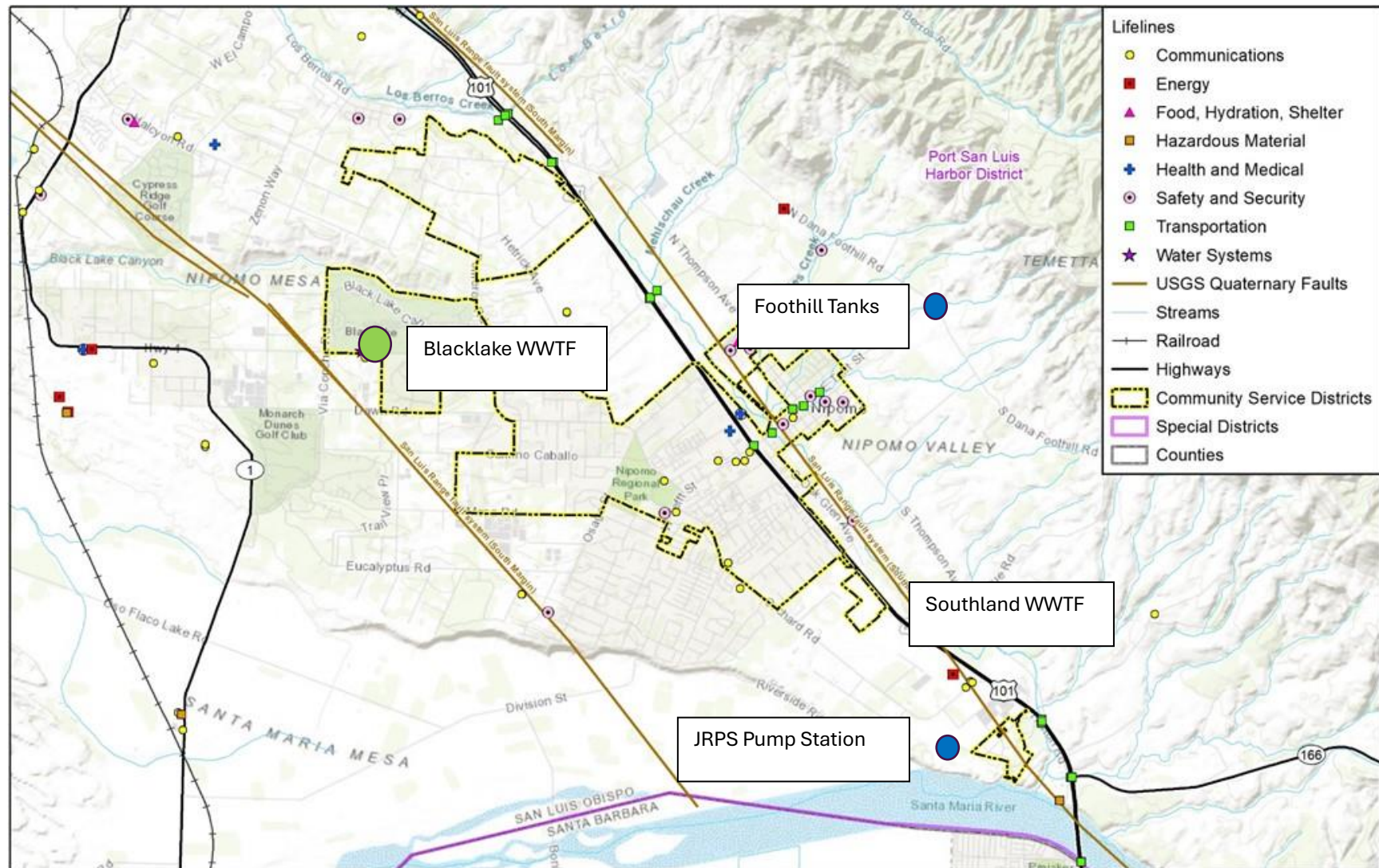
More details on the planning process and how the jurisdictions, service districts, and stakeholders participated can be found in Section 3 of the Base Plan, along with how the public was involved during the 2025 update.

Figure M-1 is a map of the larger Nipomo community including nearby special districts critical facility lifelines.





Figure M-1 Nipomo Community Services District



Map compiled 2/2025;  
Intended for planning purposes only.  
Data Source: San Luis Obispo County, CalARP, HIFLD,  
National Bridge Inventory, National Inventory of Dams,  
Department of Conservation, USGS

0 0.5 1 2 Miles





## M.1.2 District Overview

The Nipomo Community Services District's (CSD) mission is to provide its customers with reliable, quality, and cost-effective services now and in the future. The district was established in 1965 under the Community Services District Law of the Government Code Section 61000, assisted by the Nipomo Citizen's Steering Committee. The proposed district at the time consisted of 1,384 acres that included 560 dwellings and about 2,300 people hoping to solve the community's early water and sewer problems after several typhoid fever cases in the early 1960s tied the health issues to nitrates in the water and proximity to sewer tanks.

In present times, the Nipomo CSD is governed by a board of directors, each with different committee assignments and possible delegations. This Board is responsible for providing counsel related to water management and resources, overall administration, financing/auditing, and facilities to the Nipomo community.

Nipomo is located in the southwest portion of the County of San Luis Obispo next to Highway 101, within the South County Planning Area. It currently serves about 14,000 people in a somewhat rural environment between the Five Cities Area of the county and the City of Santa Maria (in the County of Santa Barbara). The Nipomo CSD has expanded to cover over six square miles, and provides limited stormwater, street lighting, and landscape maintenance. The district's sphere of influence covers about nine square miles in addition to the current service area and based on the latest LAFCO-developed Municipal Service Review, growth in the Nipomo area is expected to follow a 1% rate over the next 20 years.

The bulk of the CSD's facilities are comprised of pipes, pumps, treatment, and tanks. Recent efforts related to the district's water infrastructure have been focused on earthquake related hazards, due to the district's location atop an ancient sand dune as well as crossing of several earthquake faults. Exposure to liquefaction and other earth movement issues is of concern to Nipomo as well, but there has not been any recent damage to key infrastructure from earthquake and liquefaction hazards.

According to the U.S. Census Bureau's American Community Survey 5 year estimate (2018-2023), in 2023 Nipomo had a population of 17,266. This a 7.6% decrease from 2018. More information surrounding Nipomo demographic and social characteristics are below in Table M-3.

**Table M-3 Nipomo CDP Demographic and Social Characteristics, 2018-2023**

NIPOMO CDP	2018	2023	% CHANGE
Population	17,455	17,266	-7.6%
Median Age	40.1	39.3	-.4%
Total Housing Units	5,988	6,027	-3.8%
Housing Occupancy Rate	94.6%	94.3%	-.4%
% of Housing Units with no Vehicles Available s2504	2.8%	5.4%	+90.9%
Median Home Value dp04	\$500,000	\$674,100	+46.1%
Unemployment dp03	4.1%	1.7%	+25%
Mean Travel Time to Work (minutes) s0801	23.2	27.5	-9.9%
Median Household Income s2506	\$100,486	\$139,126	+18.6%
Per Capita Income dp03	\$32,929	\$39,021	+29.6%
% of Individuals Below Poverty Level s1701	9.9%	5.8%	-18.4%
# of Households s1101	5,664	5,682	-4.1%



NIPOMO CDP	2018	2023	% CHANGE
Average Household Size	3.08	3.03	+3.6%
% of Population Over 25 with High School Diploma s1501	83.5%	83.5%	+1.6%
% of Population Over 25 with Bachelor's Degree or Higher	23.7%	25.4%	-25.7%
% with Disability	10.4%	13.9%	-8.8%

Source: U.S. Census Bureau American Community Survey 2018-2023 5-Year Estimates, [www.census.gov/](http://www.census.gov/)

Note: Data is for the Los Osos Census Designated Place (CDP) which may not have the same boundaries as the Cambria Community Service District.

The following table show how the Nipomo CDP's labor force breaks down by occupation and industry estimates from the 2023 American Community Survey. The industries with the most employees are educational services, health care and social assistance (23.3%) as shown in below Table M-4. The most common occupations in Nipomo are those in management, business, science, and the arts (36.3%) as shown in Table M-5.

**Table M-4 Nipomo CPD Employment by Industry (2023)**

INDUSTRY	# EMPLOYED	%
Population (16 years and over)	13,780	
In Labor Force	8,520	61%
Agriculture, forestry, fishing and hunting, and mining	684	8.3%
Armed Forces		0%
Construction	828	10%
Manufacturing	596	7.2%
Wholesale trade	156	1.9%
Retail trade	456	5.5%
Transportation and warehousing, and utilities	725	8.7%
Information	94	1.1%
Finance and insurance, and real estate and rental and leasing	223	2.7%
Professional, scientific, and management, and administrative and waste management services	758	9.1%
Educational services, health care and social assistance	1,930	23.3%
Arts, entertainment, recreation, and accommodation and food services	608	7.3%
Other services, except public administration	661	8%
Public administration	570	6.9%
Unemployed	231	1.7%

Source: U.S. Census Bureau American Community Survey 2018-2023 5-Year Estimates, [www.census.gov/](http://www.census.gov/)

**Table M-5 Nipomo CPD Employment by Occupation (2023)**

INDUSTRY	# EMPLOYED	%
Population (2023)	13,780	
In Labor Force	8,520	61.8%
Management, business, science, and arts occupations	3,011	36.3%
Service occupations	1,199	14.5%
Sales and office occupations	1,885	22.7%
Natural resources, construction, and maintenance occupations	1,264	15.2%
Production, transportation, and material moving occupations	930	11.2%

Source: U.S. Census Bureau American Community Survey 2018-2023 5-Year Estimates, [www.census.gov/](http://www.census.gov/)



### M.1.3 Development Trends

Nipomo developed their most recent Strategic Plan in 2018 with an update expected in 2025. This plan outlines the district's initial priority issues for the coming years (among other key plan aspects), and these were identified during workshops and interviews with the board members, managers, and directors of local operative processes. Three priorities were outlined in this Strategic Plan document: 1) Maintain and enhance community sustainability, financial stability, and infrastructure stability; 2) optimize operations and achieve customer satisfaction; and 3) attain operational resiliency and encourage employee leadership and development. In terms of hazards and related mitigation opportunities, it is important to acknowledge these goals and objectives to ensure effective planning mechanisms and efforts across the district, especially to enable or help move forward currently ongoing activities.

As of 2023, the American Community Survey noted the CSD's population to be approximately 17,266. Prior to 2015, Nipomo was relying solely on groundwater sources. Although growth has been very slight and slow in Nipomo, due to extreme drought and growing water demands, groundwater was becoming scarce and shortage conditions required solutions to balance supply versus demand in the district. In 2015, the district began a \$34 million public works project (the largest and most important in the District's 50-year history) to obtain supplemental water from Santa Maria Water deliveries began that year, allowing for millions of gallons to avoid being pumped from the troubled water basin underlying the Nipomo Mesa. The intertie pipeline project connects Nipomo's water system to Santa Maria's, and currently delivers 1000 acre-feet of water to Nipomo every year. Growth in the past five years since the last update of this plan has not notably increased or decreased hazard vulnerabilities. Significant growth is expected in the next five years with the County's approval of the Dana Reserve development.

### M.1.4 Other Community Planning Efforts

The development of this Community Services District Annex involved a comprehensive review of existing plans, studies, reports, and initiatives from San Luis Obispo County and the Nipomo community that relate to hazards or hazard mitigation. A high-level summary of the key plans, studies and reports is summarized in Table M-6. Information on how they informed the update are noted and incorporated where applicable.

In addition to the development standards within the Nipomo Strategic Plan, there are County planning mechanisms that regulate future and existing development within the Nipomo CSD planning area. Refer to Section M.4 Capability Assessment for more information on the plans, policies, regulations and staff that govern the Nipomo CSD.

**Table M-6 Summary of Review of Key Plans, Studies, and Reports for Nipomo CSD**

PLAN, STUDY, REPORT NAME	HOW DOCUMENT INFORMED THE ANNEX
Nipomo Community Plan Update (2025)	Provided information about updates to public facilities
Nipomo Community Services District Interconnection Project (2020)	Obtained water use information and facilities information
San Luis Obispo County Community Wildfire Protection Plan (2019)	Informed the wildfire section
County of San Luis Obispo Local Hazard Mitigation Plan (2019)	Informed past hazard event history, hazard profile and background, and mitigation strategy information.
County of San Luis Obispo Land Use and Circulation Elements (Part II): The Area Plans – Inland and South County Area Plans	Obtained water use information, drought related details, etc.





PLAN, STUDY, REPORT NAME	HOW DOCUMENT INFORMED THE ANNEX
Nipomo Community Services District 2018 Strategic Plan	Obtained current District information, ongoing efforts, water use information, etc.
Nipomo Community Plan – Updated 2014	Obtained District information, history, past programs, etc.
Nipomo’s Supplemental Water from Santa Maria project summary	Obtained information on past and ongoing water purchase/acquisition efforts and the drought/water scarcity hazard.
San Luis Obispo County 2014 Integrated Regional Water Management Plan	Obtained information on water use in Nipomo, water management regions, and the drought/water scarcity hazard.
State of California’s Hazard Mitigation Plan – Updated 2018	General information on hazards, events, and vulnerability assessments.
San Luis Obispo County Dam and Levee Failure Evacuation Plan – Updated 2016	Flooding, dam, and levee hazard information and recent studies.
2014-2016 Resource Summary Report for San Luis Obispo County’s General Plan	Pulled information about water resources, reliability, and ongoing efforts to increase resilience in the County and District of Nipomo as related to drought.

## M.2 Hazard Identification and Summary

The Nipomo CSD planning team identified the key hazards that affect the district, and summarized their frequency of occurrence, spatial extent, potential magnitude, and overall significance specific to the Nipomo CSD (see Table M-7). There are no hazards that are unique to this CSD. (Note that earthquake and liquefaction hazards will be profiled together as one under Section M.3.3.5)

**Table M-7 Nipomo CSD Hazard Risk Summary**

HAZARD	GEOGRAPHIC AREA	PROBABILITY OF FUTURE OCCURRENCE	MAGNITUDE/ SEVERITY (EXTENT)	OVERALL SIGNIFICANCE
Adverse Weather: Thunderstorm, Heavy Rain, Lightning, Freeze, Hail, Dense Fog	Limited	Likely	Negligible	Low
Adverse Weather: High Wind and Tornado	Limited	Likely	Negligible	Low
Adverse Weather: Extreme Heat	Limited	Likely	Negligible	Low
Drought and Water Shortage	Significant	Likely	Limited	High
Earthquake (including Liquefaction)	Extensive	Likely	Limited	Medium
Flood	Limited	Occasional	Limited	Low
Wildfire	Significant	Occasional	Limited	Medium
Human Caused: Hazardous Materials	Limited	Highly Likely	Negligible	Low
<b>Geographic Area</b> Limited: Less than 10% of planning area Significant: 10-50% of planning area Extensive: 50-100% of planning area Probability of Future Occurrences		<b>Magnitude/Severity (Extent)</b> Catastrophic—More than 50 percent of property severely damaged; shutdown of facilities for more than 30 days; and/or multiple deaths		





HAZARD	GEOGRAPHIC AREA	PROBABILITY OF FUTURE OCCURRENCE	MAGNITUDE/ SEVERITY (EXTENT)	OVERALL SIGNIFICANCE
Highly Likely: Near 100% chance of occurrence in next year or happens every year. Likely: Between 10 and 100% chance of occurrence in next year or has a recurrence interval of 10 years or less. Occasional: Between 1 and 10% chance of occurrence in the next year or has a recurrence interval of 11 to 100 years. Unlikely: Less than 1% chance of occurrence in next 100 years or has a recurrence interval of greater than every 100 years.		Critical—25-50 percent of property severely damaged; shutdown of facilities for at least two weeks; and/or injuries and/or illnesses result in permanent disability Limited—10-25 percent of property severely damaged; shutdown of facilities for more than a week; and/or injuries/illnesses treatable do not result in permanent disability Negligible—Less than 10 percent of property severely damaged, shutdown of facilities and services for less than 24 hours; and/or injuries/illnesses treatable with first aid Significance Low: minimal potential impact Medium: moderate potential impact High: widespread potential impact		

### M.3 Vulnerability Assessment

The intent of this section is to assess the Nipomo CSD's vulnerability separately from that of the County, which has already been assessed in Section 5 Hazard Identification and Risk Assessment (HIRA) in the Base Plan. This vulnerability assessment analyzes the population, property, and other assets (e.g. critical facilities) at risk to hazards ranked of medium or high significance that may vary from other parts of the planning area.

The key information to support the HIRA for this Annex was collected through a Data Collection Guide, which was distributed to each participating municipality, community services district, or special district to complete during the planning process. Information collected was analyzed and summarized in order to identify and rank all the hazards that could impact anywhere within the County, as well as to rank the hazards and identify the related vulnerabilities unique to each jurisdiction/district. In addition, the Nipomo CSD planning team was asked to share information on past hazard events that have affected the district.

Each participating jurisdiction or district was in support of the main hazard summary identified in the Base Plan (See **Error! Reference source not found.**). However, the hazard summary rankings for each jurisdictional annex may vary slightly due to specific hazard risk and vulnerabilities unique to that jurisdiction (see **Error! Reference source not found.**). Identifying these differences helps the reader to differentiate the district's risk and vulnerabilities from that of the overall county.

Note: The hazard "Significance" reflects overall ranking for each hazard and is based on the Nipomo CSD planning team input from the Data Collection Guide and the risk assessment developed during the planning process (see Chapter 5 of the Base Plan), which included more detailed quantitative and qualitative analyses with best available data for all hazards in the County.

#### M.3.1 Other Hazards

The followings hazards identified in the base plan HIRA are not identified within this jurisdictional annex due to no risk or insignificant anticipated impacts and are not considered further for vulnerability or mitigation actions:



- Agricultural Pests and Plant Diseases
- Biological Agents
- Coastal Storm/ Coastal Erosion/ Sea Level Rise
- Dam Incidents (only a small area of the district could have potential inundation from the Twitchell Dam; otherwise there is no exposure to this hazard)
- Land Subsidence
- Landslides and Debris Flows (Per the LPT landslide issues are site specific around the NCSD facilities and there are currently sufficient landslide protections these facilities)
- Tsunamis and Seiches

### M.3.2 Assets at Risk

This section considers the district's assets at risk, including values at risk, critical facilities and infrastructure, historic assets, economic assets, and growth and development trends.

#### M.3.2.1 Values at Risk

The following data on property exposure is derived from San Luis Obispo County Assessor's data. This data should only be used as a guideline to overall values in the Community Services District as the information has some limitations. Table M-8 shows the exposure of properties (e.g., the values at risk based on improvement values, content values, and total values as an addition of these two types of values) broken down by property type for the Nipomo Community Services District. Refer to the Base Plan Section 5.2 (HIRA Asset Summary) for more details on value information, content calculations, and overall parcel analysis methodology.

**Table M-8 Property Exposure Values for the Nipomo CSD by Parcel Type**

PROPERTY TYPE	PARCEL COUNT	IMPROVED VALUE	CONTENT VALUE	TOTAL VALUE
Agricultural	4	\$1,139,600	\$1,139,600	\$2,279,200
Commercial	70	\$96,933,973	\$96,933,973	\$193,867,946
Exempt	12	\$2,489,264	\$2,489,264	\$4,978,528
Industrial	9	\$13,078,606	\$19,617,909	\$32,696,515
Mixed Use	345	\$68,577,792	\$68,577,792	\$137,155,584
Mobile Home	289	\$31,395,158	\$15,697,579	\$47,092,737
Multi-Family Residential	59	\$57,606,158	\$28,803,079	\$86,409,237
Residential	3,513	\$1,048,201,906	\$524,100,953	\$1,572,302,859
Vacant Improved	26	\$4,083,657	\$4,083,657	\$8,167,314
Total	4,327	\$1,323,506,114	\$761,443,806	\$2,084,949,920

Source: San Luis Obispo County Assessor Data November 15, 2024, WSP GIS Analysis

#### M.3.2.2 Critical Facilities and Lifelines

A critical facility is defined as one that is essential in providing utility or direction either during the response to an emergency or during the recovery operation. See Section 5 of the Base Plan for more details on the definitions and categories of critical facilities.

An inventory of critical facilities in the district based on San Luis Obispo County GIS data as well as structures obtained from the Homeland Infrastructure Foundation-Level Dataset (HIFLD) is provided in Table M-9, and is illustrated in Figure M-1. The four types of Critical Facilities categorized by San Luis Obispo County and its jurisdictions and districts' planning teams are: Emergency Services, High Potential Loss Facilities, Lifeline Utility Systems, and



Transportation Systems. Refer to Appendix G and Section 5.2 of the Base Plan for more information on the assets used throughout this Annex and the county-wide analyses.

**Table M-9 Summary of Nipomo CSD's Critical Facilities**

FACILITY TYPE	COUNTS
Communication	10
Food, Hydration, Shelter	1
Health and Medical	2
Safety and Security	11
Transportation	5
Water Systems	1
Total Count	30

#### *M.3.2.3 Additional Critical Facilities*

Three additional Essential Infrastructure facilities identified by the District Lead Planning Team are listed below under the Lifeline Utility Services category.

- Wastewater Treatment Plan - \$18 million replacement value (Southland WWTF)
- Water Treatment/Distribution facility - \$50 million replacement value (Joshua Pump Station)
- Wastewater Treatment Plan - \$8 million replacement value (Blacklake WWTF)
- Foothill Water Storage Tanks

#### *M.3.2.4 Transportation Systems and High Potential Loss Facilities*

No critical transportation facilities were noted for the district. However, there may be certain structures or entities important to the district, particularly along the main corridor running through Nipomo (Highway 101) or other major nearby transportation lines (e.g. Highway 1, Highway 166).

#### *M.3.2.5 Historic and Cultural Resources*

Historical assets include local, county, state, and potentially federally listed historic sites. Based on data provided by the County of San Luis Obispo and LAFCO, it was found that there are 7 historic and cultural resources in or near the Nipomo CSD. These are summarized in Table M-10.

**Table M-10 Nipomo CSD's Historic and Cultural Resources**

AREA PLAN WHERE NOTED	PROPERTY NAME	YEAR	DESCRIPTION
South County Inland Area Plan	Dana Adobe	1839	Historical Landmark No. 1033 (Rancho Nipomo)
	Dana House	1882	535 Mehlschau
	Los Berros Adobe Barn	1860	159 Avis St
	Los Berros Schoolhouse	1890	1841 Grant Ave
	Old St. Joseph's Church	1902	110 Thompson Av
	Pacific Coast Railroad Depot	1881	right-of-way granted in 1881
	Runels Home - Dana Street	1886	now Kaleidoscope Inn & Gardens

Source: San Luis Obispo County Planning and Building; LAFCO



### *M.3.2.6 Natural Resources*

Natural assets may include wetlands, threatened and endangered species, or other environmentally sensitive areas. Natural and environmental resources are important to include in benefit-cost analyses for future projects and may be used to leverage additional funding for projects that also contribute to community goals for protecting sensitive natural resources. Awareness of natural assets can lead to opportunities for meeting multiple objectives. For instance, protecting wetlands areas protects sensitive habitat as well as attenuates and stores floodwaters. The San Luis Obispo County Inland Area Plan was adopted in 2014. This larger plan comprises the Nipomo CSD as well as Nipomo's valley sub-basins within the Santa Maria Valley Groundwater Basin, all in the South County sub-area plan. Based on information pulled from this South County sub-area plan, the Nipomo Mesa is an important destination for recreation that contributes to the local economic base, including construction of golf courses. The characteristics of the community mix urban appeal with rural features and lifestyles through development of site-sensitive treatment of scenic areas, parks, expansive biking and pedestrian infrastructure, and public and tourist-related transit that enhance quality of life. Based on these aspects, natural resources and environmental assets are undoubtedly key to the Nipomo community and should be carefully considered during development and planning efforts.

### *M.3.2.7 Economic Assets*

Tourism is a large economic driver for the Nipomo community due to recreational and environmental assets as discussed in the above section. However, agriculture is important to the community as well, as are commercial, retail, and services. These types of economic assets could be compromised due to various hazards such as drought, flooding, earthquake, liquefaction, severe weather, and wildfire among others.

## **M.3.3 Estimating Potential Losses**

This section details vulnerability to specific hazards of low, medium, or high significance, where quantifiable, noted by the Planning Team, and/or where it differs significantly from that of the overall County. Impacts of past events and vulnerability to specific hazards are further discussed below, though refer to Section 5 of the Base Plan for more details on the County's HIRA findings and hazard profiles.

### *M.3.3.1 Adverse Weather: Thunderstorm/ Heavy Rain/ Lightning/ Dense Fog/ Freeze*

Nipomo CSD's risk and vulnerability does not differ significantly from that of San Luis Obispo County. The overall significance rating of the planning area is **low**. Nipomo CSD is subject to many of the same regional weather patterns during storm seasons and transitional weather patterns.

Similar to the county, the district is susceptible to the impacts of heavy rainfall. The planning area experiences about 13 inches of precipitation annually, according to Western Regional Climate Center. While thunderstorms and lightning are relatively rare, they can still pose safety risks to residents and strain electrical infrastructure when they occur. Dense fog is a common concern along the coast, particularly in the cooler months, often reducing visibility along roadways. The tables below show key climate variables such as extreme temperatures, precipitation totals, and the frequency of specific weather events. Note that Santa Maria weather station is the nearest official reporting site to Nipomo CSD.

**Table M-11 Santa Maria Public Airport Climate Summary Table – Weather (Period of Record: 01/01/1948 - 04/20/2025)**

SUMMARY PERIOD	MONTHLY MEAN MAXIMUM TEMP.	MONTHLY MEAN MINIMUM TEMP.	DAILY EXTREME HIGH TEMP.	DAILY EXTREME HIGH DATE	DAILY EXTREME LOW TEMP.	DAILY EXTREME LOW DATE	MAXIMUM TEMP. ≥ 90°F MEAN # DAYS	MINIMUM TEMP. ≤ 32°F MEAN # DAYS
Winter	64.2°F	39.8°F	90°F	12/3/1958	20°F	1/2/1976	0	11.7
Spring	66.9°F	44.5°F	105°F	5/15/2014	24°F	3/2/1971	0.8	1.3
Summer	72.5°F	52.6°F	110°F	6/20/2008	36°F	6/2/1955	0.9	0
Fall	72.8°F	48.0°F	108°F	10/4/1987	25°F	11/17/1958	3.2	1.1
Annual	69.1°F	46.2°F	110°F	6/20/2008	20°F	1/2/1976	5	14.3

Source: Western Regional Climate Center (WRCC) <https://wrcc.dri.edu/>

\* Winter is defined as December, January, and February

\*\* Summer is defined as June, July, and August

**Table M-12 Santa Maria Public Airport Climate Summary Table – Precipitation (Period of Record: 01/01/1948 - 04/20/2025)**

SUMMARY PERIOD	PRECIP. MEAN	PRECIP. HIGH	PRECIP. HIGH YEAR	PRECIP. LOW	PRECIP. LOW YEAR	PRECIP. 1 DAY MAXIMUM	PRECIP. 1 DAY MAXIMUM DATE	PRECIP. ≥ 1.00 IN. MEAN # DAYS
Winter	7.09 in.	18.39 in.	1978	1.41 in.	1964	3.42 in.	1/9/2023	1.5
Spring	3.61 in.	9.69 in.	1991	0.01 in.	1997	3.46 in.	3/20/2011	0.7
Summer	0.1 in.	0.91 in.	1976	0 in.	1955	0.84 in.	8/19/1976	0
Fall	1.9 in.	5.14 in.	1997	0.02 in.	1980	1.89 in.	10/6/1960	0.3
Annual	12.69 in.	28.24 in.	1998	2.99 in.	2013	3.46 in.	3/20/2011	2.6

Source: Western Regional Climate Center (WRCC) <https://wrcc.dri.edu/>

\* Winter is defined as December, January, and February

\*\* Summer is defined as June, July, and August

### **M.3.3.2 Adverse Weather: High Wind and Tornado**

Nipomo CSD's risk and vulnerability to this hazard does not differ significantly from that of the County overall significance of **low**. While these hazards are not common in the region they can occasionally occur during strong storm systems, particularly in the winter months. Nipomo may experience gusty winds capable of causing minor damage and tornado activity is extremely rare across the county. As such, while the potential for high wind events exists, the likelihood of significant damage or disruption remains low and tornado risk is considered minimal.

### **M.3.3.3 Adverse Weather: Extreme Heat**

Extreme heat is a **low** significance hazard for Nipomo CSD. The monthly mean high fall temperature for the Santa Maria Public Airport, the closest NOAA weather station to the CSD with recent data, is 72.8°F; however, temperatures up to 110°F have been recorded (see Table M-11). Additionally, rising temperatures and more frequent heat waves are increasing the likelihood of more extreme heat events in the future.

Extreme heat can threaten the reliability of services provided by the CSD. Rising temperatures increase water demand, straining local supplies, reducing well yields, and degrade water





quality through reduced dilution capacity and bacterial contamination, increasing dependence on supplemental sources. Additionally, critical infrastructure such as pumps, treatment systems, and distribution lines, can become vulnerable to overheating and reduced efficiency. Power outages linked to regional energy surges further increases the risk of service disruption, especially for water and wastewater operations.

These impacts are felt most acutely by vulnerable populations who may face heightened health risks if access to clean water or sanitation is compromised. Additionally, extreme heat puts field staff at risk, requiring potentially costly operational adjustments to ensure worker safety.

#### *M.3.3.4 Drought and Water Shortage*

The Nipomo CSD sources its water from two primary sources; the CSD operates four groundwater wells located in the Nipomo Mesa which extract water from the local aquifer, and imports water from the City of Santa Maria through the Nipomo Supplemental Water Project. This imported water is a blend of groundwater and surface water, including allocations from the State Water Project. In 2020, approximately 50% of the CSD's supply was sourced from groundwater wells, and the remaining 50% was obtained through the Nipomo Supplemental Water Project. In addition to the four groundwater wells, the CSD maintains five storage tanks and over ninety miles of distribution pipelines, as well as wastewater collection and treatment facilities.

A Five-Year Consecutive Dry Year Water Reliability Assessment in the 2020 Nipomo CSD Urban Water Management Plan, shown in Table M-13, evaluates the CSD's ability to sustain water supply during prolonged drought conditions. The assessment projects that during a five-year drought, groundwater availability could decline due to increasing conservation mandates from the Nipomo Mesa Management Area (NMMA) potentially reducing pumping allowances by up to 60%. However, the CSD expects to offset these reductions with increased imported water supplies, ensuring sufficient supply to meet demand. Despite this, the CSD remains vulnerable to potential reductions in imported water availability and groundwater overdraft risks.

**Table M-13 Multiple Dry Years Supply and Demand Comparison**

DROUGHT YEAR	SUPPLY DEMAND	2025	2030	2035	2040	2045
First year (NMMA Stage 2)	Groundwater Supply	2,027	2,027	2,027	2,027	2,027
	Imported Water Supply	3,000	3,000	3,000	3,000	3,000
	Total	5,027	5,027	5,027	5,027	5,027
	District (Existing and Infill)	2,118	2,186	2,253	2,320	2,388
	Annexations Under Review	176	352	352	352	352
	Sales to Other Agencies	833	833	833	833	833
	Total	3,127	3,371	3,438	3,505	3,573
	Difference (AF)	1,900	1,656	1,589	1,522	1,454
Second year (NMMA Stage 3)	Groundwater Supply	1,733	1,733	1,733	1,733	1,733
	Imported Water Supply	3,000	3,000	3,000	3,000	3,000
	Total	4,733	4,733	4,733	4,733	4,733
	District (Existing and Infill)	2,118	2,186	2,253	2,320	2,388
	Annexations Under Review	176	352	352	352	352
	Sales to Other Agencies	833	833	833	833	833
	Total	3,127	3,371	3,438	3,505	3,573
	Difference (AF)	1,606	1,362	1,295	1,228	1,160
Third year (NMMA Stage 4)	Groundwater Supply	1,267	1,267	1,267	1,267	1,267
	Imported Water Supply	3,000	3,000	3,000	3,000	3,000
	Total	4,267	4,267	4,267	4,267	4,267
	District (Existing and Infill)	2,118	2,186	2,253	2,320	2,388
	Annexations Under Review	176	352	352	352	352



DROUGHT YEAR	SUPPLY DEMAND	2025	2030	2035	2040	2045
	Sales to Other Agencies	833	833	833	833	833
	Total	3,127	3,371	3,438	3,505	3,573
	Difference (AF)	1,140	896	829	762	694
Fourth year (NMMA Stage 5)	Groundwater Supply	1,013	1,013	1,013	1,013	1,013
	Imported Water Supply	3,000	3,000	3,000	3,000	3,000
	Total	4,013	4,013	4,013	4,013	4,013
	District (Existing and Infill)	2,118	2,186	2,253	2,320	2,388
	Annexations Under Review	176	352	352	352	352
	Sales to Other Agencies	833	833	833	833	833
	Total	3,127	3,371	3,438	3,505	3,573
	Difference (AF)	886	642	575	508	440
Fifth year (NMMA Stage 5)	Groundwater Supply	1,013	1,013	1,013	1,013	1,013
	Imported Water Supply	3,000	3,000	3,000	3,000	3,000
	Total	4,013	4,013	4,013	4,013	4,013
	District (Existing and Infill)	2,118	2,186	2,253	2,320	2,388
	Annexations Under Review	176	352	352	352	352
	Sales to Other Agencies	833	833	833	833	833
	Total	3,127	3,371	3,438	3,505	3,573
	Difference (AF)	886	642	575	508	440

Source: 2020 Nipomo Community Services District Urban Water Management Plan

Drought was classified by the Planning Team as the most significant hazard for Nipomo, just as it is a **high significance** hazard for the entire County of San Luis Obispo. The most notable impacts associated with drought in the planning area are those related to water intensive activities such as wildfire protection, jurisdictional usage, commerce, tourism and recreation. Drought conditions can also cause soil to compact and not absorb water well, potentially making an area more susceptible to flooding, erosion, and debris flows.

The San Luis Obispo County 2014-2016 Resource Summary Report related to the Nipomo CSD recommended that the District work with stakeholders including the County's Sanitation District to strengthen drought resilience by expanding recycled water use, enhancing conservation programs, developing additional storage capacity, and improving contingency planning for supply interruptions. Overall, the assessment indicates that the CSD can meet demand under extended dry-year conditions but could continue diversifying and securing water sources to mitigate long-term risks.

#### **M.3.3.5 Earthquake and Liquefaction**

Nipomo sits on an ancient sand dune, and there are several faults underlying or near the district, such as the San Luis Range fault system/South Margin faults and the Santa Maria Fault. (See a very basic layout of the district and surrounding faults in Figure M-1). Because of earthquake, coupled with liquefaction (both of which are discussed in more detail in Section 5.3.10 of the Base Plan) and earth movement issues, the Planning Team for the District noted that its infrastructure is prone to severe or even catastrophic failure from seismic activities. However, recent efforts to construct well-designed above ground structures has resulted in greater focus on earthquake survivability for critical and essential infrastructure and properties. Because of the recent and ongoing efforts and projects in Nipomo, as well as the inherent understanding of the Planning Team regarding seismic activity and the district's infrastructure, the earthquake and liquefaction hazards can be rated as **Medium** Significance even though the County of San Luis Obispo rated it as high significance.

For example, the district built the Joshua Road Reservoir in 2017 (a post stressed designed concrete water storage structure), and it was constructed with the ability to withstand a severe earthquake during its 100-year life cycle. In addition, as with many public and municipal



structures across the County, Nipomo's above ground facilities are built with a high degree of resilience and capability to withstand earthquakes. Underground facilities are less vulnerable in these environments, as flexibility of pipelines and valves in sand have limited distribution system failures during seismic activities. Nevertheless, the Planning Team noted that the original distribution systems off the ancient dunes east of Highway 101 in Nipomo would be the most vulnerable to earthquakes and would be expected to experience greater rates of failure due to the soil types in which they are found as well as the pipeline bedding practices exercised by the early District design engineers. In addition, the District's Southland and Blacklake wastewater facilities are typical above-ground facilities that are susceptible to earthquakes and would experience measurable damage consistent with the strength of an earthquake, so that the greater the quake the greater the degree of damage to these. The Southland facility was rebuilt in 2014 and incorporates modern engineering standards to better withstand earthquakes, while Blacklake, built in 1984, is more vulnerable to damage caused by an earthquake due to its age and design.

In terms of liquefaction, the Nipomo CSD is almost completely covered by liquefiable soils that are rated as posing moderate risk, resulting in the highest level of exposure to moderate or higher liquefaction risk amongst the CSDs in San Luis Obispo County. The portion of the District that falls to the east of Highway 101 (near N. Thompson Ave and north of Nipomo Creek) is only found to be at low risk of this hazard, though high risk liquefaction potential is found surrounding the District to the south, southeast, and west. See Figure M-2 for reference on liquefaction risk.

The following tables (Table M-14 and Table M-15) display the types and values of properties and the types of critical facilities located in low, moderate, or high liquefaction risk areas. Based on this analysis there are 4,327 properties exposed to liquefaction risk with a total value of over \$2 billion. Residential properties are the most vulnerable property type to liquefaction in Nipomo, with a combined total of 3,861 properties (including multi-family residential and mobile homes) with a total value of over \$1.7 billion.

**Table M-14 Nipomo CSD's Improved Properties Exposed to Liquefaction Potential by Property Type**

PROPERTY TYPE	STRUCTURE COUNT HIGH	STRUCTURE COUNT MODERATE	STRUCTURE COUNT LOW	TOTAL STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATION
Agricultural	-	4	-	4	\$1,139,600	\$1,139,600	\$2,279,200	-
Commercial	-	47	23	70	\$96,933,973	\$96,933,973	\$193,867,946	-
Exempt	-	6	6	12	\$2,489,264	\$2,489,264	\$4,978,528	-
Industrial	-	9	-	9	\$13,078,606	\$19,617,909	\$32,696,515	-
Mixed Use	-	270	75	345	\$68,577,792	\$68,577,792	\$137,155,584	-
Mobile/Manufactured Homes	-	284	5	289	\$31,395,158	\$15,697,579	\$47,092,737	714
Multi-Family Residential	-	29	30	59	\$57,606,158	\$28,803,079	\$86,409,237	146
Residential	-	2,879	634	3,513	\$1,048,201,906	\$524,100,953	\$1,572,302,859	8,677
Vacant Improved	-	20	6	26	\$4,083,657	\$0	\$4,083,657	-
Total	0	3,548	779	4,327	\$1,323,506,114	\$757,360,149	\$2,080,866,263	9,537

Source: San Luis Obispo Assessor Data November 15, 2024, WSP GIS Analysis

With regards to critical facilities, the Nipomo CSD contains 18 that are at moderate risk of liquefaction, including the Blacklake Wastewater Treatment facility (classified in Water Systems lifeline). These are noted in Figure M-2. No critical facilities are found in high liquefaction risk areas.

**Table M-15 Critical Facility Assets Exposed to Liquefaction Susceptibility by FEMA Lifeline**

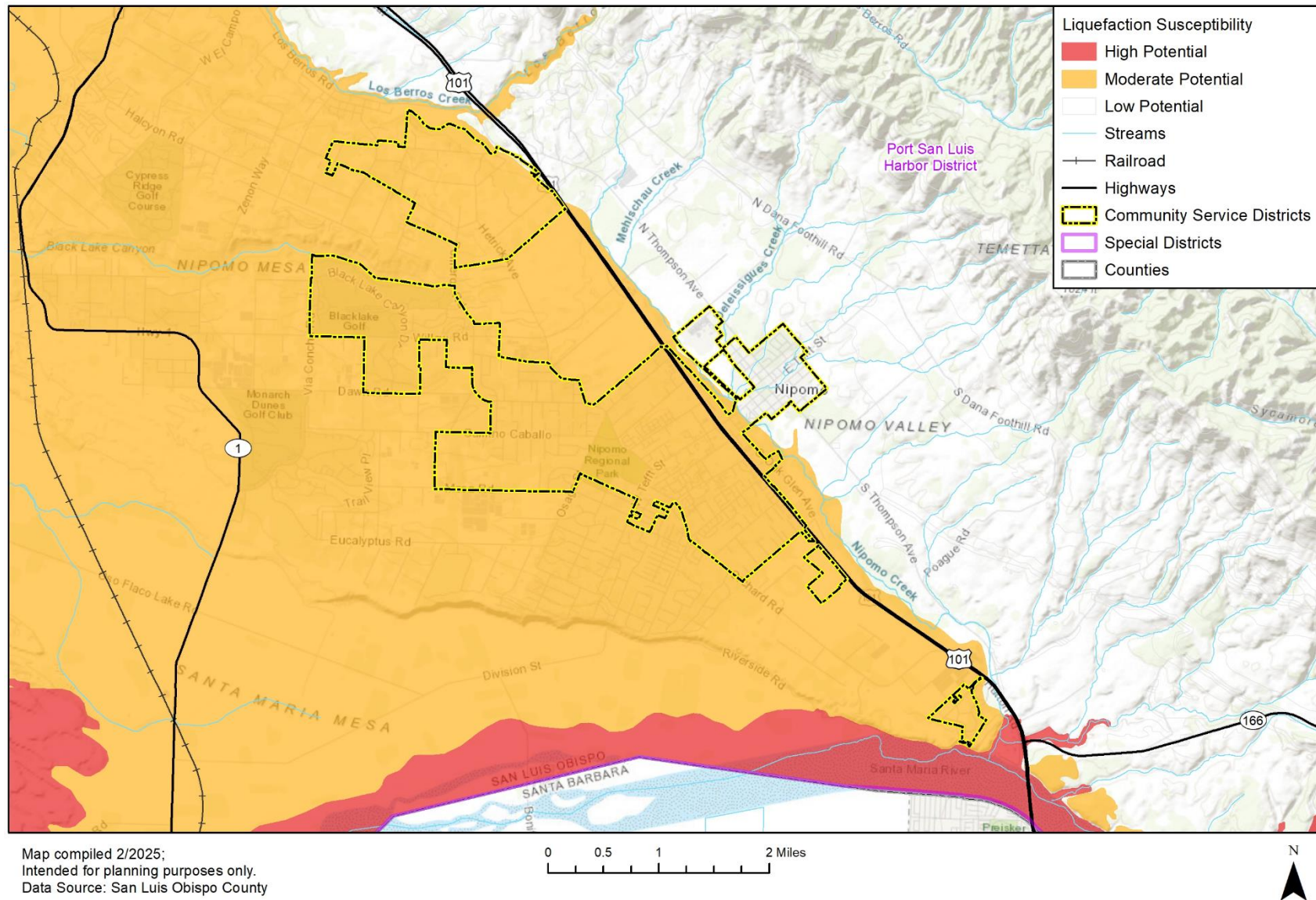
LIQUEFACTION SUSCEPTIBILITY	COMMUNICATIONS	ENERGY	FOOD, HYDRATION, SHELTER	HAZARDOUS MATERIAL	HEALTH AND MEDICAL	SAFETY AND SECURITY	TRANSPORTATION	WATER SYSTEMS	TOTAL COUNT
Medium Liquefaction Susceptibility	9	-	-	2	-	4	2	1	18
Low Liquefaction Susceptibility	1	-	1	-	-	7	3	-	12

Source: San Luis Obispo County, CalARP, HIFLD, NBI, NID, FCWCD, WSP Analysis





Figure M-2 Liquefaction Risk in the Nipomo CSD







### **M.3.3.6 Flood**

The Nipomo CSD lies within San Luis Obispo County's Water Planning Area 3, which corresponds to the San Luis Obispo/South County zone. Nipomo is located in the Nipomo Creek/Santa Maria River watershed and remains exposed to riverine flood hazards.

Based on the most recent effective Flood Insurance Rate Maps (FIRMs) published by FEMA for San Luis Obispo County, areas of Nipomo remain at risk from both 1% annual chance (100-year) and 0.2% annual chance (500-year) flood events. Nipomo Creek, which flows north-south and runs parallel to Highway 101 east of the community, poses the most significant flood risk. The Santa Maria River, located south of the District, and tributaries such as Deleissigues Creek and Mehlschau Creek also contribute to localized flood risk. The highest concentrations of 1% annual chance floodplain are located near Tefft Street and North Thompson Avenue. Smaller 0.2% annual chance flood zones are found in areas east of Highway 101.

### **Levee Description**

One levee system provides localized flood protection to portions of the Nipomo area. The Santa Maria River Levee, constructed by the U.S. Army Corps of Engineers (USACE) in 1963 under the Flood Control Acts of 1938 and 1954, was designed to protect the city of Santa Maria and surrounding areas. The levee is currently operated by the Santa Barbara County Flood Control and Water Conservation District, with partial maintenance funding provided by San Luis Obispo County's Zone 4 Flood Control District. Zone 4 collects service fees from benefitting San Luis Obispo County properties, including parts of Nipomo, and reimburses Santa Barbara County for levee maintenance.

The levee has experienced damage from several low to moderate flood events and breached entirely in 1998, flooding nearby agricultural land. In 1983, USACE modified a portion of the structure by adding groin systems to reduce erosive cross-flow impacts; however, large segments remain unmodified and are vulnerable to undercutting and failure. While Reaches 1 through 3 and the Bradley Canyon Levee have been improved to their design standard of protection, the overall levee system is not certified by USACE to withstand a 1% annual chance flood. Following recent inspections, it remains listed on the national levees at risk of failure inventory.

### **Flood Hazard Summary**

To date, only minor riverine flooding has affected the Nipomo CSD. As of the 2025 update, the HMPC continues to rank the flood hazard as **low** significance for the District based on the potential risk to life and property. For additional context and a countywide flood hazard assessment, refer to Section 5.3.8 of the Base Plan. Figure M-3 shows the FEMA flood hazard areas in the Nipomo CSD, below.



Figure M-3 FEMA Flood Hazard Areas in the Nipomo CSD

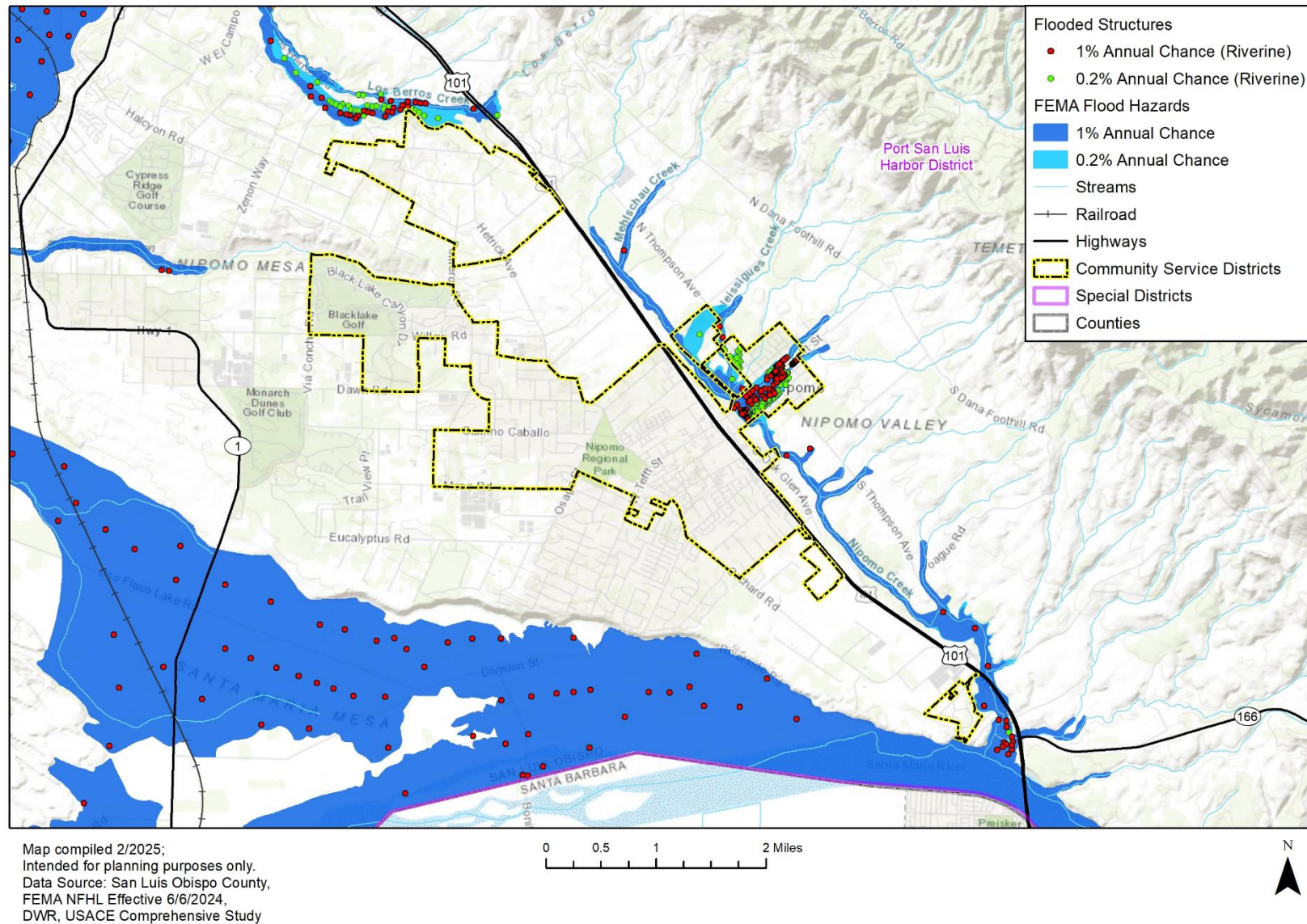




Table M-16 and Table M-17 show the parcels and population at risk to the 1% and 0.2% annual chance floodplains, below.

### Properties at Risk

**Table M-16 Parcels and Population at Risk to 1% Annual Chance Flood Hazard Areas in the Nipomo CSD**

PROPERTY TYPE	PARCEL COUNT	IMPROVED VALUE	CONTENT VALUE	TOTAL VALUE	LOSS ESTIMATE	POPULATION
Commercial	13	\$4,788,973	\$4,788,973	\$9,577,946	\$2,394,487	-
Exempt	2	\$60,087	\$60,087	\$120,174	\$30,044	-
Mixed Use	39	\$6,375,769	\$6,375,769	\$12,751,538	\$3,187,885	-
Multi-Family Residential	8	\$1,806,412	\$903,206	\$2,709,618	\$677,405	20
Residential	34	\$5,486,593	\$2,743,297	\$8,229,890	\$2,057,472	84
TOTAL	96	\$18,517,834	\$14,871,332	\$33,389,166	\$8,347,291	104

Source: San Luis Obispo Assessor Data November 15, 2024, FEMA NFHL Effective Date 6/6/2024, WSP GIS Analysis

**Table M-17 Parcels and Population at Risk to 0.2% Annual Chance Flood Hazard Areas in the Nipomo CSD**

PROPERTY TYPE	PARCEL COUNT	IMPROVED VALUE	CONTENT VALUE	TOTAL VALUE	LOSS ESTIMATE	POPULATION
Commercial	9	\$2,621,604	\$2,621,604	\$5,243,208	\$1,310,802	-
Exempt	1	\$0	\$0	\$0	\$0	-
Mixed Use	37	\$6,705,993	\$6,705,993	\$13,411,986	\$3,352,997	-
Multi-Family Residential	9	\$3,669,856	\$1,834,928	\$5,504,784	\$1,376,196	22
Residential	69	\$9,908,781	\$4,954,391	\$14,863,172	\$3,715,793	170
TOTAL	125	\$22,906,234	\$16,116,916	\$39,023,150	\$9,755,787	193

Source: San Luis Obispo Assessor Data November 15, 2024, FEMA NFHL Effective Date 6/6/2024, WSP GIS Analysis

Flood exposure within the Nipomo CSD includes a total of 96 parcels in the 1% annual chance (100-year) floodplain, with an estimated \$33.39 million in combined improved and content value. The majority of at-risk structures fall under mixed-use (\$12.75 million) and residential (\$8.23 million) categories, followed by commercial parcels valued at \$9.58 million. Estimated losses for this flood scenario total \$8.35 million, indicating a significant portion of structural value is vulnerable to a single high-magnitude event. In the 0.2% annual chance (500-year) floodplain, total parcel exposure increases to 125 parcels, with \$39.02 million in total value and \$9.76 million in estimated loss. Residential and mixed-use parcels again dominate value exposure, with combined losses exceeding \$7 million, while commercial assets make up roughly 13% of total loss value. These figures reflect meaningful structural risk even in areas outside the FEMA-designated flood zones.



Nipomo does not participate separately in the National Flood Insurance Program (NFIP) but will continue to support the County's participation in and compliance with the NFIP.

### Population at Risk

Population exposure within Nipomo CSD remains concentrated in residential and multi-family housing within both mapped flood zones. In the 1% (100-year) floodplain, 104 people are exposed, including 84 residents in single-family parcels and 20 in multi-family units. While the total population count is modest, these properties represent some of the highest density residential areas near Nipomo Creek and Tefft Street. In the 0.2% (500-year) floodplain, population exposure increases to 193 residents, nearly double the 100-year count. This includes 170 individuals in residential parcels and 22 in multi-family structures, showing a broader extent of risk into less frequently flooded zones. The expansion of exposure in the 0.2% (500-year) area suggests that larger storm events, though rare, could affect a significantly greater portion of the District's housing base and disrupt service delivery or evacuation operations across multiple neighborhoods.

### Critical Facilities at Risk

A total of six critical facilities in Nipomo CSD fall within the 1% (100-year) annual chance floodplain, as identified using FEMA and DWR datasets. These include one communications facility, two safety and security facilities, and three transportation assets. Notably, no water, medical, energy, or shelter-related facilities are located within this zone, which helps reduce direct impacts to core life-sustaining infrastructure during a 1% annual chance flood event. However, the presence of multiple transportation and public safety assets in this zone may disrupt emergency access routes and first responder coordination if flooding occurs.

Within the 0.2% (500-year) floodplain, three critical facilities are exposed, including one food, hydration, and shelter facility and two safety and security assets. Although fewer facilities are impacted at this less frequent flood depth, the presence of shelter and public safety infrastructure in the 0.2% zone suggests that larger storm events could disrupt recovery staging locations or temporary housing during extended emergencies. The concentration of public safety-related facilities across both zones highlights the importance of maintaining continuity of operations planning and backup systems, particularly where overlapping flood risks and emergency services intersect. Table M-18 and Table M-19 show the critical facility assets with the Nipomo CSD exposed to flood hazards, below.

**Table M-18 Nipomo CSD Critical Facility Assets Exposed to FEMA and DWR Awareness 1% Flood Hazards by FEMA Lifelines**

COMMUNITY SERVICE DISTRICT	COMMUNICATIONS	ENERGY	FOOD, HYDRATION, SHELTER	HAZARDOUS MATERIAL	HEALTH AND MEDICAL	SAFETY AND SECURITY	TRANSPORTATION	WATER SYSTEMS	TOTAL COUNT
Nipomo	1	-	-	-	-	2	3	-	6

Source: San Luis Obispo County, FEMA NFHL Effective Date 6/6/2024, CalARP, HIFLD, NBI, NID, FCWCD, WSP Analysis



**Table M-19 Nipomo CSD Critical Facility Assets Exposed to FEMA Riverine 0.2% Flood Hazards by FEMA Lifelines**

COMMUNITY SERVICE DISTRICT	COMMUNICATIONS	ENERGY	FOOD, HYDRATION, SHELTER	HAZARDOUS MATERIAL	HEALTH AND MEDICAL	SAFETY AND SECURITY	TRANSPORTATION	WATER SYSTEMS	TOTAL COUNT
Nipomo	-	-	1	-	-	2	-	-	3

Source: San Luis Obispo County, FEMA NFHL Effective Date 6/6/2024, CalARP, HIFLD, NBI, NID, FCWCD, WSP Analysis

#### **M.3.3.7 Wildfire**

The overall significance of wildfire in Nipomo CSD is rated as **medium** significance. While there is no recent fire history in the Nipomo CSD, due to factors such as the coverage of high fire hazard severity zones in about half of Nipomo and its sphere of influence as well as parcel analysis result. The geography, climate, and land use factors make the district more vulnerable to wildfire than the coastal areas.

In Nipomo CSD, 1,380 properties are situated within wildfire hazard exposure zones ranging from moderate to very high risk. None of these properties are located in the Very High Fire Severity Zone, while 398 properties fall within the High Fire Severity Zone and 982 properties fall within the Moderate Fire Hazard Severity zone. Collectively, these properties represent a total assessed value of \$733,614,228 and impact approximately 3,325 residents across all fire hazard severity zones. Table M-20 shows the properties in the district exposed to Fire Hazard Severity Zones. Figure M-4 depicts the Fire Hazard Severity Zones in Nipomo CSD.

GIS analysis shows the critical facilities in Nipomo CSD that are exposed to fire hazard severity, categorizing them by severity level and facility type. The exposure of these critical assets to wildfire hazards poses significant risks to communications. GIS analysis shows that there is a total of one (1) critical facilities that fall in the high fire severity zone rating, seven (7) in the moderate fire hazard severity zone and none that fall into the very high fire hazard severity zone rating. Only one school is found within fire severity zones in Nipomo. This is a private school (Highland Preparatory School) located to the west of Highway 101, off Live Oak Ridge Road.



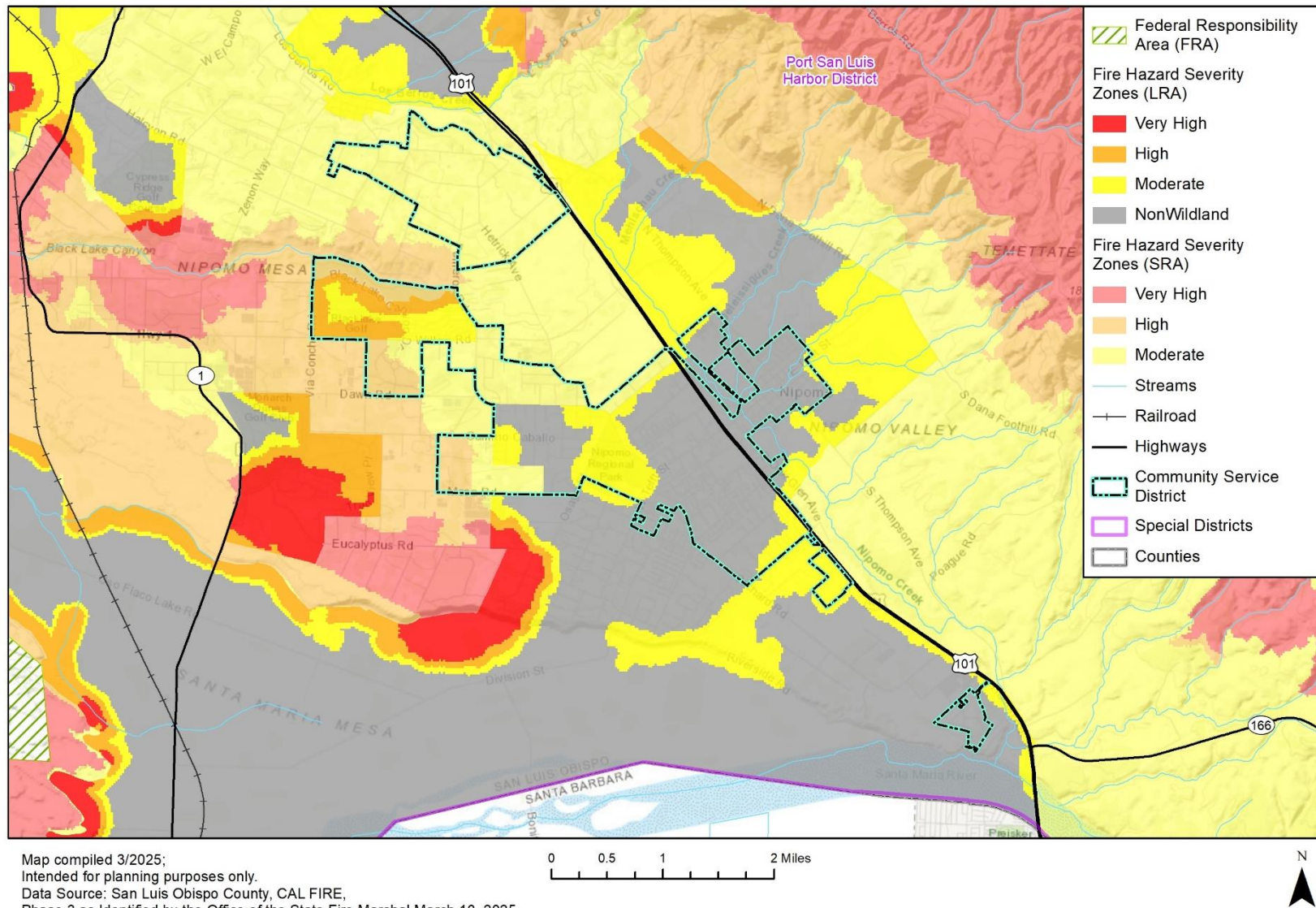
**Table M-20 Nipomo CSD Improved Properties Exposed to Fire Hazard Severity Zones by Property Zone**

PROPERTY TYPE	STRUCTURE COUNT VERY HIGH	STRUCTURE COUNT HIGH	STRUCTURE COUNT MODERATE	TOTAL STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATION
Agricultural	-	-	3	3	\$508,298	\$508,298	\$1,016,596	-
Commercial	-	2	10	12	\$12,142,573	\$12,142,573	\$24,285,146	-
Exempt	-	-	1	1	\$821,961	\$821,961	\$1,643,922	-
Industrial	-	-	5	5	\$6,572,730	\$9,859,095	\$16,431,825	-
Mobile/Manufactured Homes	-	2	33	35	\$6,589,928	\$3,294,964	\$9,884,892	86
Multi-Family Residential	-	-	6	6	\$1,350,136	\$675,068	\$2,025,204	15
Residential	-	394	911	1,305	\$450,903,105	\$225,451,553	\$676,354,658	3,223
Vacant Improved	-	-	13	13	\$1,971,985	\$0	\$1,971,985	-
Total	0	398	982	1,380	\$480,860,716	\$252,753,512	\$733,614,228	3,325

Source: San Luis Obispo Assessor Data November 15, 2024, CAL FIRE - FHSZ Phase 3 March 10, 2025, WSP GIS Analysis



Figure M-4 Fire Hazard Severity Zones in the Nipomo CSD





### M.3.3.8 Human Caused: Hazardous Materials

The Nipomo LPT rated hazardous materials incidents as having **medium** overall significance. The Cal OES Spill Release Reporting Center reports 18 hazardous materials incidents in the Nipomo CSD from January 1<sup>st</sup>, 2019 through December 20<sup>th</sup>, 2024. This likely excludes a number of unreported minor spills. The 18 reported incidents constitutes 3.97% of the hazardous materials incidents reported countywide during the same time frame and averages out to roughly 3 incidents per year.

## M.4 Capability Assessment

Capabilities are the programs and policies currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. This capability assessment is divided into five sections: regulatory mitigation capabilities, administrative and technical mitigation capabilities, fiscal mitigation capabilities, mitigation outreach and partnerships, and other mitigation efforts.

To develop this capability assessment, the jurisdictional and district planning representatives used a matrix of common mitigation activities to inventory policies or programs in place. The team then supplemented this inventory by reviewing additional existing policies, regulations, plans, and programs to determine if they contributed to reducing hazard-related losses.

During the plan update process, this inventory was reviewed by the jurisdictional and district planning representatives and WSP consultant team staff to update information where applicable and note ways in which these capabilities have improved or expanded. In summarizing current capabilities and identifying gaps, the jurisdictional planning representatives also considered their ability to expand or improve upon existing policies and programs as potential new mitigation strategies. The Nipomo CSD capabilities are summarized below.

### M.4.1 Regulatory Mitigation Capabilities

Table M-21 Nipomo CSD Regulatory Mitigation Capabilities identifies existing regulatory capabilities the district has in place to help with future mitigation efforts. Note: many of the regulatory capabilities that can be used for the district are within the County's jurisdiction. Refer to the Base Plan's Section 6 Capability Assessment for specific information related to the County's mitigation capabilities as well as more details on this topic.

**Table M-21 Nipomo CSD Regulatory Mitigation Capabilities**

REGULATORY TOOL	YES/NO	COMMENTS
General plan	No	Included in the San Luis Obispo County efforts
Zoning ordinance	No	Included in the San Luis Obispo County efforts
Subdivision ordinance	No	Included in the San Luis Obispo County efforts
Growth management ordinance	No	Included in the San Luis Obispo County efforts
Floodplain ordinance	No	Included in the San Luis Obispo County efforts
Other special purpose ordinance (stormwater, water conservation, wildfire)	No	Included in the San Luis Obispo County efforts
Building code	No	Included in the San Luis Obispo County efforts
Fire department ISO rating	No	Included in the San Luis Obispo County efforts
Erosion or sediment control program	No	Included in the San Luis Obispo County efforts
Stormwater management program	No	Included in the San Luis Obispo County efforts
Site plan review requirements	No	Included in the San Luis Obispo County efforts



REGULATORY TOOL	YES/NO	COMMENTS
Capital improvements plan	Yes	NCSD Budget Document
Economic development plan	No	Included in the San Luis Obispo County efforts
Local emergency operations plan	Yes	NCSD Emergency Operations Plan
Other special plans	No	Included in the San Luis Obispo County efforts
Flood Insurance Study or other engineering study for streams	No	Unknown
Elevation certificates (for floodplain development)	No	Included in the San Luis Obispo County efforts

Source: Wood Data Collection Guide, 2019; Nipomo CSD

### M.4.2 Discussion on Existing Building Codes, Land Use and Development Regulations

Building codes and regulations for construction and development in Nipomo are governed by the county. The district does maintain its own Code Book which includes ordinances for the district's operations; water, sewer, and solid waste management. For building codes, the district adopts the same ones as the county, which enforces the California Building Standards Code which includes the California Building Code and California Residential Code. Any new construction or major renovation projects in Nipomo must comply with these county and state codes.

### M.4.3 Administrative/Technical Mitigation Capabilities

Table M-22 Table M-22 Nipomo CSD Administrative/Technical Mitigation Capabilities identifies the personnel responsible for activities related to mitigation and loss prevention in the Nipomo Community Services District.

**Table M-22 Nipomo CSD Administrative/Technical Mitigation Capabilities**

PERSONNEL RESOURCES	YES/NO	DEPARTMENT/POSITION/COMMENTS
Planner/engineer with knowledge of land development/land management practices	No	SLO County Planning
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Yes	Engineering/Operations. Director is Peter Sevcik
Planner/engineer/scientist with an understanding of natural hazards	No	
Personnel skilled in GIS	Yes	Contract Services: Pro West
Full time building official	No	SLO County Planning
Floodplain manager	No	SLO County Planning
Emergency manager	No	SLO County
Grant writer	No	
Other personnel	No	
GIS Data Resources (Hazard areas, critical facilities, land use, building footprints, etc.)	Yes	District infrastructure
Warning systems/services (Reverse 9-11, outdoor warning signals)	No	

Source: Wood Data Collection Guide, 2019; Nipomo CSD



#### M.4.4 Fiscal Mitigation Capabilities

Table M-23 Table M-23 Nipomo CSD Fiscal Mitigation Capabilities identifies financial tools or resources that the CSD could potentially use to help fund mitigation activities.

**Table M-23 Nipomo CSD Fiscal Mitigation Capabilities**

FINANCIAL RESOURCES	ACCESSIBLE/ELIGIBLE TO USE (YES/NO)
Community Development Block Grants	No
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
Fees for water, sewer, gas, or electric services	Yes
Impact fees for new development	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activities	No
Withhold spending in hazard prone areas	No

#### M.4.5 Mitigation Outreach and Partnerships

The Nipomo Community Services District runs a responsible water use outreach program to encourage conservation and efficiency by sending out public notices via quarterly newsletters, school outreach efforts, and bill stuffers for water conversation, responsible water use, and sewer misuse examples. Other outreach, partnership, and general district efforts include those stated in Nipomo's Strategic Plan, updated in 2018.

**Table M-24 Nipomo CSD Mitigation Outreach and Partnerships**

CAPABILITY TYPE	YES/NO
School programs	Yes
Community Newsletters	Yes
Utility Bill Inserts	Yes
Community Organizations (Lions, Kiwanis, etc.)	Yes

#### M.4.6 Opportunities for Enhancement

Based on this capabilities assessment and the noted information from existing plans and efforts (e.g., those noted in the District's Strategic Plan from 2018), the Nipomo Community Services District has several existing mechanisms in place that help to mitigate hazards. There are also opportunities for the district to expand or improve on these policies and programs to further protect the community. Future improvements may include providing training for staff members related to hazards or hazard mitigation grant funding in partnership with the county and Cal OES; or even obtaining official certifications such as Storm Ready or FireWise certification. Additional training opportunities will help to inform District staff and board members on how best to integrate hazard information and mitigation projects into the district policies and ongoing duties of the district. Continuing to train District staff on mitigation and the hazards that pose a risk to the Nipomo Community Services District will lead to more informed staff members who can better communicate this information to the public and prevent or respond to changes in development and the district makeup overall. Furthermore, the Planning Team for the District noted that Nipomo often seeks to find opportunities to reinforce and strengthen its infrastructure during the initial design of facilities planned to be built. A review process that involves assessing other existing facilities against hazards to





determine their vulnerability has not been fully cataloged, so Nipomo hopes to continue these ongoing efforts in the future.

## M.5 Mitigation Strategy

### M.5.1 Mitigation Goals and Objectives

The Nipomo CSD adopts those hazard mitigation goals and objectives developed by the County Planning Team and described in Section 7 of the Base Plan: Mitigation Strategy.

### M.5.2 2019 Completed Mitigation Actions

The Lead Planning Team reviewed the mitigation actions listed in the 2019 plan and found that one action had been completed as shown below in Table M-25.

**Table M-25 Nipomo CSD Completed and Deleted Mitigation Actions**

2019 ACTION ID	HAZARD(S) ADDRESSED	MITIGATION ACTION TITLE	LEAD AGENCY	ACTION STATUS NOTES
N.2*	Drought	Add secondary source of water supply as additional supply to hedge against future drought conditions.	NCSD	Completed. Deliveries started July 2015.

### M.5.3 Mitigation Actions

The Lead Planning Team for the Nipomo Community Services District identified and prioritized the following mitigation actions based on the conducted risk assessment (see Table M-7). Actions were prioritized using the process described in Section 7.2.1 of the Base Plan. Background information and information on how each action will be implemented and administered, such as ideas for implementation, responsible office, potential funding, estimated cost, and timeline are also included. Actions with an asterisk (\*) are those that mitigate losses to future development.



Table M-26 Nipomo CSD's Mitigation Action Plan

MITIGATION ACTION NUMBER	PRIMARY HAZARD(S) MITIGATED	DESCRIPTIONS/BACKGROUND/BENEFITS	LEAD AGENCY & PARTNERS	ESTIMATED COST & POTENTIAL FUNDING SOURCES	2025 PRIORITY	TIMELINE	STATUS/IMPLEMENTATION NOTES
N.1	Earthquake; Adverse Weather: Thunderstorm, High Wind and Tornado	Retrofit treatment facility buildings to increase resiliency to hazards.	NCSD Operations	High FEMA Hazard Mitigation Assistance Grant	Medium	5 years	Not started. Initial funding proposed for Budget FY25-26.
N.2	Wildfire; Adverse Weather: Thunderstorm, High Wind and Tornado; Drought and Water Shortage	Install backup generators at key water production facilities to ensure water availability during power grid failures or brownouts and also to ensure that firefighting capacity remains.	NCSD Operations	Moderate FEMA Hazard Mitigation Assistance Grant	Medium	1 year	In Progress. The District completed 1 out of the 4 needed. We are doing a phased approach as funding allows.
N.3	Drought and Water Shortage	Update the Nipomo CSD Urban Water Management Plan and Water Shortage Contingency Plan to further define actions to mitigate and respond to various drought conditions	NCSD Utilities	Moderate District Budget	Medium	1 year; Updated every 5 years	New in 2025 - An updated plan is planned and budgeted for the fiscal year 2025-2026
N.4	Flood	Coordinate with flood protection in the Nipomo area that is under the purview of the County of San Luis Obispo Public Works Department capital projects list to reduce flood hazards in the District.	County of SLO Public Works, NCSD Operations	High FEMA Hazard Mitigation Assistance Grant; County general fund	Medium	5 years	New in 2025 - This would be addressed in the County of SLO Public Work's capital projects list.



## M.6 Implementation and Maintenance

Moving forward, the Nipomo Community Services District will use the mitigation action table in the previous section to track progress on implementation of each project. Implementation of the plan overall is discussed in Section 7 of the Base Plan.

### *M.6.1.1 Incorporation into Existing Planning Mechanisms*

The information contained within this Annex and the Base Plan, including results from the Vulnerability Assessments and the Mitigation Strategy will be used by the district to help inform updates of the Nipomo CSD's existing plans (e.g. Strategic Plan), as well as in the development of additional local plans, programs, regulations, and policies. Understanding the hazards which pose a risk and the specific vulnerabilities to the district and its sphere of influence will help in future capital improvement planning and development for the district. The San Luis Obispo County Planning & Building Department may utilize the hazard information when reviewing a site plan or other type of development applications within or nearby the boundaries of the Nipomo Community Services District area. As noted in Section 8, the Lead Planning Team representative/s from the Nipomo Community Services District will report on efforts to integrate the hazard mitigation plan into local plans, programs, regulations, and policies and will report on these efforts at the annual Hazard Mitigation Plan and Planning Team review meeting.

### *M.6.1.2 Monitoring, Evaluation and Updating the Plan*

The Nipomo Community Services District will follow the procedures to monitor, review, and update this plan in accordance with San Luis Obispo County as outlined in Section 8 of the Base Plan. The District will continue to involve the public in mitigation, as described in Section 8.3 of the Base Plan. The CSD General Manager will be responsible for representing the Community Services District in related County Hazard Mitigation Plan meetings or events, and for coordination with County staff and departments during plan updates. The Nipomo CSD realizes it is important to review the plan regularly and update it every five years in accordance with the FEMA Disaster Mitigation Act Requirements as well as other State of California requirements.



## Annex N Oceano Community Services District

### N.1 District Profile

The Oceano Community Services District was formed in 1981 through a reorganization that combined several existing entities such as the Ocean Fire Protection District, Oceano Beach Lighting District, and the Oceano Sanitary District. The district is overseen by a five-member elected Board of Directors and provides multiple services to approximately 7,600 residents and businesses in Oceano and Halcyon. These services include sewer and water services, street lighting, parks and recreation.

#### N.1.1 Mitigation Planning History and 2025 Process

This annex was updated in 2025 and is based upon the Local Hazard Mitigation Plan for the Oceano Community Services District created in 2019. While the previous plan has not yet been integrated into local planning mechanisms, the current Water and Sewer CIPs will be using the MJHMP annex to inform projects.

The General Manager of the Oceano Community Services District (OCSD) was the representative for the County HMPC and took the lead for developing the plan and this annex in coordination with the OCSD Local Planning Team (Planning Team). The Planning Team will be responsible for implementation and maintenance of the plan. Table N-1 summarizes OCSD's planning team for the plan revision process.

**Table N-1 Oceano CSD Hazard Mitigation Plan Planning Team**

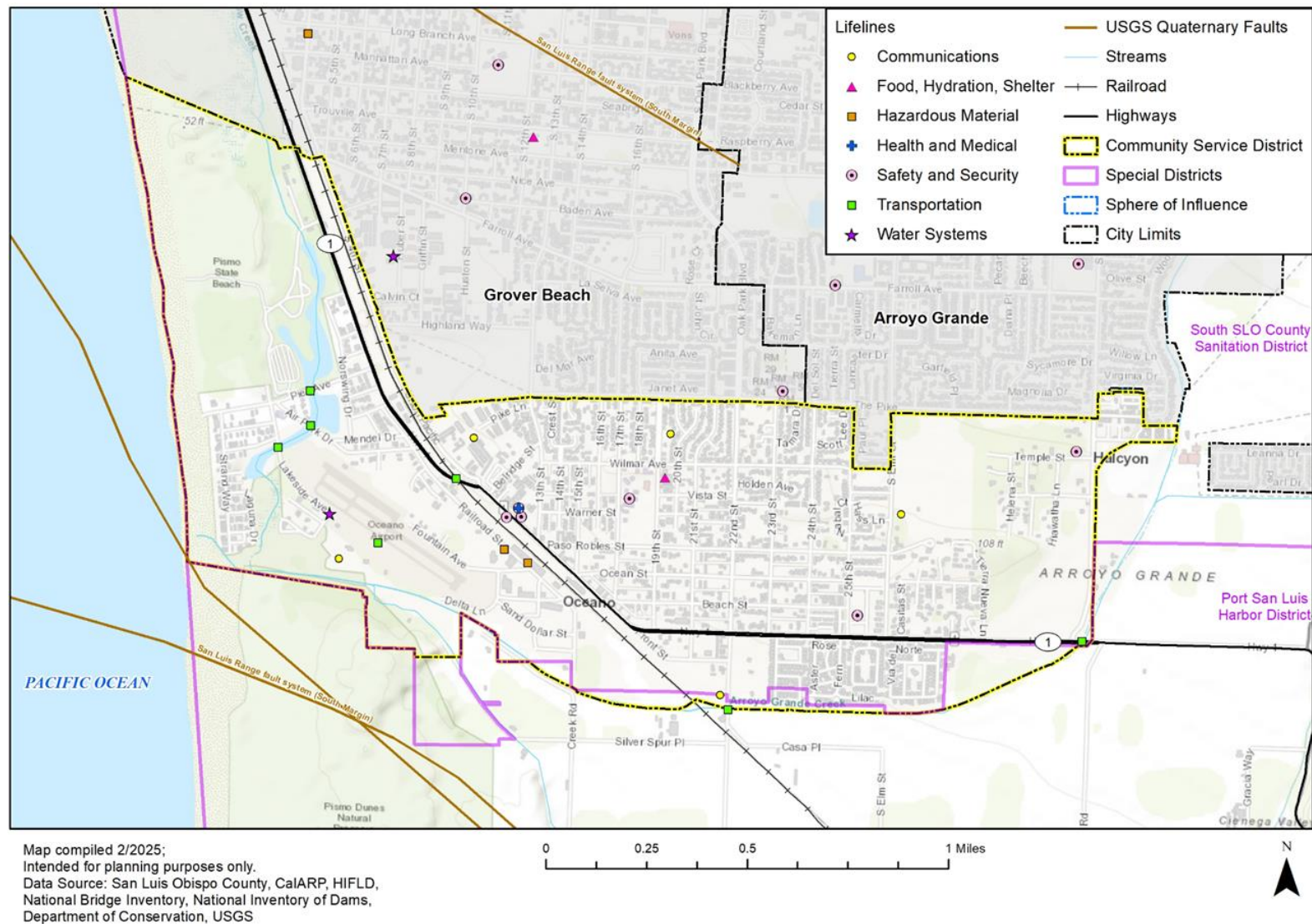
STAKEHOLDER GROUP	DEPARTMENT OR STAKEHOLDER	TITLE
Local Planning Team	Administration	General Manager
	Administration	Accounting and Business Manager
	Operations	Utilities Manager
	Operations	Utility Systems Operator
Agencies involved in hazard mitigation activities	County Public Works	Public Works
	Grover Beach	Public Works Director
	Five Cities Fire Authority	Fire Chief
Agencies that have the authority to regulate development	County Planning and Building Dept	Planner
	Coastal Commission	
Neighboring Communities	County Planning and Building Dept	
	Grover Beach	Public Works Director
	Arroyo Grande	Community Development Director
Representatives of business academia, and other private orgs	South SLO County - Chamber of Commerce	
Representatives supporting underserved communities	5Cities Homeless Coalition	

More details on the planning process and how the jurisdictions, service districts, and stakeholders participated can be found in Section 3 of the Base Plan, along with how the public was involved during the 2025 update.

Figure N-1 is a map of the larger Oceano community including its sphere of influence and nearby areas.



Figure N-1 Oceano Community Services District







## N.1.2 Geography and Climate

Oceano covers a total area of 1.7 square miles, with 1,150 acres of land. Oceano is part of the Five Cities Area, near other cities such as Grover Beach, Arroyo Grande, and Pismo Beach. Oceano is known for its proximity to the Oceano Dunes State Recreation Area, a popular tourist destination for outdoor activities like off-roading and camping.

## N.1.3 History

The OCSD was established on January 1, 1981, following voter approval in the November 1980 general election. This formation resulted from the consolidation of several local service entities, including the all-volunteer Oceano Fire Protection District (established in 1947, currently the Five Cities Fire Authority (FCFA)), Oceano Beach Lighting District, Oceano Sanitary District, and County Service Area No. 13. Since the early 2000s, OCSD has focused on improving water and wastewater infrastructure, including upgrades to aging water service lines and the sewage conveyance system, as well as improvements to the treatment plan shared with the Cities of Grover Beach and Arroyo Grande.

## N.1.4 Economy

The following tables show how the labor force of the Oceano Community Designated Place (CDP) breaks down by occupation and industry estimates from the U.S. Census Bureau's 2023 American Community Survey. In 2023 the most common industry was educational services, and health care and social assistance with (22.7%) of the labor force working in the industry as shown in Table N-2. The unemployment rate is very low at 1.7%, and the most common industries are construction and education as shown in Table N-2, and the most common occupations were those in sales and office occupations as shown in Table N-3.

**Table N-2 Oceano CDP Employment by Industry (2023)**

INDUSTRY	# EMPLOYEE	% EMPLOYEE
Population (16 years and over)	5,756	
In Labor Force	3,443	59.8%
Agriculture, forestry, fishing and hunting, and mining	75	2.3%
Armed Forces	0	0%
Construction	549	16.5%
Manufacturing	261	7.8%
Wholesale trade	60	1.8%
Retail trade	345	10.4%
Transportation and warehousing, and utilities	242	7.3%
Information	31	.9%
Finance and insurance, and real estate and rental and leasing	33	1%
Professional, scientific, and management, and administrative and waste mgmt. services	242	7.3%
Educational services, and health care and social assistance	756	22.7%
Arts, entertainment, and recreation, and accommodation and food services	410	12.3%
Other services, except public administration	213	6.4%
Public administration	116	3.5%
Unemployed	110	1.7%

Source: U.S. Census Bureau American Community Survey 2018-2023 5-Year Estimates, [www.census.gov/](https://www.census.gov/)

Note: Data is for the Oceano CDP which may not have the same boundaries as the Oceano Community Service District.

**Table N-3 Oceano CPD Employment by Occupation (2023)**

INDUSTRY	# EMPLOYED	% EMPLOYED
Population (2023)	5,756	
In Labor Force	3,443	59.8%
Management, business, science, and arts occupations	864	36.3%
Service occupations	1,034	14.5%
Sales and office occupations	553	22.7%
Natural resources, construction, and maintenance occupations	482	15.2%
Production, transportation, and material moving occupations	400	11.2%

Source: U.S. Census Bureau American Community Survey 2018-2023 5-Year Estimates, [www.census.gov/](https://www.census.gov/)

Note: Data is for the Oceano CDP which may not have the same boundaries as the Oceano Community Service District.

### N.1.5 Population

According to the American Community Survey, in 2023 Oceano had a population of 7,098. This is a 7.6% decrease from 2018. More information surrounding Oceano demographic and social characteristics are below in Table N-4.

**Table N-4 Oceano CDP Demographic and Social Characteristics, 2018-2023**

	2018	2023	% CHANGE
Population	7,678	7,098	-7.6%
Median Age	38.9	46.4	+19.3%
Total Housing Units	3,281	3,503	+6.8%
Housing Occupancy Rate	79%	87.7%	+11%
% of Housing Units with no Vehicles Available	3%	5.3%	+76.7%
Median Home Value	\$500,000	\$674,100	+34.8%
Unemployment	4.1%	1.7%	-58.5%
Mean Travel Time to Work (minutes)	23.2	27.5	+18.5%
Median Household Income	\$350,700	\$518,500	+47.8%
Per Capita Income	\$25,657	\$38,764	+51.1%
% of Individuals Below Poverty Level	15.7%	17.1%	+8.9%
# of Households	2,596	3,073	+18.4%
Average Household Size	2.96	2.31	-22%
% of Population Over 25 with High School Diploma	77.8%	79.9%	+2.7%
% of Population Over 25 with Bachelor's Degree or Higher	17.2%	18.6%	+8.1%
% with Disability	15.1%	20.6%	+36.4%

Source: U.S. Census Bureau American Community Survey 2018-2023 5-Year Estimates, [www.census.gov/](https://www.census.gov/)

Note: Data is for the Oceano CDP which may not have the same boundaries as the Oceano Community Service District.

### N.1.6 Development Trends

Constraints on available land have limited development in Oceano, with only 3% of Oceano's land vacant and available. This has resulted in efforts in Oceano focusing on redevelopment rather than new construction. Housing market trends in Oceano show an increase in value, with median home prices increasing by 34.8% in from 2018 to 2023.



In 2020 the Oceano Airport Redevelopment Specific Plan was renamed as an initiative that envisions a mixed-use development with historic and cultural focus west of Highway 1. Flood control measures were incorporated into redevelopment plans for the Oceano Airport area to address infrastructure challenges and to support growth.

In 2023 Oceano proposed to divest from fire protection services due to funding issues and escalating costs of service provisions for the FCFA in relation to property tax revenue. Two ballot measures were proposed to the residents of Oceano but were rejected by voters, failing to receive the required 2/3rds voter approval. The Divestiture was approved by the Local Agency Formation Commission (LAFCO) in December 2024. This transitioned fire protection responsibilities from Oceano to San Luis Obispo County. The agreement for the County to take over fire services in Oceano went into effect in January of 2025. The County now contracts with the FCFA to provide fire responses to the Oceano community through Arroyo Grande and Grover Beach fire stations.

As of 2024, there has been a focus on revitalization efforts throughout the district. Oceano CSD is working on various community improvement projects including capital improvements to both the water and sewer systems, supporting the Oceano Plaza project at 17th and Beach streets, and implementing a grant for field trips to state parks for local schoolchildren. In general the development trends since 2019 have not changed hazard vulnerability.

## N.2 Hazard Identification and Summary

The Oceano CSD planning team identified the key hazards that affect the district, and summarized their frequency of occurrence, spatial extent, potential magnitude, and overall significance specific to the Oceano CSD (see Table N-5). There are no hazards that are unique to this CSD. (Note that earthquake and liquefaction hazards will be profiled together as one under Section N.3.3)

**Table N-5 Oceano CSD Hazard Risk Summary**

HAZARD	GEOGRAPHIC AREA	PROBABILITY OF FUTURE OCCURRENCE	MAGNITUDE/ SEVERITY (EXTENT)	OVERALL SIGNIFICANCE
Adverse Weather: Thunderstorm/ Heavy Rain/ Lightning/ Dense Fog/ Freeze	Significant	Likely	Limited	Medium
Adverse Weather: High Wind and Tornado	Significant	Likely	Negligible	Low
Adverse Weather: Extreme Heat	Extensive	Occasional	Negligible	Low
Agricultural Pest Infestation and Disease	Limited	Highly Likely	Negligible	Medium
Biological Agents	Extensive	Occasional	Critical	Medium
Coastal Storm/ Coastal Erosion/ Sea Level Rise	Significant	Occasional	Limited	Medium
Dam Incidents	Limited	Occasional	Critical	Medium
Drought and Water Shortage	Extensive	Likely	Critical	High
Earthquake	Extensive	Occasional	Critical	High
Flood	Significant	Highly Likely	Limited	Medium
Landslide and Debris Flow	Significant	Likely	Critical	Medium
Tsunami and Seiche	Significant	Occasional	Limited	Medium
Wildfire	Extensive	Likely	Critical	High
Geographic Area Limited: Less than 10% of planning area Significant: 10-50% of planning area	Magnitude/Severity (Extent) Catastrophic—More than 50 percent of property severely			



HAZARD	GEOGRAPHIC AREA	PROBABILITY OF FUTURE OCCURRENCE	MAGNITUDE/ SEVERITY (EXTENT)	OVERALL SIGNIFICANCE
Extensive: 50-100% of planning area  Probability of Future Occurrences Highly Likely: Near 100% chance of occurrence in next year or happens every year. Likely: Between 10 and 100% chance of occurrence in next year or has a recurrence interval of 10 years or less. Occasional: Between 1 and 10% chance of occurrence in the next year or has a recurrence interval of 11 to 100 years. Unlikely: Less than 1% chance of occurrence in next 100 years or has a recurrence interval of greater than every 100 years.			damaged; shutdown of facilities for more than 30 days; and/or multiple deaths Critical—25-50 percent of property severely damaged; shutdown of facilities for at least two weeks; and/or injuries and/or illnesses result in permanent disability Limited—10-25 percent of property severely damaged; shutdown of facilities for more than a week; and/or injuries/illnesses treatable do not result in permanent disability Negligible—Less than 10 percent of property severely damaged, shutdown of facilities and services for less than 24 hours; and/or injuries/illnesses treatable with first aid  Significance Low: minimal potential impact Medium: moderate potential impact High: widespread potential impact	

### N.3 Vulnerability Assessment

The intent of this section is to assess OCSD's vulnerability separately from that of the county, which has already been assessed in Section 5 Hazard Identification and Risk Assessment (HIRA) in the base plan. This vulnerability assessment analyzes the population, property, and other assets (e.g. critical facilities) at risk to hazards ranked of medium or high significance that may vary from other parts of the planning area.

The key information to support the HIRA for this Annex was collected through a Data Collection Guide, which was distributed to each participating municipality, community services district, or special district to complete during the planning process. Information collected was analyzed and summarized to identify and rank all the hazards that could impact anywhere within the County, as well as to rank the hazards and identify the related vulnerabilities unique to each jurisdiction/district. In addition, the Oceano CSD planning team was asked to share information on past hazard events that have affected the District.

Each participating jurisdiction or district was in support of the main hazard summary identified in the base plan; however, the hazard summary rankings for each annex may vary slightly due to specific hazard risk and vulnerabilities unique to that jurisdiction. Identifying these differences helps the reader to differentiate OCSD's risk and vulnerabilities from that of the overall County.

#### N.3.1 Other Hazards

The following hazards identified in the base HIRA are not identified within this jurisdictional annex due to low or no risk or insignificant impacts and are not considered further for mitigation actions:



- Subsidence
- Hazardous Materials

### N.3.2 Assets at Risk

This section considers the District's assets at risk, including values at risk, critical facilities and infrastructure, historic assets, economic assets, and growth and development trends.

#### N.3.2.1 Values at Risk

The following data on property exposure is derived from San Luis Obispo County Assessor's data. This data should only be used as a guideline to overall values in the Community Services District as the information has some limitations. Table N-6 shows the exposure of properties (e.g., the values at risk based on improvement values, content values, and total values as an addition of these two types of values) broken down by property type for the OCSD. Refer to the Base Plan Section 5.2 (HIRA Asset Summary) for more details on value information, content calculations, and overall parcel analysis methodology.

**Table N-6 Oceano CSD Total Exposure by Property Type**

PROPERTY TYPE	STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE
Agricultural	2	\$221,810	\$221,810	\$443,620
Commercial	56	\$21,123,150	\$21,123,150	\$42,246,300
Exempt	17	\$2,028,094	\$2,028,094	\$4,056,188
Industrial	20	\$9,862,011	\$14,793,017	\$24,655,028
Mixed Use	342	\$70,025,062	\$70,025,062	\$140,050,124
Mobile Home	25	\$9,180,804	\$4,590,402	\$13,771,206
Multi-Family Residential	172	\$52,321,738	\$26,160,869	\$78,482,607
Residential	1,439	\$266,499,016	\$133,249,508	\$399,748,524
Vacant Improved	7	\$563,194	\$563,194	\$1,126,388
Total	2,080	\$431,824,879	\$272,755,106	\$704,579,985

Source: San Luis Obispo County Assessor Data November 15, 2024, WSP GIS Analysis

#### N.3.2.2 Critical Facilities and Infrastructure

A critical facility is defined as one that is essential in providing utility or direction either during the response to an emergency or during the recovery operation. The four types of Critical Facilities categorized by the San Luis Obispo County HMPC are emergency services, high potential loss facilities, lifeline utility systems, and transportation systems. See Section 5 of the base plan for more details on the definitions and categories of critical facilities, and section 5.2 of the base plan for more information on the assets used throughout this annex and the county-wide analyses.

Table N-7 provides an inventory of critical facilities within the OCSD, compiled using GIS data from San Luis Obispo County and structure information from the Homeland Infrastructure Foundation-Level Dataset (HIFLD). The locations of these facilities is illustrated in is Figure N-1.

**Table N-7 Oceano CSD Critical Facility Assets Summary by Lifeline**

LIFELINE	FACILITY COUNT
Communications	6
Energy	-
Food, Hydration, Shelter	1
Hazardous Material	2





LIFELINE	FACILITY COUNT
Health and Medical	1
Safety and Security	7
Transportation	6
Water Systems	1
Total Count	24

### *N.3.2.3 Historic and Cultural Resources*

The Oceano CSD serves a community that contains several historic and cultural resources within its jurisdictional boundaries. The Oceano Train Depot is a restored 20<sup>th</sup> century railroad station that now functions as a museum and community space. The OCSD service area is also a part of the ancestral lands of the Chumash people, with known archeological and cultural sites, particularly near the Oceano Dunes and local waterways. Additionally, the community has several older residential and civic structures that may be considered historically significant.

### *N.3.2.4 Natural Resources*

Oceano's natural resources are shaped by its coastal setting and low-lying geography. Within Oceano CSD's boundaries, one of the most prominent natural features is Meadow Creek, which runs through the community and connects to the nearby lagoon and dunes system. This creek is part of a broader watershed and plays a role in local drainage and flood risk. Just west of the district is the Oceano Dunes, part of the larger Guadalupe-Nipomo Dunes complex, which supports rare habitats and species, though much of the protected land lies just outside CSD boundaries. Arroyo Grande Creek is another key natural resource running through the Oceano Community.

### *N.3.2.5 Economic Assets*

One of the most significant economic assets to Oceano CSD is tourism, driven by the nearby Oceano Dunes State Vehicular Recreation Area. Although the dunes themselves are outside the CSD's jurisdiction, visitors often pass through or stay in Oceano, supporting local businesses like vacation rentals, restaurants, and small retail shops. The Union Pacific rail line also runs through Oceano, providing light industrial and transportation connections, though its economic impact on the community is modest.

## **N.3.3 Estimating Potential Losses**

This section details vulnerability to specific hazards of medium or high significance, where quantifiable, noted by the Planning Team, and/or where it differs significantly from that of the overall County. Impacts of past events and vulnerability to specific hazards are further discussed below, though refer to Section 5 of the Base Plan for more details on the County's HIRA findings and hazard profiles.

### *N.3.3.1 Adverse Weather: Thunderstorm/Heavy Rain/Lightning/Dense Fog/Freeze*

Oceano CSD's risk and vulnerability does not differ significantly from that of San Luis Obispo County. The overall significance rating of the planning area is **low**. Oceano CSD is subject to many of the same regional weather patterns during storm seasons and transitional weather patterns.

Similar to the county, the district is susceptible to the impacts of heavy rainfall. The planning area experiences about 16 inches of precipitation annually, according to Western Regional Climate Center. While thunderstorms and lightning are relatively rare, they can still pose safety risks to residents and strain electrical infrastructure when they occur. Dense fog is a common concern along the coast, particularly in the cooler months, often reducing visibility along roadways. The tables below show key climate variables such as extreme temperatures,



precipitation totals, and the frequency of specific weather events. Note that Pismo Beach weather station is the nearest official reporting site to Oceano CSD.

**Table N-8 Pismo Beach Climate Summary Table – Weather (Adjacent to Oceano, Period of Record: 07/01/1949 - 08/30/2017)**

SUMMARY PERIOD	MONTHLY MEAN MAXIMUM TEMP.	MONTHLY MEAN MINIMUM TEMP.	DAILY EXTREME HIGH TEMP	DAILY EXTREME HIGH DATE	DAILY EXTREME LOW TEMP	DAILY EXTREME LOW DATE	MAXIMUM TEMP. ≥ 90°F MEAN # DAYS	MINIMUM TEMP. ≤ 32°F MEAN # DAYS
Winter	63.9 °F	43.5 °F	92 °F	12/2/1958	21 °F	12/3/1986	0	2.9
Spring	66.9 °F	46.3 °F	101 °F	4/7/1989	23 °F	3/23/1963	0.6	0.4
Summer	69.5 °F	52.4 °F	102 °F	8/22/1972	37 °F	6/29/1987	1.1	0
Fall	70.3 °F	50.1 °F	103 °F	9/3/1982	27 °F	10/27/1986	1.4	0.1
Annual	67.5 °F	47.8 °F	103 °F	9/3/1982	21 °F	12/3/1986	3.4	4.3

Source: Western Regional Climate Center (WRCC) <https://wrcc.dri.edu/>

\* Winter is defined as December, January, and February

\*\* Summer is defined as June, July, and August

**Table N-9 Pismo Beach Climate Summary Table – Precipitation (Adjacent to Oceano, Period of Record: 07/01/1949 - 08/30/2017)**

SUMMARY PERIOD	PRECIP. MEAN	PRECIP. HIGH	PRECIP. HIGH YEAR	PRECIP. LOW	PRECIP. LOW YEAR	PRECIP.1 DAY MAXIMUM	PRECIP. 1 DAY MAXIMUM DATE	PRECIP. ≥ 1.00 IN. MEAN # DAYS
Winter	9.34 in.	26.85 in.	1969	2.03 in.	1964	5.16 in.	1/19/1969	2.4
Spring	4.1 in.	17.23 in.	1991	0.03 in.	1997	2.62 in.	3/20/2011	1
Summer	0.15 in.	1.5 in.	2015	0 in.	1953	1.15 in.	7/19/2015	0
Fall	2.76 in.	8.19 in.	1972	0.09 in.	2014	2.25 in.	11/14/1953	0.6
Annual	15.92 in.	33.58 in.	1983	3.23 in.	2013	5.16 in.	1/19/1969	4.3

Source: Western Regional Climate Center (WRCC) <https://wrcc.dri.edu/>

\* Winter is defined as December, January, and February

\*\* Summer is defined as June, July, and August

### **N.3.3.2 Adverse Weather: High Wind and Tornado**

Oceano CSD's risk and vulnerability to this hazard does not differ significantly from that of the County overall significance of **low**. While these hazards are not common in the region they can occasionally occur during strong storm systems, particularly in the winter months. Oceano may experience gusty winds capable of causing minor damage and tornado activity is extremely rare across the county. As such, while the potential for high wind events exists, the likelihood of significant damage or disruption remains low and tornado risk is considered minimal.

### **N.3.3.3 Adverse Weather: Extreme Heat**

Extreme heat is a **low** significance hazard for OCSD. The monthly mean maximum fall temperature for Pismo Beach, the closest NOAA weather station to Oceano CSD, is 70.3 °F; however, temperatures up to 103°F have been recorded (see Table N-8). Additionally, rising temperatures and more frequent heat waves are increasing the likelihood of more extreme heat events in the future.

In addition to sensitive populations within Oceano, such as low-income households, elderly residents, and outdoor workers, infrastructure within the CSD is also vulnerable to the effects of extreme heat. Increased demand for electricity during heat events can strain the regional



energy grid, potentially leading to rolling blackouts that would disrupt critical services, including water and wastewater operations. Additionally, extreme heat elevates evaporation rates and increases water consumption, placing stress on water supplies, especially the surface water and domestic wells from which Oceano sources its water. Given the CSD's limited emergency services capacity, its resources could be overwhelmed during extended or concurrent heat emergencies.

Many of Oceano CDP's homes are older and may lack adequate insulation or air conditioning, making indoor temperatures dangerously high during heat waves. Public infrastructure such as parks and shaded gathering areas is limited, and the community does not currently have a designated cooling center. This presents a challenge for residents who lack climate-controlled environments. Additionally, language barriers and limited internet access can hinder the effectiveness of emergency communication and public health outreach during heat events.

#### *N.3.3.4 Agricultural Pest Infestation and Disease*

The LPT gave Oceano a **medium** ranking for agricultural pest infestation and plant disease.

An indicator of plant health and potential monetary damages caused by exposure to disease is tree mortality rates. Reduced numbers of trees or pest infestation of nearby vegetation can also reduce property values and leave surrounding areas highly susceptible to wildfires. Within Oceano there are 467 structures with a total value of over \$174 million, as well as 894 people residing in areas potentially affected by tree mortality. Exact exposure impacts can be found below in Table N-10 Improved Properties Exposed to Tree Mortality Hazard Zones. The land use in Oceano is heavily recreational, with multiple popular surf spots. A disease outbreak or pest infestation that targets oak trees such as Sudden Oak Death could make residential and tourist areas more susceptible to wildfire or landslides. Within Oceano there are 5 critical facilities exposed to tree mortality. Out of these, transportation has the most with 4 facilities. The fifth facility is for communications.

**Table N-10 Improved Properties Exposed to Tree Mortality Hazard Zones**

STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATION
467	\$106,380,508	\$68,341,602	\$174,722,110	894

Source: San Luis Obispo Assessor Data November 15, 2024, CAL FIRE, FRAP, TMTF October 2022, WSP GIS Analysis

#### *N.3.3.5 Biological Agents (Naturally Occurring)*

The Oceano LPT gave biological agents a **medium** overall significance rating. Oceano's risk and vulnerability to this hazard does not differ substantially from that of the county's overall. Disease outbreaks usually occur in densely populated areas, where person to person proximity provides ample opportunity for transmission of illnesses. Places of work and business, schools and high-population public spaces are of particular concern when the threat of transmissible illness occurs. More information on biological agents can be found in Section 5.3.6 of the base plan.

#### *N.3.3.6 Coastal Storm/Coastal Erosion/Sea Level Rise*

Oceano CSD faces significant risks from coastal storms, erosion, and sea level rise due to its low-lying topography and proximity to the Pacific Ocean. The community has experienced repeated flooding events, notably in January 2023, when the lift station near Pier Avenue suffered from sea and stormwater intrusions during high tides and major rain events. These incidents, which also occurred multiple times in 2022 and 2023, overwhelmed the lift station's capacity, leading to operational challenges and multiple closures of Pier Avenue, disrupting local transportation and access to businesses. Maintenance and Operations staff have identified the lift station as highly vulnerable, emphasizing the need for relocation,



reconstruction, or fortification to prevent future failures. Given its exposure to tidal and stormwater influences, this type of flooding is likely to occur again.

When combined with extreme storms and higher tides, sea level rise will result in accelerated cliff and bluff erosion, increased coastal flooding, and flooding from groundwater. Sea level rise will increase the frequency of coastal flooding events, which occur when sea level rise amplifies short-term elevated water levels associated with higher tides, large storms, El Niño events, or when large waves coincide with high tides. These conditions pose significant threats to Oceano CSD's infrastructure, including wastewater conveyance facilities and transportation routes, as well as the South San Luis Obispo County Sanitation District treatment plant. The community's vulnerability is further increased by its status as a disadvantaged community, underscoring the urgency for proactive mitigation and adaptation strategies to enhance resilience against these escalating coastal hazards.

Oceano CSD has been ranked as **medium** significance for this hazard. See Section 5.3.4 Coastal Storm/Coastal Erosion/Sea Level Rise in the base plan for more details on the scenarios and data sources used for this analysis.

### Values at Risk

Analysis of the data reveals that sea level rise, particularly when combined with a 1% annual chance flood event, poses a significant risk to properties and property values in Oceano CSD. While no parcels are projected to be impacted under the 25 cm or 75 cm sea level rise scenarios alone, the impacts sharply escalate under the 300 cm scenario, which shows 265 properties at risk from sea level rise alone, and 296 parcels at risk when combined with a 1% annual chance flood event. The most affected categories include 203 residential parcels and 11 commercial parcels under sea level rise alone, with totals increasing to 222 and 14 respectively when flood conditions are added.

The associated property value at risk climbs accordingly, with over \$54 million in improved value exposed under the 300 cm sea level rise scenario and more than \$64 million at risk when combined with a 1% flood. Residential properties account for the majority of that value, followed by mixed-use and commercial structures. This analysis highlights that long-term coastal impacts are not theoretical—they represent tangible economic and structural vulnerabilities, especially for a disadvantaged community like Oceano, where the capacity to recover from repeated flood or sea level rise events may already be strained.

**Table N-11 Oceano CSD Properties Inundated by Sea Level Rise and Sea Level Rise with 1% Annual Chance Flood**

PROPERTY TYPE	25-CM SLR	75-CM SLR	300-CM SLR	25-CM SLR W/1% FLOOD	75-CM SLR W/1% FLOOD	300-CM SLR W/1% FLOOD
Agricultural	-	-	1	-	-	1
Commercial	-	-	11	-	-	14
Exempt	-	-	4	-	-	4
Industrial	-	-	5	-	-	7
Mixed Use	-	-	28	-	-	32
Mobile/Manufactured Homes	-	-	1	-	-	1
Multi-Family Residential	-	-	12	-	-	15
Residential	-	-	203	-	-	222
Total	0	0	265	0	0	296

Source: San Luis Obispo County Assessor Data November 15, 2024, USGS CoSMoS v3.1, WSP GIS Analysis

**Table N-12 Oceano CSD Improved Values of Properties Inundated by Sea Level Rise and Sea Level Rise with 1% Annual Chance Flood**

PROPERTY TYPE	25-CM SLR	75-CM SLR	300-CM SLR	25-CM SLR W/ 1% FLOOD	75-CM SLR W/ 1% FLOOD	300-CM SLR W/ 1% FLOOD
Agricultural	-	-	\$184,841	-	-	\$184,841
Commercial	-	-	\$1,826,254	-	-	\$3,590,019
Exempt	-	-	\$0	-	-	\$0
Industrial	-	-	\$1,783,655	-	-	\$2,363,655
Mixed Use	-	-	\$6,124,296	-	-	\$6,593,693
Mobile/Manufactured Homes	-	-	\$319,374	-	-	\$319,374
Multi-Family Residential	-	-	\$3,821,977	-	-	\$6,187,803
Residential	-	-	\$40,382,354	-	-	\$45,693,308
Total	\$0	\$0	\$54,442,751	\$0	\$0	\$64,932,693

Source: San Luis Obispo County Assessor Data November 15, 2024, USGS CoSMoS v3.1, WSP GIS Analysis

### Populations at Risk

Table N-13 shows the Oceano CSD affected populations potentially inundated by sea level rise and sea level rise with 1% annual chance flood by FEMA lifeline, below.

**Table N-13 Oceano CSD Population Exposed to Sea Level Rise Scenario Hazards**

COMMUNITY CSD	25-CM SLR	75-CM SLR	300-CM SLR	25-CM SLR W/1% FLOOD	75-CM SLR W/1% FLOOD	300-CM SLR W/1% FLOOD
Oceano CSD	-	-	534	-	-	588
Total	-	-	534	-	-	588

Source: San Luis Obispo County Assessor Data November 15, 2024, USGS CoSMoS v3.1, WSP GIS Analysis

Analysis of Table N 13 shows that sea level rise, particularly at more extreme scenarios, presents a serious threat to population exposure within Oceano CSD. While there is no projected population impact under the 25 cm or 75 cm sea level rise scenarios, that changes significantly at 300 cm, where 534 residents are at risk from sea level rise alone. When combined with a 1% annual chance flood, the number rises to 588. This indicates that over 500 people could be directly affected by flooding and coastal inundation in a high sea level rise future, emphasizing the vulnerability of the district's low-lying residential areas. Given Oceano's designation as a disadvantaged community, this level of exposure raises public safety concerns, especially around evacuation access, infrastructure resilience, and the capacity to recover from such events.

### Critical Facilities at Risk

Table N-14 shows Oceano CSD critical facilities inundated by sea level rise and sea level rise with 1% annual chance flood by FEMA lifeline, below.



**Table N-14 Oceano CSD Critical Facilities Inundated by Sea Level Rise and Sea Level Rise with 1% Annual Chance Flood by FEMA Lifeline**

FEMA LIFELINE	25-CM SLR	75-CM SLR	300-CM SLR	25-CM SLR W/1% FLOOD	75-CM SLR W/1% FLOOD	300-CM SLR W/1% FLOOD
Communications	-	-	2	-	-	2
Energy	-	-	-	-	-	-
Food, Hydration, Shelter	-	-	-	-	-	-
Hazardous Material	-	-	1	-	-	1
Health and Medical	-	-	-	-	-	-
Safety and Security	-	-	-	-	-	-
Transportation	-	-	4	-	-	4
Water Systems	-	-	1	-	-	1
Total	-	-	8	-	-	8

Source: San Luis Obispo County, USGS CoSMoS v3.1, CalARP, HIFLD, NBI, NID, WSP Analysis

Analysis indicates that critical facilities within Oceano CSD become increasingly vulnerable under the 300 cm sea level rise scenario and the combined 300 cm sea level rise with 1% annual chance flood. At this threshold, a total of eight critical assets are projected to be inundated. These include two communications facilities, one hazardous material site, one drinking water system asset, and four transportation-related facilities. No facilities are exposed at the 25 cm or 75 cm sea level rise levels, reinforcing that the most significant threats emerge under higher-end projections. The loss or impairment of these facilities, particularly those tied to communications and hazardous materials, could severely disrupt emergency response, public health, and mobility during high-impact flood events. This highlights the importance of long-term planning for coastal infrastructure resilience in Oceano, especially as sea levels rise and storm surge events intensify.

Figure N-2 and Figure N-3 show Oceano CSD sea level rise with tidal inundation only and tidal inundation with the 1% annual chance (100-year) zone.



Figure N-2 Oceano CSD Sea Level Rise with Tidal Inundation and 1% Annual Chance (100 -year) Zone

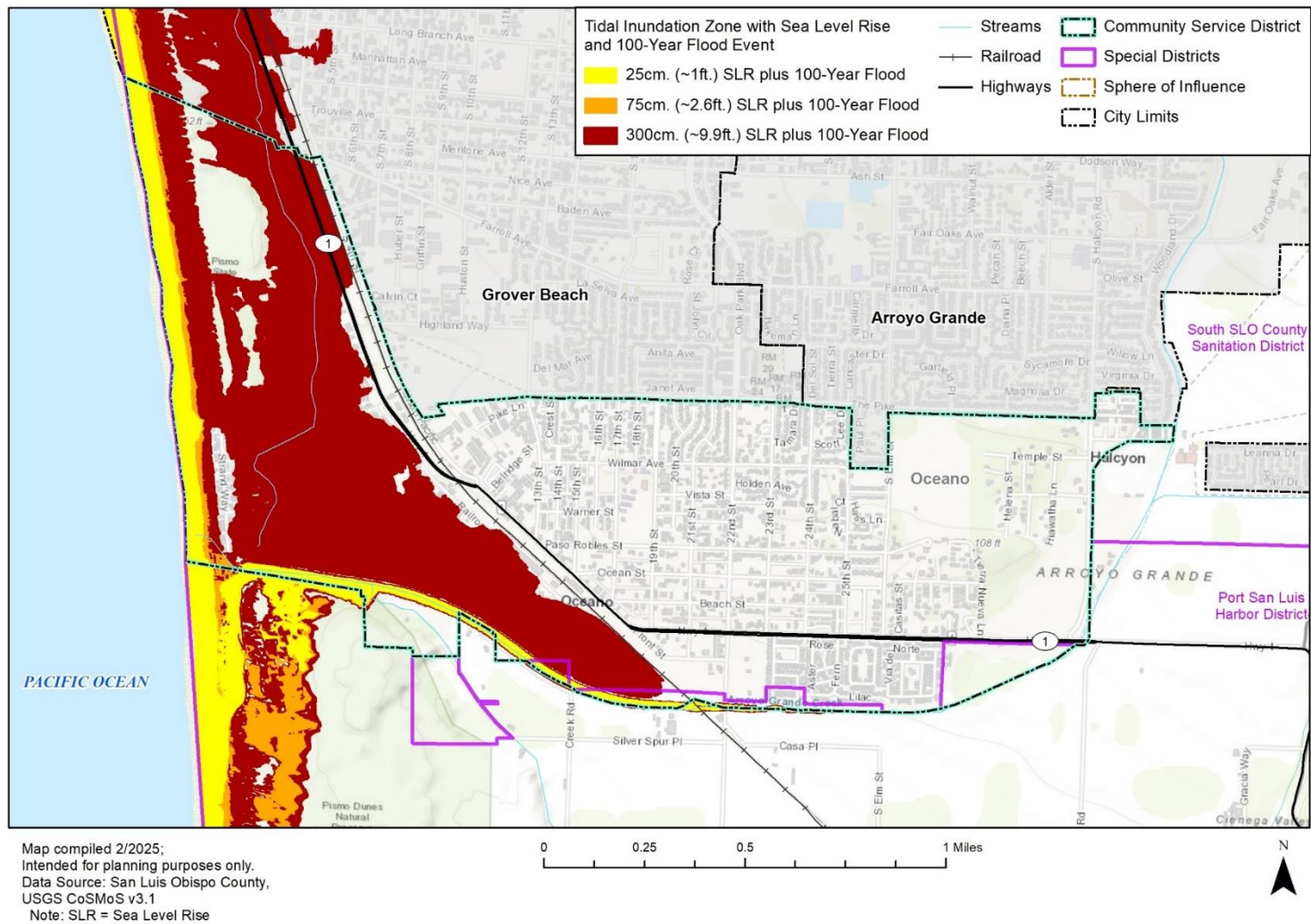
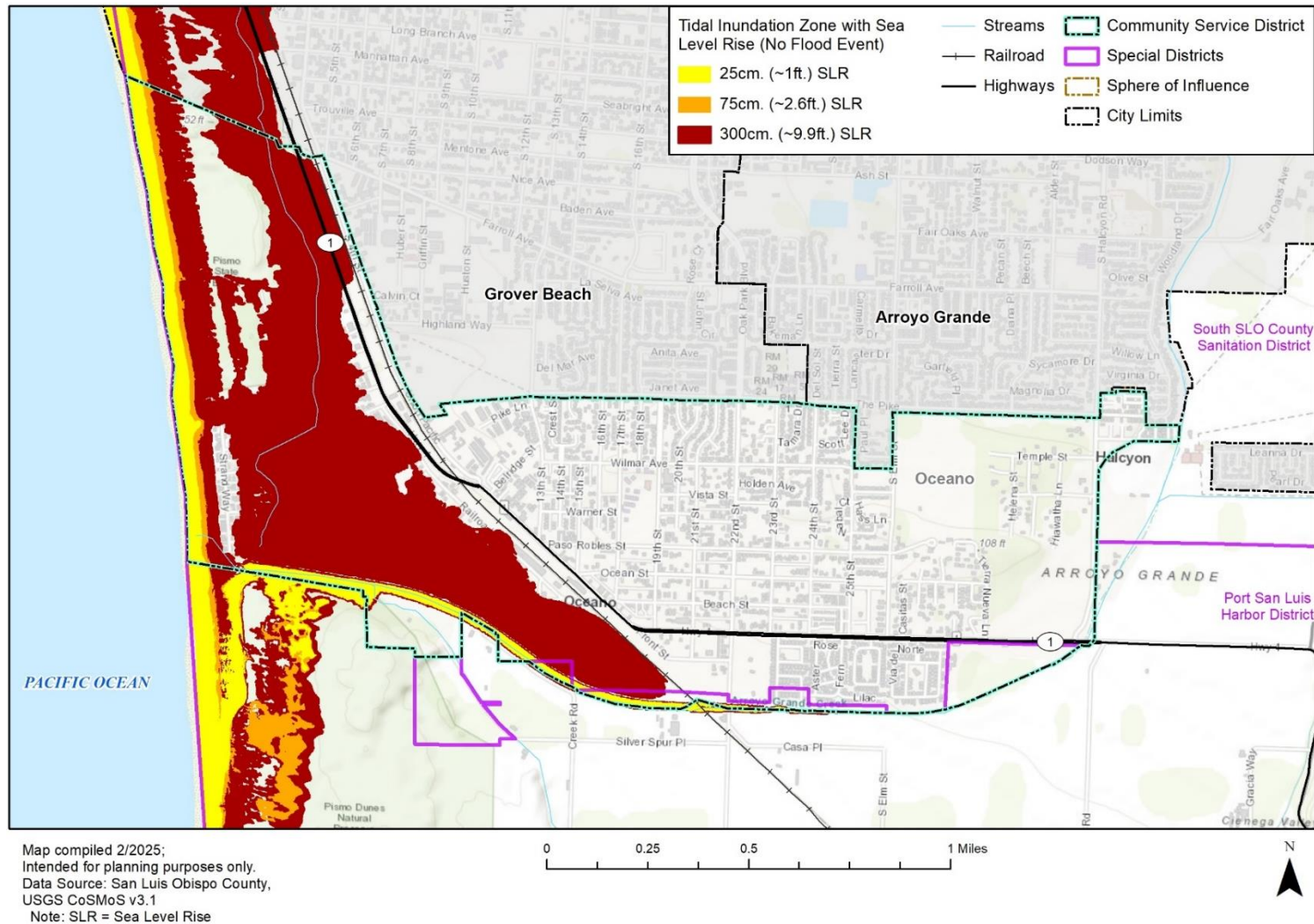




Figure N-3 Oceano CSD Sea Level Rise Tidal Inundation Only





### *N.3.3.7 Dam Incidents*

The Oceano CSD rated dam incident a **medium** significance hazard. The District is downstream from Terminal Dam at the water treatment plant and Lopez Dam two miles further upstream on Arroyo Grande Creek. Terminal Dam is an earth fill dam that holds 844 acre-feet of water, located northeast of the District. This dam presents a considerable hazard to Oceano, the potential inundation zone is shown in blue hatching in Figure N-4.

The Lopez Dam is an earth-fill dam that holds over 60 times more water than Terminal Dam, nearly 50,000 acre-feet of water, and is located less than ten miles upstream from Oceano. The Lopez Dam presents a considerably greater hazard to the District than Terminal Dam. A very large portion of the District is within the inundation zone of Lopez Dam (Figure N-4).

Failure of Lopez Dam would cause water to flow along Arroyo Grande Creek in a westerly direction, extending laterally up to 3,000 feet in each direction of the centerline of the creek channel. The inundation would hit Oceano particularly hard. As floodwaters approach the coast, the stream channel becomes constricted, which would force water to flow up Meadow Creek to the north, inundating most of the western end of the District, before spilling west to the ocean.

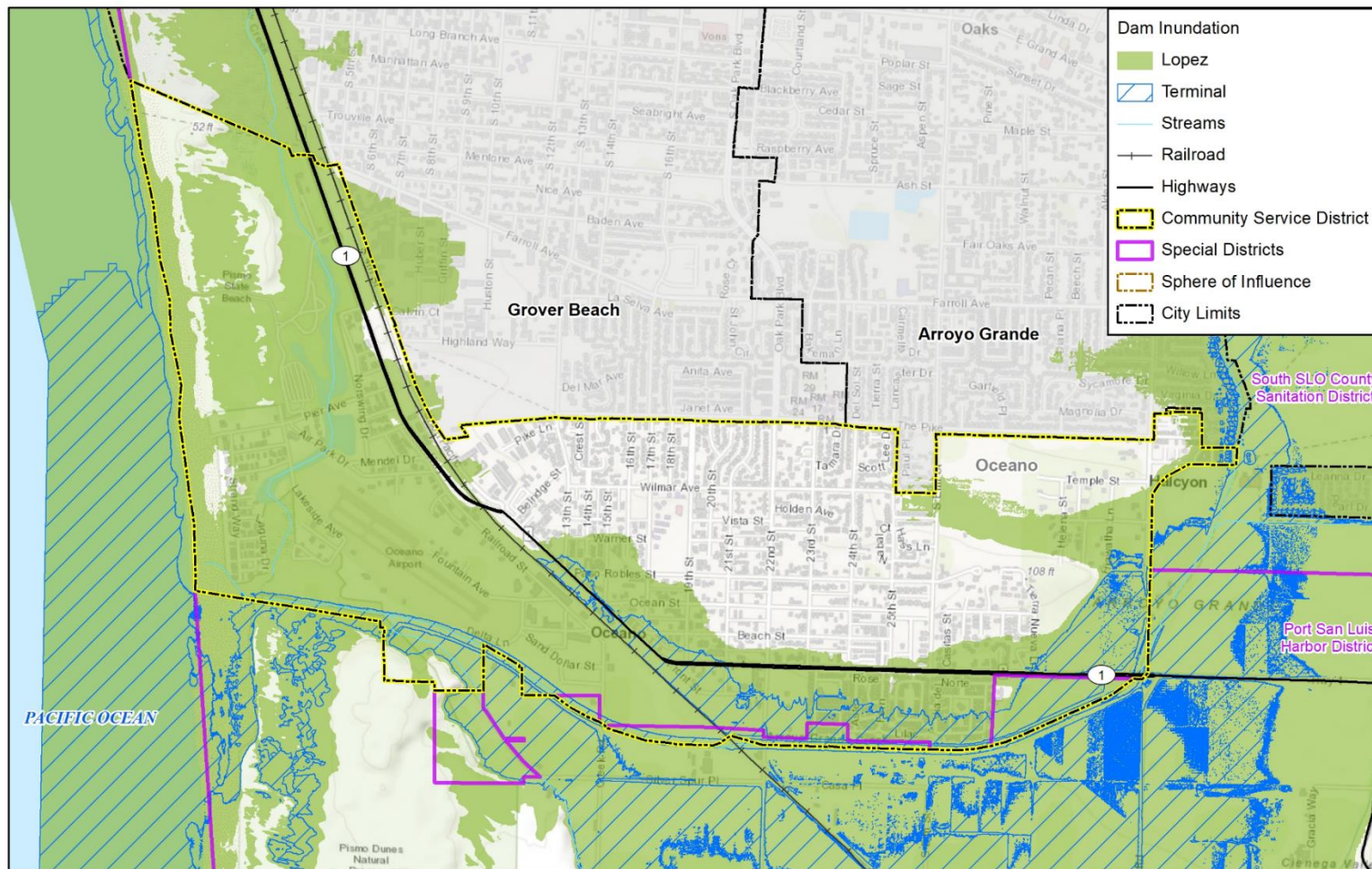
A total of 680 structures and 1,235 people in the Oceano CSD exist in the Lopez Dam inundation zone (Table N-15). Notably, 13 pieces of critical infrastructure exist within the dam inundation zone (Table N-16), including the South San Luis wastewater treatment plant, the Oceano Senior Center, the Oceano County Airport, and several bridges. Appendix E provides additional detail of critical facilities at risk from dam inundation hazards.

A failure of the Lopez Dam would also affect Highway 101 impeding or reducing flows of goods, people and resources into and out of Oceano and potentially impacting the entire region. There have been no past dam incidents or failures in the jurisdiction of the Oceano or anywhere in the South County. Refer to Section 5.3.8 *Dam Incidents* of the Base Plan for additional discussion on the potential impacts of dam incidents in the County





Figure N-4 Oceano CSD Dam Inundation Zones near Oceano CSD



Map compiled 2/2025;  
Intended for planning purposes only.  
Data Source: San Luis Obispo County,  
NID 2024, Department of Water Resources (DWR),  
Division of Safety of Dams (DSOD)



**Table N-15 People and Structures in Oceano CSD Within the Modeled Dam Inundation Zone**

PROPERTY TYPE	STRUCTURE COUNT	POPULATION
Agricultural	1	-
Commercial	46	-
Exempt	10	-
Industrial	15	-
Mixed Use	104	-
Mobile/Manufactured Homes	11	27
Multi-Family Residential	48	119
Residential	441	1,089
Vacant Improved	4	-
<b>Total</b>	<b>680</b>	<b>1,235</b>

Source: San Luis Obispo Assessor Data November 15, 2024, Division of Safety of Dams, Department of Water Resources, WSP GIS Analysis

**Table N-16 Critical Facility Assets Exposed to Dam Inundation in Oceano CSD by FEMA Lifeline**

COMMUNICATIONS	ENERGY	FOOD, HYDRATION, SHELTER	HAZARDOUS MATERIAL	HEALTH AND MEDICAL	SAFETY AND SECURITY	TRANSPORTATION	WATER SYSTEMS	TOTAL COUNT
3	-	-	2	-	1	6	1	<b>13</b>

Source: San Luis Obispo County, Division of Safety of Dams, Department of Water Resources, CalARP, HIFLD, NBI, NID, FCWCD, WSP Analysis

### *N.3.3.8 Drought and Water Shortage*

The OCSD sources its water from three primary sources: groundwater, surface water from Lopez Lake, and allotments from the State Water Project (SWP). The CSD operates wells that extract groundwater from local aquifers. In recent years, the CSD has installed deeper wells to access higher-quality water, aiming to mitigate potential quality deterioration. The CSD receives a designated allotment of water from Lopez Lake, which is managed by the San Luis Obispo County Flood Control and Water Conservation District. Additionally, the CSD supplements its supply with allocations from the SWP, as provided under terms of water supply contracts with the County of San Luis Obispo Flood Control and Water Conservation District.

The CSD's infrastructure includes groundwater wells, distribution pipelines, and related facilities. The CSD additionally provides sewage conveyance, solid waste/recycling organics hauling and a streetlight system. As stated in the Flood section, high tide and stormwater surges overwhelmed a lift station in 2022 and 2023, leading to excessive water inflow, which prevented the pumps from functioning effectively. This caused flooding and closures on Pier Avenue, highlighting the vulnerability of the lift station's location and the need for fortification, reconstruction, or relocation.

OCSD faces significant challenges during drought conditions, particularly regarding water supply and quality. Prolonged dry periods put both SWP allocations and groundwater from the Santa Maria Groundwater Basin at risk. Reduced SWP deliveries during droughts force increased reliance on groundwater pumping, which raises concerns about overdraft and



potential saltwater intrusion. Additionally, declining water levels can lead to higher concentrations of contaminants, necessitating costly water treatment measures. The financial burden of securing alternative water sources or implementing conservation programs may also result in higher water rates for residents and businesses, disproportionately affecting low-income households and other vulnerable populations.

Drought conditions also place critical infrastructure at risk, particularly the wastewater system, which relies on sufficient water flow for effective treatment processes. Lower water availability can lead to increased waste concentration, putting additional strain on treatment facilities. Oceano's fire protection services could also be compromised if drought-induced low water pressure limits firefighting capabilities.

Drought was rated as a **high significance** hazard for the CSD. As Oceano is a disadvantaged community, the CSD needs to be well-prepared to increase resiliency related to water and sewer utilities. There is an increased desire to pursue grant funds for capital improvements and resiliency as related to water and sewer systems. As such, OCSD is updating their capital improvement programs for both their water and sewer systems in 2025.

#### *N.3.3.9 Earthquake and Liquefaction*

The Oceano CSD is vulnerable to various types of seismic hazards including fault rupture, groundshaking and liquefaction. According to the district's 2019 LHMP, the only known mapped fault in the vicinity of Oceano is the Oceano fault. Although the fault is classified as potentially active by CGS, review of the Oceano fault suggests that the fault is inactive. The Oceano fault presents a very low fault rupture hazard to Oceano. Other mapped faults within the South County area include the potentially active Wilmar Avenue fault and the inactive Pismo fault. Beyond these very local faults, the district is exposed to seismic hazards from movement along several regional faults and is at more or less the same level of risk for damage as other communities in San Luis Obispo County from ground shaking triggered by any earthquakes that impact the county.

Due to its coastal location and geology underlain with dunes and sand, liquefaction is a more pressing concern. As shown in the figure below, the entirety of the Oceano CSD is underlain by liquefiable soils that are rated as posing moderate or high risk. The following tables (Table N-17 and Table N-18) display the types and values of properties and the types of critical facilities located in moderate or high liquefaction risk areas. Based on this analysis there are 2,080 properties exposed to liquefaction risk with a total value of over \$704 million. Residential properties are the most vulnerable property type to liquefaction in Oceano, with a combined total of 1,636 properties (including multi-family residential and mobile homes) with a total value of over \$491.8 million. Every critical facility in the community is also exposed to moderate liquefaction risk, summarized below.

**Table N-17 Oceano CSD's Improved Properties Exposed to Liquefaction Potential by Property Type**

PROPERTY TYPE	STRUCTURE COUNT HIGH	STRUCTURE COUNT MODERATE	STRUCTURE COUNT LOW	TOTAL STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATION
Agricultural	-	2	-	2	\$221,810	\$221,810	\$443,620	-
Commercial	8	48	-	56	\$21,123,150	\$21,123,150	\$42,246,300	-
Exempt	-	17	-	17	\$2,028,094	\$2,028,094	\$4,056,188	-
Industrial	-	20	-	20	\$9,862,011	\$14,793,017	\$24,655,028	-
Mixed Use	3	339	-	342	\$70,025,062	\$70,025,062	\$140,050,124	-
Mobile/ Manufactured Homes	1	24	-	25	\$9,180,804	\$4,590,402	\$13,771,206	62
Multi-Family Residential	10	162	-	172	\$52,321,738	\$26,160,869	\$78,482,607	425
Residential	106	1,333	-	1,439	\$266,499,016	\$133,249,508	\$399,748,524	3,554
Vacant Improved	-	7	-	7	\$563,194	\$0	\$563,194	-
Total	128	1,952	0	2,080	\$431,824,879	\$272,191,912	\$704,016,791	4,041

Source: San Luis Obispo Assessor Data November 15, 2024, WSP GIS Analysis

**Table N-18 Critical Facility Assets Exposed to Liquefaction Susceptibility by FEMA Lifeline**

LIQUEFACTION SUSCEPTIBILITY	COMMUNICATIONS	ENERGY	FOOD, HYDRATION, SHELTER	HAZARDOUS MATERIAL	HEALTH AND MEDICAL	SAFETY AND SECURITY	TRANSPORTATION	WATER SYSTEMS	TOTAL COUNT
Medium Liquefaction Susceptibility	6	-	1	2	1	7	6	1	24

Source: San Luis Obispo County, CalARP, HIFLD, NBI, NID, FCWCD, WSP Analysis

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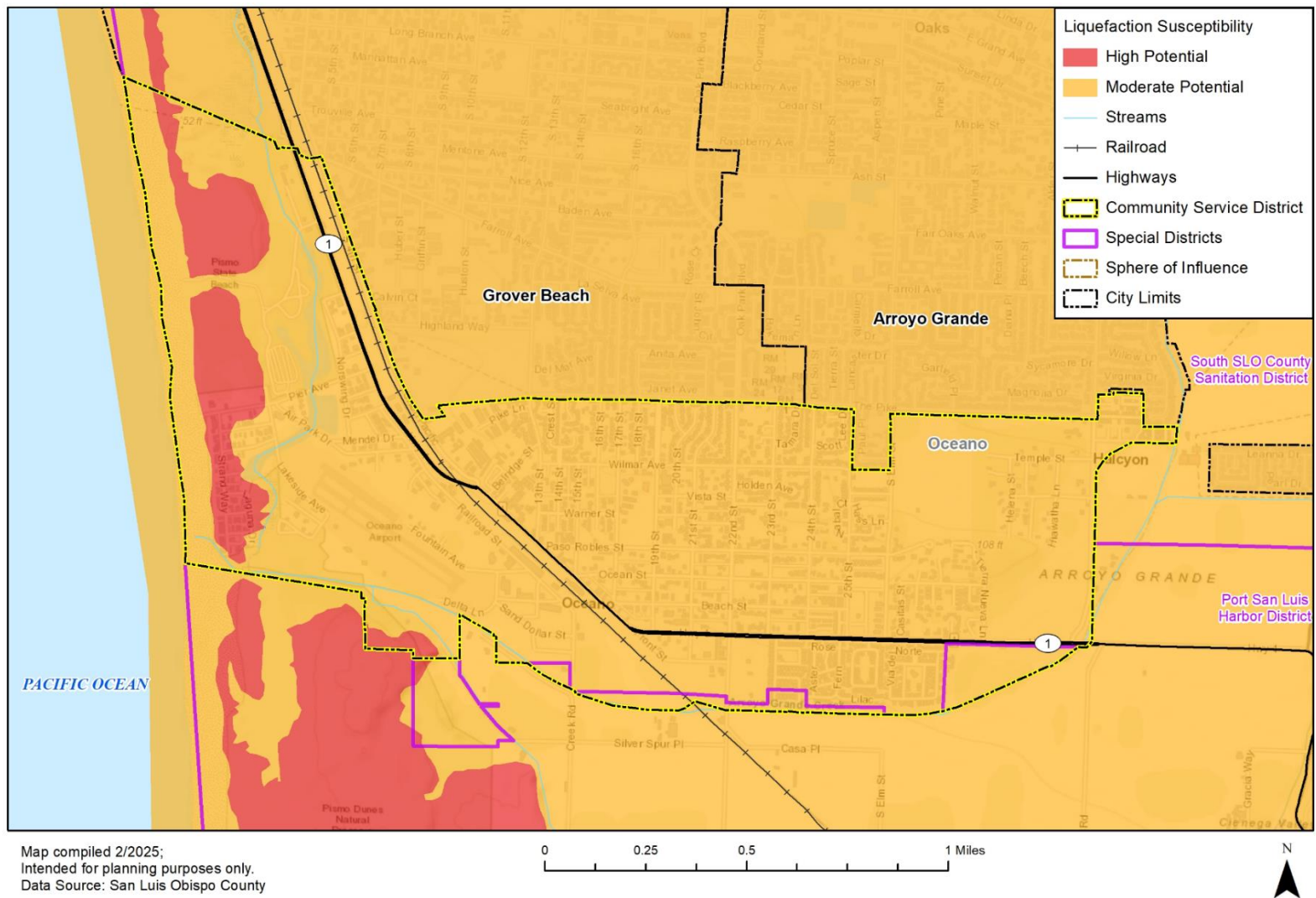
Map compiled 2/2025;  
Intended for planning purposes only.  
Data Source: San Luis Obispo County, CalARP, HIFLD,  
National Bridge Inventory, National Inventory of Dams,  
FCWCD, Department of Conservation, USGS







Figure N-6 Liquefaction Risk in the Oceano CSD







### *N.3.3.10 Flood*

Oceano CSD, situated along California's Central Coast, faces significant flood risks due to its low-lying topography, proximity to the Pacific Ocean and to Arroyo Grande Creek. Historical records indicate that flooding has been a recurring issue in the area, with notable events causing substantial damage to infrastructure and property.

A particularly vulnerable asset within the district is the lift station located near 393 Pier Avenue. This facility has experienced repeated flooding during high tide and major rain events, notably in January 2023, leading to operational challenges and temporary closures of Pier Avenue, thereby disrupting local transportation and access to businesses. The CSD Maintenance and Operations staff have identified this lift station as susceptible to tidal and stormwater intrusions, emphasizing the need for its relocation, reconstruction, or fortification to prevent future failures. Design is underway to address the vulnerability of this lift station.

The community's susceptibility to flooding is further exacerbated by its geographical characteristics. The area's flat terrain and inadequate drainage infrastructure contribute to the accumulation of stormwater, increasing the risk of inundation during heavy rainfall events. Moreover, the presence of mobile home parks adjacent to the creek levee along Highway 1 highlights the potential for significant impacts on vulnerable populations.

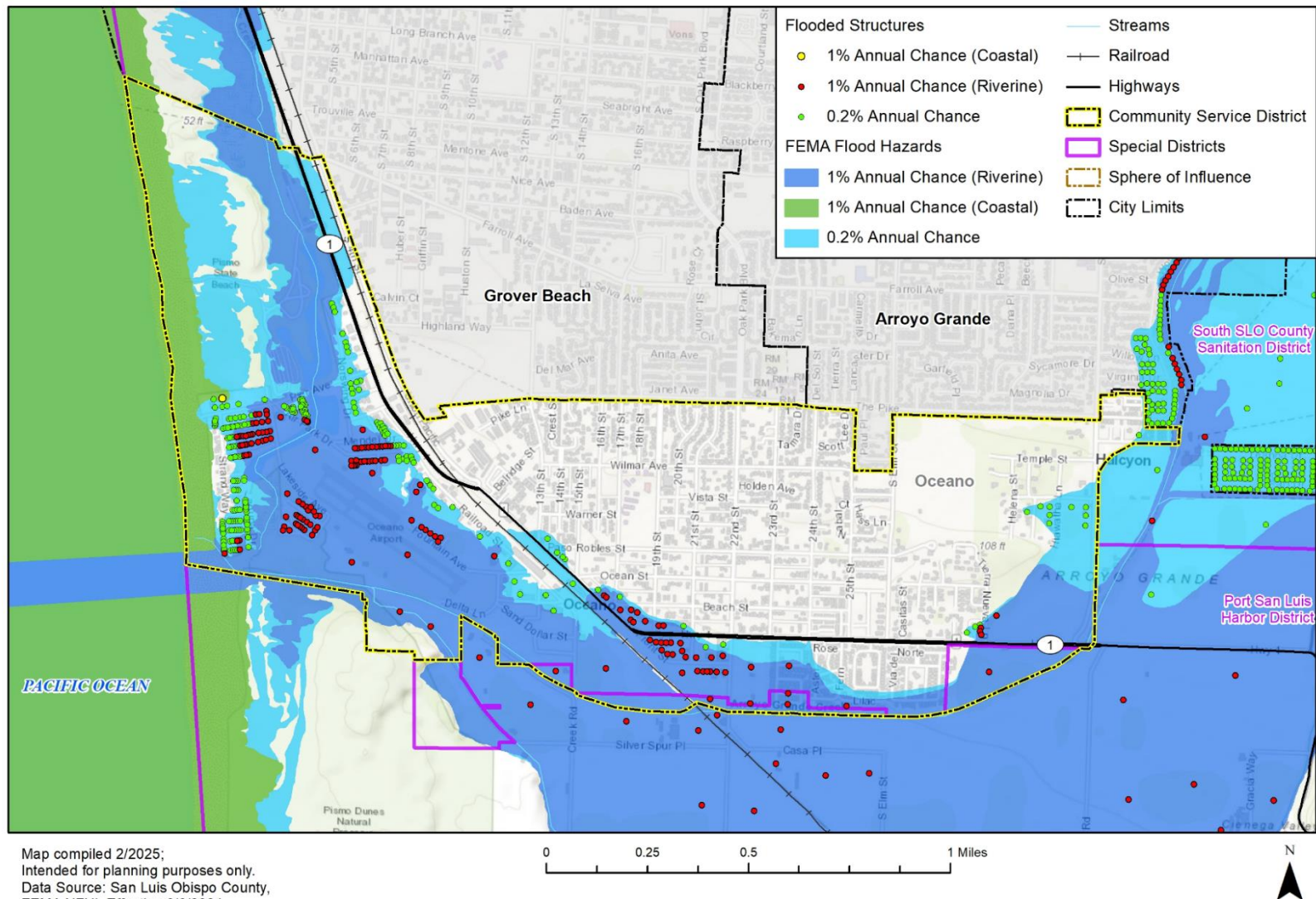
In response to these challenges, Oceano CSD has undertaken initiatives aimed at enhancing resilience to flooding. Projects such as the bioretention and stormwater capture system at Oceano Elementary School have been implemented to improve stormwater management and reduce runoff. Additionally, the CSD continues to collaborate with sister-agencies to develop comprehensive flood control strategies tailored to the unique needs of the Oceano community.

Given the increasing frequency and intensity of storm events, it is imperative for Oceano CSD to prioritize infrastructure improvements and community preparedness measures. By addressing existing vulnerabilities and investing in adaptive strategies, the CSD can better safeguard its residents, infrastructure, and natural resources against future flooding events.

Figure N-7, below, shows Oceano CSD DWR and FEMA flood hazards along with flooded structures.



Figure N-7 Oceano CSD DWR & FEMA Flood Hazards with Flooded Structures





The planning team has ranked flood as a **medium** significance hazard for Oceano CSD. For additional context and a countywide flood hazard assessment, refer to Section 5.3.8 of the Base Plan.

### Values at Risk

Table N-19 and Table N-20 show parcels and populations at risk within the 1% and 0.2% annual chance flood zones. Within the Oceano CSD, flood hazard modeling reveals substantial financial exposure in both the 1% and 0.2% annual chance flood zones. In the 1% annual chance floodplain, 158 parcels represent over \$55 million in total value at risk, with an estimated \$13.8 million in potential losses. These parcels span residential, mobile/manufactured homes, multi-family units, and commercial and industrial properties, highlighting a mix of housing and economic infrastructure at risk. Exposure increases significantly in the 0.2% annual chance flood area, where 226 parcels account for nearly \$95 million in value and more than \$23.7 million in potential losses—primarily due to residential and commercial properties clustered in vulnerable areas.

**Table N-19**      **Parcels and Populations in 1% Annual Chance Flood Hazard Areas in the Oceano CSD**

PROPERTY TYPE	PARCEL COUNT	IMPROVED VALUE	CONTENT VALUE	TOTAL VALUE	LOSS ESTIMATE	POPULATION
Agricultural	1	\$184,841	\$184,841	\$369,682	\$92,421	-
Commercial	15	\$4,646,704	\$4,646,704	\$9,293,408	\$2,323,352	-
Exempt	5	\$75,802	\$75,802	\$151,604	\$37,901	-
Industrial	3	\$1,548,050	\$2,322,075	\$3,870,125	\$967,531	-
Mixed Use	24	\$3,287,397	\$3,287,397	\$6,574,794	\$1,643,699	-
Mobile/Manufactured Homes	4	\$2,632,448	\$1,316,224	\$3,948,672	\$987,168	10
Multi-Family Residential	7	\$2,388,077	\$1,194,039	\$3,582,116	\$895,529	17
Residential	97	\$18,266,267	\$9,133,134	\$27,399,401	\$6,849,850	240
Vacant Improved	2	\$68,744	\$0	\$68,744	\$17,186	-
<b>Total</b>	<b>158</b>	<b>\$33,098,330</b>	<b>\$22,160,215</b>	<b>\$55,258,545</b>	<b>\$13,814,636</b>	<b>267</b>

Source: San Luis Obispo Assessor Data November 15, 2024, FEMA NFHL Effective Date 6/6/2024, WSP GIS Analysis

**Table N-20**      **Parcels and Populations in 0.2 Annual Chance Flood Hazard Areas in the Oceano CSD**

PROPERTY TYPE	PARCEL COUNT	IMPROVED VALUE	CONTENT VALUE	TOTAL VALUE	LOSS ESTIMATE	POPULATION
Commercial	20	\$9,642,324	\$9,642,324	\$19,284,648	\$4,821,162	-
Exempt	1	\$19,713	\$19,713	\$39,426	\$9,857	-
Industrial	6	\$1,744,308	\$2,616,462	\$4,360,770	\$1,090,193	-
Mixed Use	23	\$4,956,572	\$4,956,572	\$9,913,144	\$2,478,286	-
Mobile/Manufactured Homes	2	\$528,788	\$264,394	\$793,182	\$198,296	5
Multi-Family Residential	7	\$2,100,551	\$1,050,276	\$3,150,827	\$787,707	17
Residential	167	\$38,267,375	\$19,133,688	\$57,401,063	\$14,350,266	412
<b>Total</b>	<b>226</b>	<b>\$57,259,631</b>	<b>\$37,683,428</b>	<b>\$94,943,059</b>	<b>\$23,735,765</b>	<b>435</b>

Source: San Luis Obispo Assessor Data November 15, 2024, FEMA NFHL Effective Date 6/6/2024, WSP GIS Analysis



## Populations at Risk

The flood risk also affects a sizable number of residents. Within the 1% floodplain, an estimated 267 people are potentially impacted, many living in traditional single-family homes, mobile homes, or multi-family structures. The population exposed in the 0.2% zone rises to 435, indicating that deeper and more widespread flood events could disrupt hundreds of lives. While property loss estimates are higher in the commercial sector, the greatest population impact is concentrated in residential zones, reinforcing the need for both structural and community-level mitigation strategies.

## Critical Facilities at Risk

Table N-21 shows critical facility assets exposed to 1% flood hazards by FEMA lifelines.

**Table N-21 Oceano CSD Critical Facility Assets Exposed to 1% Flood Hazards by FEMA Lifelines**

COMMUNITY SERVICE DISTRICT	COMMUNICATIONS	ENERGY	FOOD, HYDRATION, SHELTER	HAZARDOUS MATERIAL	HEALTH AND MEDICAL	SAFETY AND SECURITY	TRANSPORTATION	WATER SYSTEMS	TOTAL COUNT
Oceano	3	-	-	-	-	-	5	1	9
<b>Total</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>5</b>	<b>1</b>	<b>9</b>

Source: San Luis Obispo County, FEMA NFHL Effective Date 6/6/2024, CalARP, HIFLD, NBI, NID, FCWCD, WSP Analysis

Within the Oceano CSD, nine critical facilities fall within the 1% annual chance floodplain, underscoring the community's infrastructure vulnerability to significant flood events. These include three communications facilities, five transportation-related assets, and one drinking water system facility. The concentration of transportation infrastructure at risk is particularly concerning given Oceano's low-lying topography and the known history of street closures during past flood events, such as on Pier Avenue. Additionally, one hazardous materials facility is located within the 0.2% annual chance floodplain, presenting potential public safety and environmental risks should more extensive flooding occur. The location of these facilities within flood hazard zones emphasizes the importance of targeted mitigation planning to ensure service continuity and reduce operational disruptions during future events.



### N.3.3.11 Landslides and Debris Flow

Landslide and debris flow hazards have been rated by the Oceano Planning Team as a **Medium Significance** hazard. There are 34 structures exposed to landslide potential as shown in Table N-22 below. These structures have a total value of over \$26 million, with 28 of these structures for residential use. Oceano has 24 critical facilities exposed to low landslide potential. The atmospheric river event that took place on January 9<sup>th</sup>, 2023 greatly affected Oceano, with mudslides and debris flow wrecking homes and businesses and leaving residents stranded. The damages spanned from Oceano to Los Osos, with over 23 miles of destruction.

**Table N-22 Oceano CSD Improved Properties Exposed to Landslide Potential by Property Type**

PROPERTY TYPE	TOTAL STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATION
Commercial	1	\$815,007	\$815,007	\$1,630,014	-
Industrial	1	\$564,645	\$846,968	\$1,411,613	-
Mixed Use	1	\$645,048	\$645,048	\$1,290,096	-
Mobile/Manufactured Homes	1	\$270,632	\$135,316	\$405,948	2
Multi-Family Residential	2	\$836,631	\$418,316	\$1,254,947	5
Residential	28	\$13,344,125	\$6,672,063	\$20,016,188	69
Total	34	\$16,476,088	\$9,532,717	\$26,008,805	77

While no previous hazard occurrences have been noted, based on historical data for the County and given the presence of landslide-susceptible geology and steep slopes nearby, landslide hazards are likely to continue on an annual basis, though damaging landslide are not expected for the District. However, GIS overlay analysis of these landslide potential layers and the parcel data broken by type show that 34 parcels are exposed to low landslide hazard areas. Twenty-four critical facilities are found to overlap with low landslide potential areas across Oceano.

A moderate to major possible landslide event along Highway 101, or an event which affected this major road into or out of the CSD, could have serious impacts on both visitors and locals in terms of road closures or maintenance. For more details on the landslide and debris flow hazards in terms of background information or analysis results for the entire County, refer to Section 5.3.9 of the Base Plan.

### N.3.3.12 Tsunami and Seiche

Tsunami inundation poses a risk to all coastal communities in the San Luis Obispo County. Offshore faults and related seismic activity could generate a tsunami event off the coast of Oceano, even if the fault rupture occurs thousands of miles away. Historically, significant tsunamis on the Central Coast of California have been infrequent. Only a few incidents have been recorded, and the historical record is not extensive enough to develop an accurate prediction for the pattern of recurrence. The potential tsunami hazard for the City's coastal areas is greatest for those communities or portions of communities that are located at or below 50 feet above mean sea level. Figure N-8 below illustrates those areas of the district most at risk. Refer to Section 5 of the Base Plan for more information related to the past tsunami events and analysis on future vulnerability.

The following table breaks down the tsunami risk for the Oceano CSD by property type.



**Table N-23 Oceano Improved Properties Exposed to Tsunami Hazard Areas by Property Type**

PROPERTY TYPE	STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATION
Agricultural	1	\$184,841	\$184,841	\$369,682	-
Commercial	18	\$4,882,533	\$4,882,533	\$9,765,066	-
Exempt	4	\$0	\$0	\$0	-
Industrial	11	\$3,757,240	\$5,635,860	\$9,393,100	-
Mixed Use	41	\$7,450,959	\$7,450,959	\$14,901,918	-
Mobile/Manufactured Homes	1	\$319,374	\$159,687	\$479,061	2
Multi-Family Residential	21	\$8,226,888	\$4,113,444	\$12,340,332	52
Residential	309	\$74,745,627	\$37,372,814	\$112,118,441	763
Vacant Improved	1	\$11,260	\$0	\$11,260	-
Total	407	\$99,578,722	\$59,800,138	\$159,378,860	818

Source: San Luis Obispo Assessor Data November 15, 2024, California Geological Survey, Dept. of Conservation, WSP GIS Analysis

**Table N-24 Critical Facility Assets Exposed to Tsunami Hazard Areas by FEMA Lifelines, Oceano CSD**

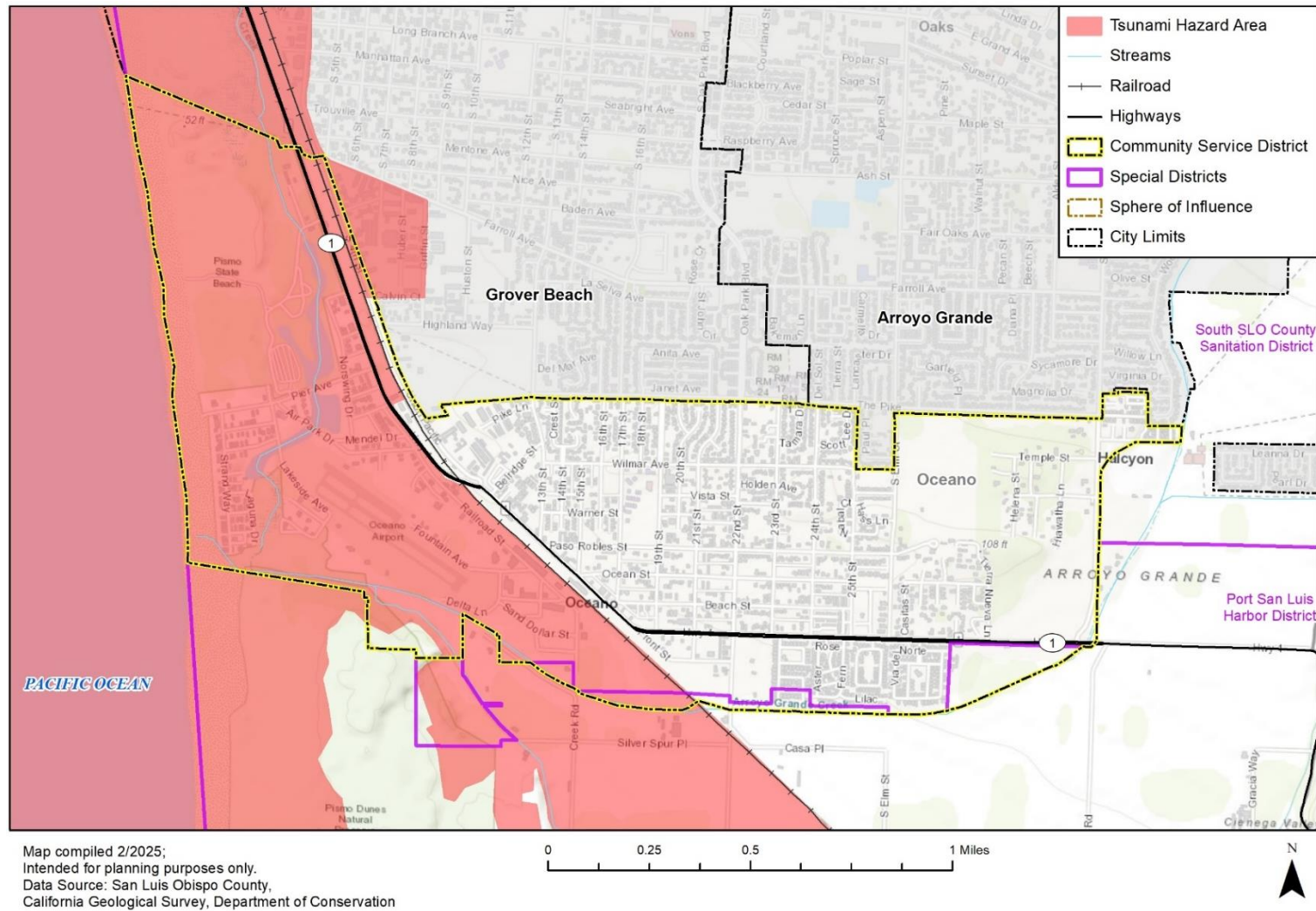
FEMA LIFELINE CATEGORY	NUMBER OF FACILITIES
Communications	2
Energy	0
Food, Hydration, Shelter	0
Hazardous Materials	2
Health and Medical	0
Safety and Security	1
Transportation	4
Water Systems	1
TOTAL	10

Source: San Luis Obispo County, California Geological Survey, Dept. of Conservation, CalARP, HIFLD, NBI, NID, WSP Analysis

Based on this analysis the majority of land in the district between Highway 1 and the coast is at a significant risk to a tsunami event. There are 407 structures vulnerable to the impacts of a tsunami, with a combined value of over \$159.4 million. Of the properties at risk, 331 are residential properties with a combined loss estimate of over \$124.5 million. Critical Facilities were also overlaid with the tsunami inundation layers in GIS. This analysis yielded a total of 10 facilities found at risk, the majority of these being within the Transportation Community Lifeline. These are listed in Table N-24.



Figure N-8 Oceano CSD Tsunami Hazard Area





### *N.3.3.13 Wildfire*

The County of San Luis Obispo overall rated wildfire as a high significance hazard due to history of occurrence and threat exposure. While there is no recent fire history in the Oceano CSD, factors such as the district's proximity to grasslands and adjacent to wildland areas with high fuel loads place it in a **high significance** rating. Strong winds, particularly in the late summer and fall, can rapidly drive flames towards residential zones.

Figure N-9 depicts the Fire Hazard Severity Zones (FHSZs) in Oceano CSD. It is worth noting, however, that FHSZs map only State Responsibility Areas (SRAs) and the areas designated as Non-Wildland do not necessarily indicate areas that are not at risk of wildfire, but areas outside of the SRA. In fact, most of the CSD is not within an SRA and therefore is not evaluated for FHSZs. Surrounding the CSD, Moderate to High Fire Hazard Zones exist along the southern and western edges of the CSD, primarily associated with vegetated portions of the Oceano Dunes. A Very High FHSZ is mapped further southwest, outside the CSD boundary, in the denser dune habitat area. Additionally, the Oceano Dunes State Vehicular Recreation Area and adjacent lands present potential ignition sources due to recreational activity and increased human presence.

In Oceano CSD SRAs, 179 properties are situated within moderate FHSZs. All of these properties are located in the Moderate FHSZ. Collectively, these properties represent a total value of \$82,708,174 and approximately 410 residents. Table N-25 shows the properties in the district exposed to FHSZs.

GIS analysis shows the critical facilities in Oceano CSD that are exposed to FHSZs, categorizing them by severity level and facility type. The exposure of these critical assets to wildfire hazards poses significant risks to communications. GIS analysis shows that there are a total of four (4) critical facilities that fall in the Moderate FHSZ.

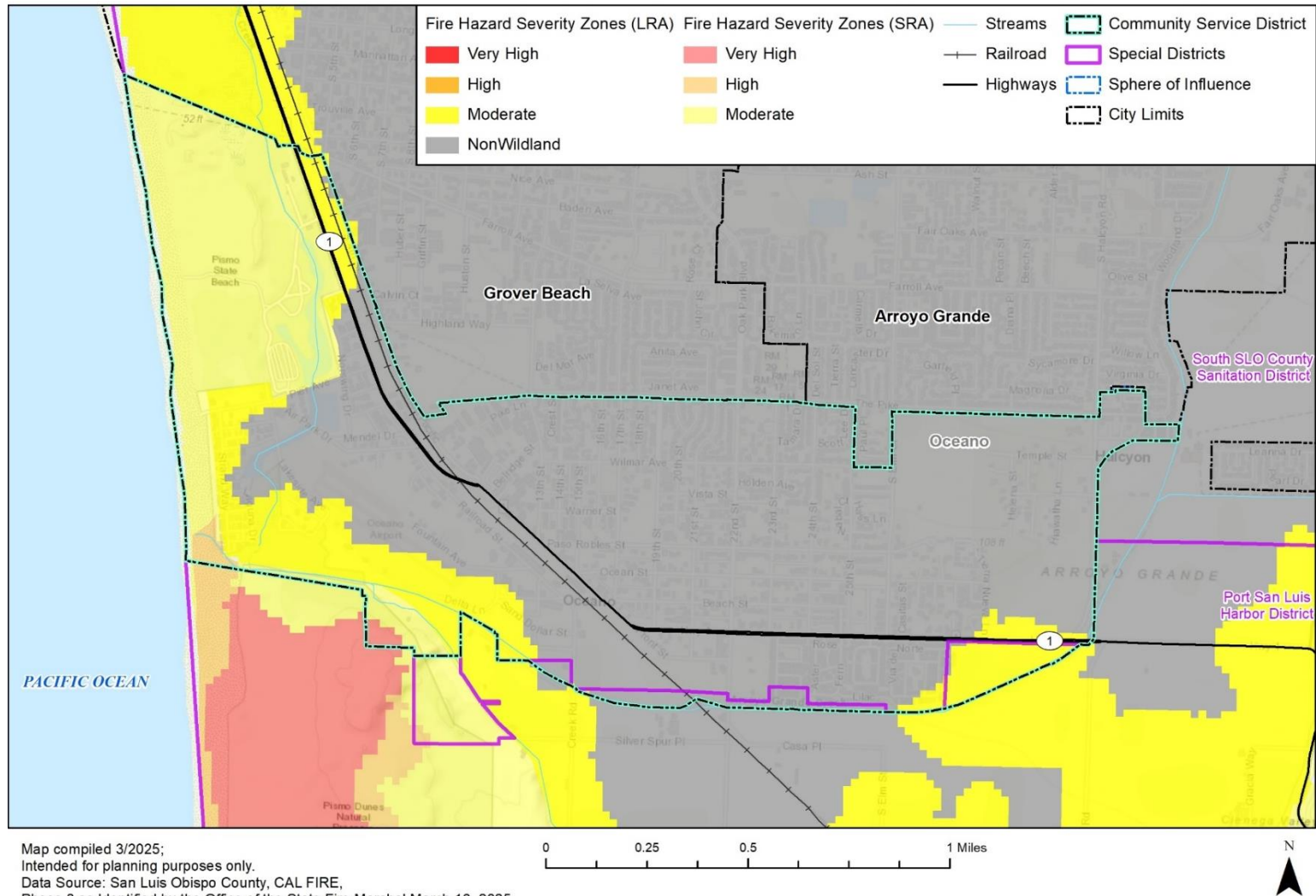
**Table N-25    Oceano CSD Improved Properties Exposed to Fire Hazard Severity Zones by Property Type**

PROPERTY TYPE	STRUCTURE COUNT VERY HIGH	STRUCTURE COUNT HIGH	STRUCTURE COUNT MODERATE	TOTAL STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATION
Commercial	-	-	8	8	\$1,335,335	\$1,335,335	\$2,670,670	-
Exempt	-	-	1	1	\$0	\$0	\$0	-
Mixed Use	-	-	3	3	\$1,273,498	\$1,273,498	\$2,546,996	-
Mobile/Manufactured Homes	-	-	1	1	\$319,374	\$159,687	\$479,061	2
Multi-Family Residential	-	-	12	12	\$4,225,413	\$2,112,707	\$6,338,120	30
Residential	-	-	153	153	\$47,108,045	\$23,554,023	\$70,662,068	378
Vacant Improved	-	-	1	1	\$11,260	\$0	\$11,260	-
Total	0	0	179	179	\$54,272,925	\$28,435,249	\$82,708,174	410

Source: San Luis Obispo Assessor Data November 15, 2024, CAL FIRE - FHSZ Phase 3 March 10, 2025, WSP GIS Analysis



Figure N-9 Oceano CSD Fire Hazard Severity Zones







## N.4 Capability Assessment

Capabilities are the programs and policies currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. This capability assessment is divided into five sections: regulatory mitigation capabilities, administrative and technical mitigation capabilities, fiscal mitigation capabilities, mitigation outreach and partnerships, and other mitigation efforts.

To develop this capability assessment, the jurisdictional and district planning representatives used a matrix of common mitigation activities to inventory policies or programs in place. The team then supplemented this inventory by reviewing additional existing policies, regulations, plans, and programs to determine if they contributed to reducing hazard-related losses.

During the plan update process, this inventory was reviewed by the jurisdictional and district planning representatives and WSP consultant team staff to update information where applicable and note ways in which these capabilities have improved or expanded. In summarizing current capabilities and identifying gaps, the jurisdictional planning representatives also considered their ability to expand or improve upon existing policies and programs as potential new mitigation strategies. The Oceano CSD capabilities are summarized below.

### N.4.1 Regulatory Mitigation Capabilities

Table N-26 identifies existing regulatory capabilities the District has in place to help with future mitigation efforts. Note: many of the regulatory capabilities that can be used for the District are within the County's jurisdiction. Refer to the Base Plan's Section 6 Capability Assessment for specific information related to the County's mitigation capabilities as well as more details on this topic.

**Table N-26 Oceano CSD Regulatory Mitigation Capabilities**

REGULATORY TOOL	YES/NO	COMMENTS
General plan	No	Included in the San Luis Obispo County efforts
Zoning ordinance	No	Included in the San Luis Obispo County efforts
Subdivision ordinance	No	Included in the San Luis Obispo County efforts
Growth management ordinance	No	Included in the San Luis Obispo County efforts
Floodplain ordinance	No	Included in the San Luis Obispo County efforts
Other special purpose ordinance (stormwater, water conservation, wildfire)	No	Included in the San Luis Obispo County efforts
Building code	No	Included in the San Luis Obispo County efforts
Fire department ISO rating	No	Included in the San Luis Obispo County efforts
Erosion or sediment control program	No	Included in the San Luis Obispo County efforts
Stormwater management program	No	Included in the San Luis Obispo County efforts
Site plan review requirements	No	Included in the San Luis Obispo County efforts
Capital improvements plan	Yes	OCSO Budget Document and CIP Documents
Economic development plan	No	Included in the San Luis Obispo County efforts
Local emergency operations plan	Yes	OCSO Emergency Operations Plan
Other special plans	No	Included in the San Luis Obispo County efforts
Flood Insurance Study or other engineering study for streams	No	Unknown
Elevation certificates (for floodplain development)	No	Included in the San Luis Obispo County efforts



Source: WSP Data Collection Guide, 2025; Oceano CSD

#### N.4.1.1 Discussion on Existing Building Codes, Land Use and Development Regulations

In Oceano, existing building codes, land use, and development regulations are administered by San Luis Obispo County, not the CSD. The County enforces state and local building codes and oversees zoning, permitting, and land use planning. Oceano is subject to the Coastal Zone Land Use Ordinance, including requirements for environmental protection, public access, and visual compatibility. While the CSD does not control land use decisions, its infrastructure planning and service delivery must align with County regulations and any applicable coastal or environmental review processes.

#### N.4.2 Administrative/Technical Mitigation Capabilities

Table N-27 identifies the personnel responsible for activities related to mitigation and loss prevention in the Oceano Community Services District.

**Table N-27 Oceano CSD Administrative/Technical Mitigation Capabilities**

PERSONNEL RESOURCES	YES/NO	DEPARTMENT/POSITION/COMMENTS
Planner/engineer with knowledge of land development/land management practices	No	SLO County Planning
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Yes	Engineering/Operations/District Engineer
Planner/engineer/scientist with an understanding of natural hazards	No	
Personnel skilled in GIS	Yes	Contract Services: MKN Engineering & Associates
Full time building official	No	SLO County Planning
Floodplain manager	No	SLO County Planning
Emergency manager	No	SLO County
Grant writer	No	
Other personnel	No	OCSD staff and consultants
GIS Data Resources (Hazard areas, critical facilities, land use, building footprints, etc.)	Yes	District infrastructure
Warning systems/services (Reverse 9-11, outdoor warning signals)	No	

Source: WSP Data Collection Guide, 2025; Oceano CSD

#### N.4.3 Fiscal Mitigation Capabilities

Table N-28 identifies financial tools or resources that the CSD could potentially use to help fund mitigation activities.

**Table N-28 Oceano CSD Fiscal Mitigation Capabilities**

FINANCIAL RESOURCES	ACCESSIBLE/ELIGIBLE TO USE (YES/NO)
Community Development Block Grants	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
Fees for water, sewer, gas, or electric services	Yes
Impact fees for new development	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activities	No
Withhold spending in hazard prone areas	No

#### N.4.4 Mitigation Outreach and Partnerships

**Table N-29 Oceano CSD Mitigation Outreach and Partnerships**

CAPABILITY TYPE	YES/NO	NOTES
Hazard Awareness/Education Campaigns	Yes	
Firewise	No	
Storm Ready	Yes	
Severe Weather Awareness Week	No	
School programs	Yes	
Other	Yes	FCFA
Methods Used to Communicate Hazard Info. to the Public	No	
Local News	Yes	
Social media	Yes	
Community Newsletters	Yes	
Utility Bill Inserts	Yes	
Community Events	Yes	
Organizations that represent or work with underserved or vulnerable communities	No	
American Red Cross	No	
Salvation Army	No	
Veterans Groups	No	
Environmental/Conservation Groups	No	
Homeowner/Neighborhood Associations	Yes	
Chamber of Commerce	No	
Community Organizations (Lions, Kiwanis, etc.)	No	

#### N.4.5 Opportunities for Enhancement

Based on the capability assessment, the Oceano Community Services District has several existing mechanisms in place that already help to mitigate hazards. There are also opportunities for the CSD to expand or improve on these policies and programs to further protect the community. To enhance its mitigation capabilities, the CSD could focus on strengthening planning, data, and coordination efforts by hiring or contracting additional



support in GIS, engineering, and hazard-specific planning. Building and continuing strong partnerships with San Luis Obispo County can help to integrate local hazard concerns into broader land use planning efforts. Additionally, the development of redundant communication and warning systems would be beneficial, particularly because the CSD currently lacks outdoor alert infrastructure or dedicated public warning capabilities.

Improving community outreach and inclusion could also enhance resilience. Establishing hazard education programs in schools and through local events can boost public preparedness. Engaging underserved populations, such as renters, mobile homeowners, and individuals with disabilities, will ensure all residents have equitable access to emergency planning and mitigation resources.

The CSD could also prioritize pursuing grant opportunities such as those offered by FEMA, the California Department of Water Resources, and the Community Development Block Grant by developing projects that focus on hazard resilience. Additionally, continued coordination with the County will be essential in advocating for funding for disadvantaged communities.

## N.5 Mitigation Strategy

### N.5.1 Mitigation Goals and Objectives

The 2019 Local Hazard Mitigation Plan For the Oceano Community Services District outlined the following goals:

- **Goal 1:** Promote understanding and support for hazard mitigation by key stakeholders and the public within the Community of Oceano.
- **Goal 2:** Ensure that future development is protected from natural disasters including earthquakes, wind, winter storms, hail, freeze, heat, drought, tsunamis and flooding.
- **Goal 3:** Build and support local capacity and commitment to minimize the District's vulnerability to potential naturally occurring hazards, including implementing sewer and water CIPs to improve infrastructure resilience.
- **Goal 4:** Minimize the level of damage and losses to people, existing and future critical facilities and infrastructure due to flooding.
- **Goal 5:** Minimize the level of damage and losses to people, existing and future critical facilities and infrastructure due to earthquakes, especially water and sewer systems.
- **Goal 6:** Limit risk to, and impacts from hazardous materials spills, sewage spills, intentional discharges, illegal disposals, transportation accidents, or system failures.
- **Goal 7:** Minimize the level of damage and losses to people, existing and future critical facilities and infrastructure due to a tsunami event.

During the creation of the 2025 countywide MJHMP, the Oceano CSD adopted the hazard mitigation goals and objectives developed by the County Planning Team and described in Section 7 of the Base Plan.

### N.5.2 Completed 2019 Mitigation Actions

During the 2025 planning process the Oceano LPT reviewed all the mitigation actions from the 2019 plan. The LPT identified that seven actions were completed and five were deleted, described in Table N-30.

**Table N-30 Oceano Complete and Deleted Actions**

2019 ACTION ID	HAZARD(S) ADDRESSED	MITIGATION ACTION TITLE	LEAD AGENCY	ACTION STATUS NOTES
3.1B	Thunderstorm; High Wind; Extreme Heat; Biological Agents; Coastal Storm; Dam Incidents; Earthquake; Flood; Landslide; Tsunami; Fire; HazMat	Update the existing Emergency Operations Plans and supporting documents to ensure coordination with the County Emergency Operations Center (EOC), Emergency Response Plans and SOP's.	Utility Systems Supervisor	Completed. 2024
3.1F	Fire	Support the efforts of the FCFA in the implementation of the Five-Year Strategic Plan.	OCSD BOD and Administration	Deleted. Divested.
3.2A	Thunderstorm; High Wind; Extreme Heat; Coastal Storm; Dam Incidents; Earthquake; Flood; Landslide; Tsunami; Fire; HazMat	To ensure that employees are available to assist during a major emergency, have all OCSD departments adopt a Family Support Plan.	OCSD Administration	Completed. 07/01/2019; similar to COOP
3.3B	Thunderstorm; High Wind; Coastal Storm; Dam Incidents; Earthquake; Flood; Landslide; Subsidence; Tsunami; Fire	Work with the South County ARES/RACES group in developing a Communications Master Plan for re-establishing District's radio communications systems.	OCSD Admin.	Completed. 09/01/2020
3.4B	Thunderstorm; High Wind; Coastal Storm; Dam Incidents; Earthquake; Flood; Landslide; Subsidence; Tsunami; Fire	Develop a plan to provide standby power to the following essential service systems/functions: water well #8, the Administration Building, and the Sheriff's Substation.	OCSD Admin.	Completed. 10/01/2021
4.1D	Coastal Storm; Flood	Support the County's efforts to improve the drainage from the Front Street/Hwy. 1 flooding areas through a combination of vegetation management and storm drain improvements along Hwy. 1, moving the water to the Arroyo Grande Creek.	SLO County Public Works Staff	Completed. 2023
4.1E	Coastal Storm; Flood	Relocate the District's water and sewer lines that will be impacted by the Front Street/Hwy. 1 storm drain project.	OCSD BOD, Admin and Utility Systems Supervisor	Completed. 07/01/2019
4.1F	Thunderstorm; Coastal Storm; Flood; Landslide	Support the efforts of the County and the Flood Control District in upgrading the Arroyo Grande Creek levee on both the north and south sides through a combination of vegetation and sediment management and raising both the north and south	SLO County Public Works	Completed. Levee repairs completed 2024





2019 ACTION ID	HAZARD(S) ADDRESSED	MITIGATION ACTION TITLE	LEAD AGENCY	ACTION STATUS NOTES
		sides of the levee in a number of places.		
5.3A	High Wind; Wildfire	Support the FCFA efforts to train fire department staff in the California State Fire Marshal's Rescue System 1 and 2 programs.	Five Cities Fire Authority/Board of Directors	Deleted. Divested
6.1A	Hazardous Materials	Continue efforts to educate applicable employees on the handling, use, storage and disposal of hazardous materials utilized in the workplace.	Five Cities Fire Authority/OCSD Board of Directors	Deleted, no longer a priority
6.1B	Hazardous Materials	Support the FCFA in training 2 first responders to the Hazardous Materials Technician Level.	Water and Wastewater Staff	Deleted, no longer a priority
6.2	Hazardous Materials	Educate community members on the impacts associated with disposing of household hazardous materials on the wastewater system and provide advice on proper storage and disposal techniques.	Five Cities Fire Authority and OCSD Board of Directors	Deleted. Divested

### N.5.3 Mitigation Actions

The Planning Team for the Oceano Community Services District identified and prioritized the following mitigation actions based on the conducted risk assessment (see Estimating Potential Losses). Actions were prioritized using the process described in Section 7.2.1 of the Base Plan. Background information and information on how each action will be implemented and administered, such as ideas for implementation, responsible office, potential funding, estimated cost, and timeline are also included. Actions with an asterisk (\*) are those that mitigate losses to future development.



Table N-31    Oceano CSD’s Mitigation Action Plan

MITIGATION ACTION NUMBER	PRIMARY HAZARD(S) MITIGATED	DESCRIPTIONS/ BACKGROUND/ BENEFITS	LEAD AGENCY & PARTNERS	ESTIMATED COST & POTENTIAL FUNDING SOURCES	2025 PRIORITY	TIMELINE	STATUS/ IMPLEMENTATION NOTES
OCSD.1	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Ag. Pest; Biological Agents; Coastal Storm; Dam Incidents; Drought; Earthquake; Flood; Landslide; Tsunami; Wildfire	Through newsletters, speaking engagements and other public contacts, continue to educate the general public and key stakeholders on the District’s issues, responsibilities, and current efforts and successes in the area of disaster preparedness.	Administration, Oceano Advisory Committee, and Board of Directors	Low. Administration and General Fund	Medium	Ongoing	Ongoing
OCSD.2	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Ag. Pest; Biological Agents; Coastal Storm; Dam Incidents; Drought ; Earthquake; Flood; Landslide; Tsunami; Wildfire	Educate staff on current disaster preparedness developments	Administration, Oceano Advisory Committee, and Board of Directors	Low. Administration and General Fund	High	Ongoing	Ongoing
OCSD.3	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Ag. Pest; Biological Agents; Coastal Storm; Dam Incidents; Drought; Earthquake; Flood; Landslide; Tsunami; Wildfire	Educate the elected OCSD BOD members on the importance of keeping current on trends and developments in disaster preparedness.	Administration, Oceano Advisory Committee, and Board of Directors	Low. Administration and General Fund	Medium	Ongoing	Ongoing
OCSD.4	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Ag. Pest Infestation; Biological Agents; Coastal Storm/Coastal Erosion/Sea Level Rise; Dam Incidents; Drought and Water Shortage; Earthquake;	Encourage OAC members to attend local seminars and lectures on naturally occurring hazards so that they may better understand and assist County Planning staff as they process future development.	Administration, Oceano Advisory Committee, and Board of Directors	Little to no Cost	Medium	Ongoing	Ongoing



MITIGATION ACTION NUMBER	PRIMARY HAZARD(S) MITIGATED	DESCRIPTIONS/ BACKGROUND/ BENEFITS	LEAD AGENCY & PARTNERS	ESTIMATED COST & POTENTIAL FUNDING SOURCES	2025 PRIORITY	TIMELINE	STATUS/ IMPLEMENTATION NOTES
	Flood; Landslide and Debris Flow; Tsunami; Wildfire						
OCSD.5	Earthquake; Flood; Tsunami, Coastal Storm/Coastal Erosion/Sea Level Rise	In order to better protect life and property, continue to accumulate from the county accurate and comprehensive series of maps and data sets that pertain to the District's earthquake, tsunami and flood threats.	Utility Systems Supervisor	Little to no Cost	Low	Medium-Term	Needs review and update.
OCSD.6	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Ag.Pest Infestation; Biological Agents; Coastal Storm; Dam Incidents; Drought; Earthquake; Flood; Landslide; Tsunami; Wildfire	Develop a Continuity of Operations Plan (COOP) for the District and train all essential staff on their roles and responsibilities as delineated in the Plan.	OCSD Administration	Moderate. General Fund	High	Medium-Term	Needs review and update.
OCSD.7	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Ag. Pest; Biological Agents; Coastal Storm; Dam Incidents; Drought; Earthquake; Flood; Landslide; Tsunami; Wildfire	Train all District department managers and key staff members on their roles and responsibilities in emergency management and the District DOC as outlined in independent study courses FEMA/National Incident Management System - ICS 100, 700, and 800.	Administration, Oceano Advisory Committee, and Board of Directors	Little to no Cost	Medium	Ongoing	Yearly
OCSD.8	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Biological Agents; Coastal Storm; Dam Incidents; Earthquake; Flood;	Working with SLO County OES, increase participation by District staff members in disaster drills put on by the County.	OCSD Board of Directors, Parks and Recreation Committee	Little to no Cost	High	Short-term	Yearly



MITIGATION ACTION NUMBER	PRIMARY HAZARD(S) MITIGATED	DESCRIPTIONS/ BACKGROUND/ BENEFITS	LEAD AGENCY & PARTNERS	ESTIMATED COST & POTENTIAL FUNDING SOURCES	2025 PRIORITY	TIMELINE	STATUS/ IMPLEMENTATION NOTES
	Landslide; Tsunami; Wildfire						
OCSD.9	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Biological Agents; Coastal Storm; Dam Incidents; Drought; Earthquake; Flood; Landslide; Tsunami; Wildfire	Send one District management employee to the California Specialized Training Institute (CSTI) Public Information Officer Course.	Administration	Low. EMGP, HSGP	High	Ongoing	Needed.
OCSD.10	Flood; Earthquake	Make improvements to wastewater collection systems by replacing or relining collection pipes so as to reduce sewer overflows and limit inflow and infiltration subsequently reducing the public health threat.	Utility Systems Supervisor	High. Sewer Fund	High	Long-Term	Sewer CIP being developed.
OCSD.11	Adverse Weather: Thunderstorm; Coastal Storm; Flood; Landslide	Train staff on the proper techniques for containing sewer system overflows (SSO Protocols).	Utility Systems Supervisor	Low. Sewer Fund	Medium	Ongoing	Ongoing
OCSD.12	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Biological Agents; Coastal Storm; Dam Incidents; Earthquake; Flood; Landslide; Tsunami; Wildfire	Utilize the South County ARES/RACES group expertise, obtain and install a base station radio, mobile radios, and a standby power source to facilitate communications throughout the District as outlined in the Communications Master Plan.	OCSD Admin.	Moderate. HSGP	Low	Medium-Term	Needs review and update.
OCSD.13	Adverse Weather: Thunderstorm, High Wind Adverse Weather: Extreme Heat; Earthquake, Coastal	Work with PG&E and County OES to explore potential funding sources for an auxiliary power source for water well # 8.	Utility Systems Supervisor	Very High. PA Program, HMA Grant, Water Fund	Medium	Medium-Term	Needs backup generator.



MITIGATION ACTION NUMBER	PRIMARY HAZARD(S) MITIGATED	DESCRIPTIONS/ BACKGROUND/ BENEFITS	LEAD AGENCY & PARTNERS	ESTIMATED COST & POTENTIAL FUNDING SOURCES	2025 PRIORITY	TIMELINE	STATUS/ IMPLEMENTATION NOTES
	Storm/Coastal Erosion/Sea Level Rise; Drought and Water Shortage						
OCSD.14	Adverse Weather: Extreme Heat; Adverse Weather: Thunderstorm, High Wind Earthquake	Collaborate with the Sheriff's office on funding sources for a standby power system for the substation and the administration building.	OCSD Admin.	Little to no Cost	Medium	Medium-Term	Needs review and update.
OCSD.15	Flood, Coastal Storm/Coastal Erosion/Sea Level Rise	Support the efforts of the county in maintaining compliance with the National Flood Insurance Program (NFIP) requirements.	SLO County Planning Staff and OCSD admin.	Little to no Cost	Low	Medium-Term	Ongoing
OCSD.16	Flood, Coastal Storm/Coastal Erosion/Sea Level Rise	Through the Development Review process (OAC), ensure the County restricts construction of essential service facilities in the 100-year flood plain.	OCSD Administration, Oceano Advisory Committee, and Board of Directors	Little to no Cost	Low	Medium-Term	County Planning/Zoning
OCSD.17	Flood, Coastal Storm/Coastal Erosion/Sea Level Rise	Continue to work cooperatively with the county, state, and federal flood related agencies for funding improvements through grant and agency programs.	SLO County Public Works Staff	High. HMGP, CDBG, and Flood Control District Funds	High	Long-Term	Ongoing
OCSD.18	Earthquake	Working with SLO County OES, increase the public's awareness and participation in earthquake preparedness activities such as the annual Great California Shake-Out drill.	Administration, Oceano Advisory Committee, and Board of Directors, County OES	Little to no Cost	Medium	Short-Term	Needs review and update.
OCSD.19	Earthquake	Continue replacing the water lines that are most vulnerable to an earthquake as delineated in the Cannon study.	OCSD Admin and Utility Systems Supervisor	High. HMGP, CDBG, and Water/Wastewater funds	High	Long-Term	Ongoing
OCSD.20	Earthquake	As delineated in the RRM Facilities Study, develop a replacement schedule for buildings found to be vulnerable to an earthquake.	OCSD Admin and Utility Systems Supervisor	High. HMGP, CDBG, Water/Wastewater funds	High	Long-Term	Ongoing





MITIGATION ACTION NUMBER	PRIMARY HAZARD(S) MITIGATED	DESCRIPTIONS/ BACKGROUND/ BENEFITS	LEAD AGENCY & PARTNERS	ESTIMATED COST & POTENTIAL FUNDING SOURCES	2025 PRIORITY	TIMELINE	STATUS/ IMPLEMENTATION NOTES
OCSD.21	Earthquake	Send one District management employee to the California Specialized Training Institute (CSTI) Introduction to Earthquake Management Course.	Administration, Oceano Advisory Committee, and Board of Directors	Low. EMPG, HSGP, and General Fund	Medium	Medium-Term	Yearly
OCSD.24	Tsunami	Continue working with County OES in the distribution of the existing tsunami public education pamphlet/map to the visitors and residents in the Tsunami inundation zone.	OCSD Admin.	Little to no Cost	Medium	Ongoing	Ongoing
OCSD.25	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Coastal Storm; Dam Incidents; Earthquake; Flood; Landslide; Tsunami; Wildfire	Work with County OES and the California Coastal Commission to post evacuation route signage along Pier Street, and in the Airport and Oceano Campground areas.	OCSD Admin.	Little to no Cost	Low	Medium-Term	Needs review and update.



## **N.6 Implementation and Maintenance**

Moving forward, the Oceano Community Services District will use the mitigation action table in the previous section to track progress on implementation of each project. Implementation of the plan overall is discussed in Section 8 of the Base Plan.

### ***N.6.1.1 Incorporation into Existing Planning Mechanisms***

The information contained within this Oceano Annex and the Base Plan, including results from the vulnerability assessments and the mitigation strategy, will be used by the District to help inform updates of the Oceano CSD's existing plans, as well as in the development of additional local plans, programs, regulations, and policies. Understanding the hazards which pose a risk and the specific vulnerabilities to the District and its sphere of influence will help in future capital improvement planning and development for the District. The San Luis Obispo County Planning & Building Department may utilize the hazard information when reviewing a site plan or other type of development applications within or nearby the boundaries of the Oceano CSD area. As noted in Section 8, the Planning Team representatives from the Oceano CSD will report on efforts to integrate the hazard mitigation plan into local plans, programs, regulations, and policies and will report on these efforts at the annual Hazard Mitigation Plan and Planning Team review meeting.

### ***N.6.1.2 Monitoring, Evaluation and Updating the Plan***

The Oceano CSD will follow the procedures to monitor, review, and update this plan in accordance with San Luis Obispo County as outlined in Section 8 of the Base Plan. The District will continue to involve the public in mitigation, as described in Section 8.3 of the Base Plan. The CSD General Manager will be responsible for representing the district in related County Hazard Mitigation Plan meetings or events, and for coordination with County staff and departments during plan updates. The Oceano CSD realizes it is important to review the plan regularly and update it every five years in accordance with the FEMA Disaster Mitigation Act Requirements as well as other State of California requirements.



## Annex O San Miguel Community Services District

### O.1 District Profile

#### O.1.1 Mitigation Planning History and 2019 Process

This annex was updated in 2025 to build upon the previous version created for the 2019 San Luis Obispo Hazard Mitigation Plan update. The 2019 MJHMP was used to guide land use and stormwater planning in the CSD. The San Miguel Fire Chief was the representative on the County HMPC and took the lead for developing this annex in coordination with the San Miguel Community Services District Local Planning Team (LPT). The LPT will be responsible for implementation and maintenance of the plan. Table O-1 shows the District's planning group for the plan revision process.

**Table O-1 San Miguel CSD Hazard Mitigation Plan Planning Team**

DEPARTMENT OR STAKEHOLDER	TITLE
San Miguel Fire	Fire Chief
Utilities	Director

Additionally, the plan must document opportunities for neighboring communities, local and regional agencies involved in hazard mitigation activities, agencies with the authority to regulate development, as well as businesses, academia, and other private and non-profit interests, to actively participate in the planning process. Stakeholder groups are listed below in Table O-2.

More details on the planning process followed and how the jurisdictions, service districts and stakeholders participated as well as how the public was involved during the 2025 update can be found in Section 3 of the Base Plan.

**Table O-2 San Miguel CSD Stakeholder Groups, Neighboring Communities, and Local Agencies**

STAKEHOLDER CATEGORY	ORGANIZATION
Agencies involved in hazard mitigation activities:	San Miguel Fire
Agencies that have the authority to regulate development:	County Planning
Neighboring Communities:	Unincorporated San Luis Obispo County
Representatives of business academia, and other private orgs:	Paso Robles
Representatives supporting underserved communities:	County Board of Supervisors

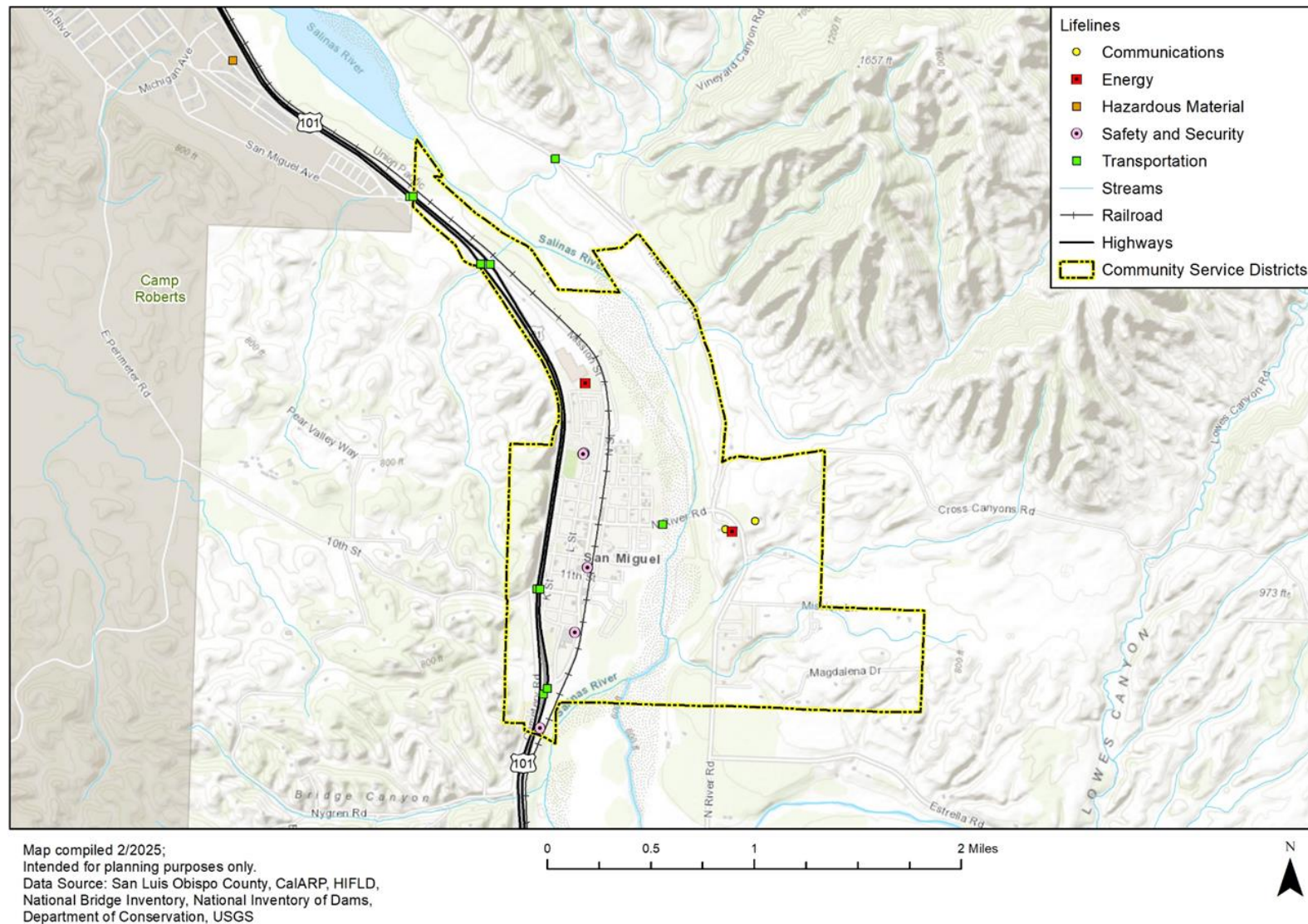
#### O.1.2 District Overview

The unincorporated community of San Miguel has a population of 2,400 according to the 2010 census and is located in the Salinas River Valley about seven miles north of Paso Robles. The community is bordered on the west by Highway 101 and on the east by the Salinas River. San Miguel originated with the founding of Mission San Miguel Arcángel in 1797. The railroad arrived in 1886, and still runs through the center of town. In 1887 San Miguel was destroyed by fire, but the town was soon rebuilt. During World War II, San Miguel became the off-duty



retreat for 45,000 troops stationed at Camp Roberts, which was later deactivated in the late 1950s. San Miguel is currently perceived as a low-cost bedroom community for Paso Robles and San Luis Obispo County.

The San Miguel Community Services District (CSD) is committed to serving the community with effectiveness, efficiency, and care to support the economic and social quality of life in San Miguel. The District proudly serves San Miguel with fire protection, street lighting, water, wastewater, and solid waste services. Figure O-1 shows the San Miguel Community Services District boundaries.

**Figure O-1 San Miguel Community Services District**





The U.S. Census Bureau estimated the San Miguel Census Designated Place's (CDP) 2017 population as 2,824, a 0.1% increase from 2,822 in 2012. Table O-3 shows an overview of key social and demographic characteristics of the CDP taken from the U.S. Census Bureau's American Community Survey.

**Table O-3 San Miguel CDP Demographic and Social Characteristics, 2018-2023**

SAN MIGUEL CDP	2018	2023	% CHANGE
Population	2,807	2,956	0.1%
Median Age	30.6	27.2	10.2%
Total Housing Units	871	813	2.3%
Housing Occupancy Rate	92%	94.3%	-7.5%
% of Housing Units with no Vehicles Available	4.7%	4.2%	0.5%
Median Home Value	\$302,200	\$452,200	26.7%
Unemployment	6.8%	3.2%	-1.0%
Mean Travel Time to Work (minutes)	27.8	23.5	14.8%
Median Household Income	\$70,945	\$93,333	20.9%
Per Capita Income	\$21,481	\$22,286	19.6%
% of Individuals Below Poverty Level	22.4%	23.1%	2.3%
# of Households	807	767	-5.4%
Average Household Size	3.46	3.84	5.8%
% of Population Over 25 with High School Diploma	72.5%	67.5%	-3.5%
% of Population Over 25 with Bachelor's Degree or Higher	13.8%	14.4%	3.5%
% with Disability	7.4%	9.3%	-0.6%

Source: U.S. Census Bureau American Community Survey 2018-2023 5-Year Estimates, [www.census.gov/](http://www.census.gov/)

Note: Data is for the San Miguel Census Designated Place (CDP) which may not have the same boundaries as the San Miguel Community Services District.

Table O-4 shows how the San Miguel CDP's labor force breaks down by occupation and industry estimates from the U.S. Census Bureau's 2023 American Community Survey.

**Table O-4 San Miguel CPD Employment by Industry (2023)**

INDUSTRY	# EMPLOYED	% EMPLOYED
Population (16 years and over, 2023)	2,084	
In Labor Force	1,351	64.8%
Agriculture, forestry, fishing and hunting, and mining	265	20.9%
Armed Forces	16	.8%
Construction	32	2.5%
Manufacturing	109	8.6%
Wholesale trade	35	2.8%
Retail trade	164	12.9%
Transportation and warehousing, and utilities	111	8.8%
Information	43	3.4%
Finance and insurance, and real estate and rental and leasing	2	.2%
Professional, scientific, and management, and administrative and waste management services	195	15.4%
Educational services, and health care and social assistance	174	13.7%



INDUSTRY	# EMPLOYED	% EMPLOYED
Arts, entertainment, and recreation, and accommodation and food services	97	7.6%
Other services, except public administration	21	1.7%
Public administration	20	1.6%
Unemployed	67	3.2%

Source: U.S. Census Bureau American Community Survey 2012-2017 5-Year Estimates, [www.census.gov/](http://www.census.gov/)

Note: Data is for the San Miguel Census Designated Place (CDP) which may not have the same boundaries as the San Miguel Community Services District.

**Table O-5 San Miguel CPD Employment by Industry (2023)**

INDUSTRY	# EMPLOYED	% EMPLOYED
Population (2023)	2,084	
In Labor Force	1,351	64.8%
Management, business, science, and arts occupations	151	11.9%
Service occupations	327	25.8%
Sales and office occupations	228	18%
Natural resources, construction, and maintenance occupations	387	30.5%
Production, transportation, and material moving occupations	175	13.8%

### O.1.3 Development Trends

San Miguel's population growth has been slower compared to the nearby City of Paso Robles. According to the Planning Team, growth in San Miguel is currently limited to infill development and single-family homes. However, multi-family housing developments are anticipated in the future, which the community hopes will encourage commercial development, particularly in the downtown area. The district believes that its historic resources and location make it suitable for more tourism-oriented development in the future and hopes to attract small-scale manufacturing, which would bring more jobs to the community. Two sites outside the boundaries of the CSD have been identified as areas for potential community expansion. The district's main concerns with future growth are their ability to supply water and wastewater infrastructure and fire protection while keeping up with the growth.

The Planning Team noted that additional homes have been built adjacent to the Salinas River 100-year floodplain and future development is planned for additional developments. Also, it was mentioned that proper construction methods and compliance with county floodplain regulations have prevented damage or loss in a recent past storm that resulted in a rise of river floodwaters. Thus hazard vulnerability has not noticeably increased or decreased since the 2019 update of this plan.

### O.1.4 Other Community Planning Efforts

The coordination and synchronization with other community planning mechanisms and efforts are vital to the success of this plan. To have a thorough evaluation of hazard mitigation practices already in place, appropriate planning procedures should also involve identifying and reviewing existing plans, policies, regulations, codes, tools, and other actions are designed to reduce a community's risk and vulnerability from natural hazards.

As an unincorporated community, the San Miguel CSD is referenced in other County planning documents and regulated by County policies and planning mechanisms. Integrating existing planning efforts, mitigation policies, and action strategies into this Annex establishes a credible, comprehensive document that weaves the common threads of a community's values together. The development of this jurisdictional Annex involved a comprehensive review of



existing plans, studies, reports, and initiatives from San Luis Obispo County and the San Miguel community that relate to hazards or hazard mitigation, as summarized in Table O-6 below. Information on how they informed the update are noted and incorporated where applicable.

In addition to the development standards within the San Miguel Specific Plan, there are County planning mechanisms that regulate future and existing development within the San Miguel CSD planning area. Refer to Section O.4 Capability Assessment below as well as the Base Plan for more information on the plans, policies, regulations and staff that govern the San Miguel CSD.

**Table O-6 Summary of Review of Key Plans, Studies and Reports**

PLAN, STUDY, REPORT NAME	HOW THE DOCUMENT INFORMED THIS ANNEX
San Miguel Community Plan (2016)	Incorporated background information on the community and CSD including historical and cultural resources, natural resources, and development and land use trends
North County Area Plan (2014)	Incorporated information into the District overview and vulnerability assessment.

## O.2 Hazard Identification and Summary

The San Miguel CSD Planning Team identified the hazards that affect the District and summarized their frequency of occurrence, spatial extent, potential magnitude, and significance specific to the San Miguel CSD (see Table O-7). There are no hazards that are unique to the District.

**Table O-7 San Miguel CSD Hazard Risk Summary**

HAZARD	GEOGRAPHIC AREA	PROBABILITY OF FUTURE OCCURRENCE	MAGNITUDE/ SEVERITY (EXTENT)	OVERALL SIGNIFICANCE
Adverse Weather: Thunderstorm, Heavy Rain, Lightening, Freeze, Hail, Dense Fog	Extensive	Likely	Catastrophic	High
Adverse Weather: High Wind and Tornado	Extensive	Likely	Catastrophic	High
Adverse Weather: Extreme Heat	Extensive	Likely	Catastrophic	High
Dam Failure	Limited	Unlikely	Negligible	Medium
Drought and Water Shortage	Extensive	Likely	Catastrophic	High
Earthquake	Extensive	Likely	Critical	High
Flooding	Limited	Occasional	Limited	Medium
Landslide	Significant	Likely	Critical	Medium
Wildfire	Extensive	Highly Likely	Catastrophic	High
Hazardous Materials	Limited	Highly Likely	Negligible	Medium



HAZARD	GEOGRAPHIC AREA	PROBABILITY OF FUTURE OCCURRENCE	MAGNITUDE/ SEVERITY (EXTENT)	OVERALL SIGNIFICANCE
<b>Geographic Area</b> Limited: Less than 10% of planning area Significant: 10-50% of planning area Extensive: 50-100% of planning area  Probability of Future Occurrences Highly Likely: Near 100% chance of occurrence in next year or happens every year. Likely: Between 10 and 100% chance of occurrence in next year or has a recurrence interval of 10 years or less. Occasional: Between 1 and 10% chance of occurrence in the next year or has a recurrence interval of 11 to 100 years. Unlikely: Less than 1% chance of occurrence in next 100 years or has a recurrence interval of greater than every 100 years.		<b>Magnitude/Severity (Extent)</b> Catastrophic—More than 50 percent of property severely damaged; shutdown of facilities for more than 30 days; and/or multiple deaths Critical—25-50 percent of property severely damaged; shutdown of facilities for at least two weeks; and/or injuries and/or illnesses result in permanent disability Limited—10-25 percent of property severely damaged; shutdown of facilities for more than a week; and/or injuries/illnesses treatable do not result in permanent disability Negligible—Less than 10 percent of property severely damaged, shutdown of facilities and services for less than 24 hours; and/or injuries/illnesses treatable with first aid Significance Low: minimal potential impact Medium: moderate potential impact High: widespread potential impact		

### O.3 Vulnerability Assessment

The intent of this section is to assess the San Miguel Community Services District's vulnerability separate from that of the planning area, which has already been assessed in Section 5 Hazard Identification and Risk Assessment (HIRA) in the Base Plan. This vulnerability assessment analyzes the population, property, and other assets at risk to hazards ranked of medium or high significance.

The information to support the HIRA portion of this Annex was collected through a Data Collection Guide, which was distributed to each participating municipality or district to complete during the planning process. Information collected was analyzed and summarized in order to identify and rank all the hazards that could impact anywhere within the County, as well as to rank the hazards and identify the related vulnerabilities unique to each jurisdiction/district. In addition, the San Miguel CSD Planning Team members were asked to share information on past significant hazard events that have affected the Community Services District.

Each participating jurisdiction and district were in support of the main hazard summary identified in Section 5 of the Base Plan. However, the hazard summary rankings for each jurisdictional annex may vary slightly due to specific hazard risk and vulnerabilities unique to that jurisdiction (see **Error! Reference source not found.**). Identifying these differences helps the reader to differentiate the jurisdiction's risk and vulnerabilities from that of the overall County.

Note: The hazard "significance" reflects overall ranking for each hazard and is based on the San Miguel CSD Planning Team input from the Data Collection Guide and the risk assessment results compiled during the planning process (see Section 5 of the Base Plan), which included more detailed quantitative analyses with the best available data. The hazard summaries in **Error! Reference source not found.** reflect the hazards that could potentially affect the District. The discussion of vulnerability for each of the hazards listed is in Section O.3.3 Estimating Potential Losses.



### O.3.1.1 Other Hazards

The following hazards identified in the base plan HIRA are not identified within this jurisdictional annex due to low or no risk or insignificant anticipated impacts and are not considered further for vulnerability assessment or mitigation actions:

- Agricultural Pests and Diseases
- Biological Agents
- Coastal Storm/ Coastal Erosion/ Sea Level Rise
- Subsidence
- Tsunami and Seiches

### O.3.2 Assets at Risk

This section considers the District's assets at risk, including values at risk, critical facilities and infrastructure, historic assets, economic assets, and growth and development trends. See Section 5.2 of the Base Plan (Asset Summary) for more details and background on the parcel summarization, analysis, and datasets available.

#### O.3.2.1 Values at Risk

This section considers San Miguel CSD's assets at risk, including an inventory of improved properties and critical facilities and Community Lifelines, and historic, economic, cultural, and environmental assets. Table O-8 summarizes the exposure of properties (e.g., the values at risk based on improvement values, content values, and total values as an addition of these two types of values) broken down by property type for the San Miguel Community Services District.

**Table O-8 San Miguel CSD Exposure by Property Types**

PROPERTY TYPE	STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE
Agricultural	5	\$32,965,309	\$32,965,309	\$65,930,618
Commercial	23	\$6,603,516	\$6,603,516	\$13,207,032
Exempt	4	\$1,974,806	\$1,974,806	\$3,949,612
Industrial	9	\$487,823	\$731,735	\$1,219,558
Mixed Use	24	\$5,306,044	\$5,306,044	\$10,612,088
Mobile Home	23	\$4,053,412	\$2,026,706	\$6,080,118
Multi Family Residential	44	\$9,402,774	\$4,701,387	\$14,104,161
Residential	771	\$155,238,174	\$77,619,087	\$232,857,261
Vacant Improved	10	\$473,599	\$473,599	\$947,198
Total	913	\$216,505,457	\$132,402,189	\$348,907,646

Source: San Luis Obispo County Assessor Data November 15, 2024, WSP GIS Analysis; San Miguel LPT noted the 33 Commercial, 35 mobile home, 25 multi-family residential, and 830 residential properties; difference may be attributable to undeveloped properties vs developed (shown in table above).

#### O.3.2.2 Critical Facilities and Infrastructure

A critical facility is defined as one that is essential in providing utility or direction either during the response to an emergency or during the recovery operation. See Section 5 of the Base Plan for more details on the definitions and categories of critical facilities.

An inventory of critical facilities in the San Miguel Community Services District based on San Luis Obispo County GIS data as well as structures obtained from the Homeland Infrastructure Foundation-Level Dataset (HIFLD) is provided in and illustrated in **Error! Reference source not found.** Table O-10 lists additional critical assets identified by the Planning Team.. Refer to





Section 5.2 of the Base Plan for more information on the assets used throughout this Annex and County-wide analyses.

**Table O-9 San Miguel CSD's Critical Facilities**

FEMA LIFELINE CATEGORY	COUNTS
Communications	4
Energy	2
Food, Hydration, Shelter	-
Hazardous Material	-
Health and Medical	1
Safety and Security	6
Transportation	8
Water Systems	-
Total	21

Source: San Luis Obispo County, CalARP, HIFLD, National Bridge Inventory, National Inventory of Dams, FCWCD, WSP Analysis

The following table lists the additional assets within the District as identified by the Planning Team. Additional discussion on assets in San Miguel can be found below.

**Table O-10 Critical Assets Identified by San Miguel Planning Team**

NAME OF ASSET	TYPE	REPLACEMENT VALUE
San Miguel Fire Department	EI	\$5,500,000
PG&E Substation	EI	\$6,000,000
Version Substation	EI	\$750,000
River Road Bridge	EI	\$5,000,000
Mission San Miguel	NA*	\$15,000,000
Rios Caledonia	NA*	\$3,000,000
Highway 101	VF	\$6,000,000
Water Infrastructure	EI	\$50,000,000
Waste water treatment plant	EI	\$1,500,000
Natural gas line	EI	\$5,000,000
Union Pacific Railroad	EI	\$3,000,000
CHC	VF	\$1,000,000
Lillian Larson School	VF	\$5,000,000
Gallo Wines	VF	\$90,494,746

Source: San Miguel CSD Planning Team.

EI: Essential Infrastructure. NA: Natural Asset. VF: Vulnerable Facility. \* = State registered landmark

### ***O.3.2.3 Emergency Services Facilities***

Emergency services facilities in San Miguel include a health center, day care, fire department, and schools. San Miguel is served by the San Miguel Joint Union School District (SMJUSD) for Kindergarten through Grade 8. The District operates Lillian Larsen Elementary School in San Miguel. There is also a preschool on campus which is operated by the State. The community is served by non-profit Community Health Centers of the Central Coast. Fire protection is provided through San Miguel Fire, which has mutual aid agreements with CalFire and Camp Roberts.

### ***O.3.2.4 Lifeline Utility Systems***

Lifeline utility systems in San Miguel include one electrical substation, natural gas lines, 3 well sites, 2 water storage tanks with 700,000 gallons of storage capacity, water pipelines, and a



wastewater treatment facility. In 2013, all of San Miguel's water needs were met by two of its three wells. The San Miguel CSD also operates the Machado Wastewater Treatment Plant, which serves 90% of the District including areas east of the Salinas River.

#### *O.3.2.5 Transportation Systems*

The Planning Team identified the following critical transportation infrastructure; the River Road Bridge, Highway 101, and the Union Pacific Railroad. Mission Street is San Miguel's main street and primary commercial corridor. Highway 101 is the principal arterial in the region, and the River Road Bridge is the only crossing of the Salinas River between Paso Robles and Camp Roberts. The Union Pacific Railroad travels through the center of town. While it once played an important role in the economy of San Miguel, trains no longer stop in San Miguel.

#### *O.3.2.6 Historic and Cultural Resources*

There are two state historical landmarks within San Miguel that attract many visitors, Mission San Miguel Arcángel and Rios Caledonia Adobe. The Mission was founded in 1797 and has been occupied and administered by the Franciscan Friars of the Province of Saint Barbara since 1928. Rios Caledonia Adobe was built in 1835 and historically served as an inn and stage stop on the Mission Trail between San Francisco and Los Angeles. Both sites are an important part of the local heritage. Gallo Wines was also identified by the community as an important cultural resource.

#### *O.3.2.7 Natural Resources*

Natural resources are important to include in benefit-cost analyses for future projects and may be used to leverage additional funding for projects that also contribute to community goals for protecting sensitive natural resources. Awareness of natural assets can lead to opportunities for meeting multiple objectives. For instance, protecting wetlands areas protects sensitive habitat as well as attenuates and stores floodwaters. The San Miguel Community Plan (2016) designated the following combining designation that applies to the protection of special resources in the San Miguel community:

- Salinas River Corridor (SRA) – The Salinas River Corridor is home to sensitive riparian habitat and important wildlife migration corridors. It is also important for flood control and management of water resources.

The two primary plant communities in the area are willow-cottonwood riparian forest and non-native annual grassland. Several special-status plant species inhabit the San Miguel community and are detailed in the San Miguel Community Plan.

#### *O.3.2.8 Economic Assets*

According to the San Miguel Community Plan, San Miguel's history has been marked by boom and bust cycles, often in response to fluctuations in the agricultural economy and the military's use of nearby Camp Roberts. The major economic sectors in San Miguel are agriculture, tourism, and manufacturing. According to the San Miguel Community Plan, agriculture in the area has shifted over time from cattle to most recently dry-farmed pasture crops such as alfalfa, almonds, olives, and wine grapes. The Community Plan states that as of 2016 San Miguel qualified under state law as a disadvantaged community based on per capita income. Few "head-of-household" jobs exist in the community, and many residents commute to Paso Robles or beyond for employment and to obtain many basic goods and services.

### **O.3.3 Estimating Potential Losses**

Note: This section details vulnerability to specific hazards of high or medium significance, where quantifiable, and/or where (according to Planning Team input) it significantly differs from that of the overall County.



**Error! Reference source not found.** under Section O.3.2 summarizes San Miguel's exposure in terms of number and value of parcels falling within the District's boundaries. San Luis Obispo County parcel and assessor data was used to calculate the improved value of parcels. The most vulnerable structures are those in the floodplain (especially those that have been flooded in the past), unreinforced masonry buildings, and buildings built prior to the introduction of modern-day building or land regulatory codes. According to San Miguel Fire, San Miguel has not experienced a hazardous event in the past 75 years. However, the community is still vulnerable to several hazards which are discussed below. See Section 5 of the Base Plan for more information on assets, parcel analysis methodology, and hazard profiles.

### ***O.3.3.1 Adverse Weather: Thunderstorms/Heavy Rain/Lightning/Dense Fog/Freeze***

Adverse weather was rated as High Significance for the San Miguel CSD and may include thunderstorms, heavy rain, hail, lightning, dense fog, freeze, high winds, tornadoes, and extreme heat. San Miguel receives about 15 inches of rainfall annually, most of which occurs in the winter, increasing the risk of flash flooding, erosion, and stormwater-related infrastructure issues. Hazardous trees are also a significant concern of the community. Older neighborhoods in particular are distinguished by the presence of mature trees which may be downed by winds and storms. Refer to Section 5 of the Base Plan for further analysis on hazardous trees within the County. The tables below show key climate variables such as extreme temperatures, precipitation totals, and the frequency of specific weather events. Note that Paso Robles weather station is the nearest official reporting site to San Miguel CSD.

**Table O-11 Paso Robles Municipal Airport Climate Summary Table – Weather (Period of Record: 03/18/1952 - 04/20/2025)**

SUMMARY PERIOD	MONTHLY MEAN MAXIMUM TEMP.	MONTHLY MEAN MINIMUM TEMP.	DAILY EXTREME HIGH TEMP	DAILY EXTREME HIGH DATE	DAILY EXTREME LOW TEMP	DAILY EXTREME LOW DATE	MAXIMUM TEMP. ≥ 90°F MEAN # DAYS	MINIMUM TEMP. ≤ 32°F MEAN # DAYS
Winter	61.9 °F	33.9 °F	87 °F	12/4/1958	0 °F	1/6/1913	0	41.7
Spring	73.2 °F	41 °F	110 °F	5/31/1910	20 °F	3/2/1971	6.5	7.9
Summer	90.8 °F	49.6 °F	117 °F	8/13/1933	31 °F	6/15/1973	54.5	0
Fall	79.7 °F	41.8 °F	115 °F	9/7/2020	14 °F	11/17/1958	21.1	12.6
Annual	76.5 °F	41.6 °F	117 °F	8/13/1933	0 °F	1/6/1913	82.4	63.2

Source: Western Regional Climate Center (WRCC) <https://wrcc.dri.edu/>

\* Winter is defined as December, January, and February

\*\* Summer is defined as June, July, and August

**Table O-12 Paso Robles Municipal Airport Climate Summary Table – Precipitation (Period of Record: 03/18/1952 - 04/20/2025)**

SUMMARY PERIOD	PRECIP. MEAN	PRECIP. HIGH	PRECIP. HIGH YEAR	PRECIP. LOW	PRECIP. LOW YEAR	PRECIP. 1 DAY MAXIMUM	PRECIP. 1 DAY MAXIMUM DATE	PRECIP. ≥ 1.00 IN. MEAN # DAYS
Winter	9.06 in.	26.18 in.	1969	2.03 in.	1964	5.25 in.	12/6/1966	2.4
Spring	3.77 in.	12.84 in.	1995	0 in.	1997	4.7 in.	3/10/1995	0.7
Summer	0.13 in.	2.82 in.	2015	0 in.	1900	2.29 in.	7/19/2015	0
Fall	2.07 in.	7.64 in.	1900	0.02 in.	1980	3.88 in.	10/14/2009	0.3
Annual	14.88 in.	29.19 in.	1941	2.78 in.	2013	5.25 in.	12/6/1966	3.5

Source: Western Regional Climate Center (WRCC) <https://wrcc.dri.edu/>



\* Winter is defined as December, January, and February

\*\* Summer is defined as June, July, and August

### *O.3.3.2 Adverse Weather: High Wind and Tornado*

The overall significance rating of high wind and tornadoes in San Miguel CSD is rated **High**. The area frequently experiences strong winds during winter storms, which can lead to downed trees, power lines, and property damage. San Miguel's open terrain offers little natural wind protection, and much of the local infrastructure, including older homes and above-ground utilities, may not be built to current wind-resistant standards. The community is also characterized by mature trees, particularly in older neighborhoods, which pose additional risks during storms as falling limbs can damage property or block critical access routes.

Although tornadoes are rare in San Luis Obispo County, the EF1 tornado in nearby Los Osos in February 2024 illustrates that such events are possible and could impact inland communities like San Miguel. Additionally, the area's rural layout and limited emergency access routes can slow response and recovery efforts after wind-related incidents.

### *O.3.3.3 Adverse Weather: Extreme Heat*

Extreme heat is a **high** significance hazard for the San Miguel CSD. The monthly mean high summer temperature for the Paso Robles Municipal Airport, the closest NOAA weather station to the CSD with recent data, is 90.8°F; however, temperatures up to 117°F have been recorded (see Table O-11). Additionally, rising temperatures and more frequent heat waves are increasing the likelihood of more extreme heat events in the future.

As a small, rural community, the San Miguel CSD is particularly vulnerable to extreme heat. Vulnerable populations, such as the elderly, children, and those with health conditions, are at higher risk for heat-related illnesses. With limited access to cooling centers and a volunteer-based fire department, the community may be strained in responding to medical emergencies during heat events.

Water resources are also at risk. Rising temperatures increase demand on San Miguel's water system, both for residential and agricultural irrigation. The surge in water use associated with extreme heat events can stress aging infrastructure and contribute to declining water quality in local wells. High temperatures can also reduce the efficiency of wastewater treatment processes and strain the CSD's capacity to manage basic services.

Energy use typically spikes during heatwaves as residents rely more heavily on air conditioning, which can in turn stress the power grid. Without backup systems prolonged outages could impact critical operations like water pumping and treatment. Additionally, sustained heat and dry conditions increase the risk of wildfire, threatening lives, homes, and essential services.

### *O.3.3.4 Dam Incidents*

Dam failure is rated as **Medium Significance** in San Miguel CSD. The San Miguel CSD is located downstream of the Salinas Dam and the Nacimiento Dam. Failure of either of these dams would cause water to rush down the Salinas River, whose river channel extends to within 100 yards of residences in San Miguel.

The Salinas Dam was constructed in 1941 to supply water to Camp San Luis Obispo. Today, the dam is operated by the City of San Luis Obispo to supply water to the City and surrounding agricultural areas. Expansion of the dam was explored as part of the 2013 Salinas Reservoir Expansion Study, but it was found that the dam would not maintain structural integrity at the increased capacity. It was also found that the dam was vulnerable to failure in a prolonged earthquake, although the dam does meet design requirements at its current capacity. Overall,



failure of the Salinas Dam is a concern for San Miguel CSD, but to a more limited extent relative to the Nacimiento Dam.

The Nacimiento Dam is over 10 times larger than the Salinas Dam, holding nearly 500,000 acre feet of water. The inundation zone of the Nacimiento Dam extends much farther into San Miguel than does the Salinas Dam inundation zone (Figure O-2). Failure of this dam could cause very significant problems in San Miguel. Exposure to housing from potential dam failure hazards in the San Miguel CSD is especially severe, with 301 structures and 736 people within the Nacimiento Dam inundation zone (Table O-13). Three critical facilities, all bridges, also exist in this area (Table O-14). See Appendix G for details of these facilities. Refer to Section 5.3.8 *Dam Incidents* of the Base Plan for additional discussion on the potential impacts of dam incidents in the County.

**Table O-13 San Miguel CSD's Estimated Losses by Property Type based on Salinas Dam Inundation Extents**

PROPERTY TYPE	STRUCTURE COUNT	POPULATION
Agricultural	1	-
Mobile/Manufactured Homes	2	5
Multi-Family Residential	5	12
Residential	291	719
Vacant Improved	2	-
Total	301	736

Source: San Luis Obispo Assessor Data November 15, 2024, Division of Safety of Dams, Department of Water Resources, WSP GIS Analysis

**Table O-14 Critical Facility Assets Exposed to Dam Inundation in San Miguel CSD by FEMA Lifeline**

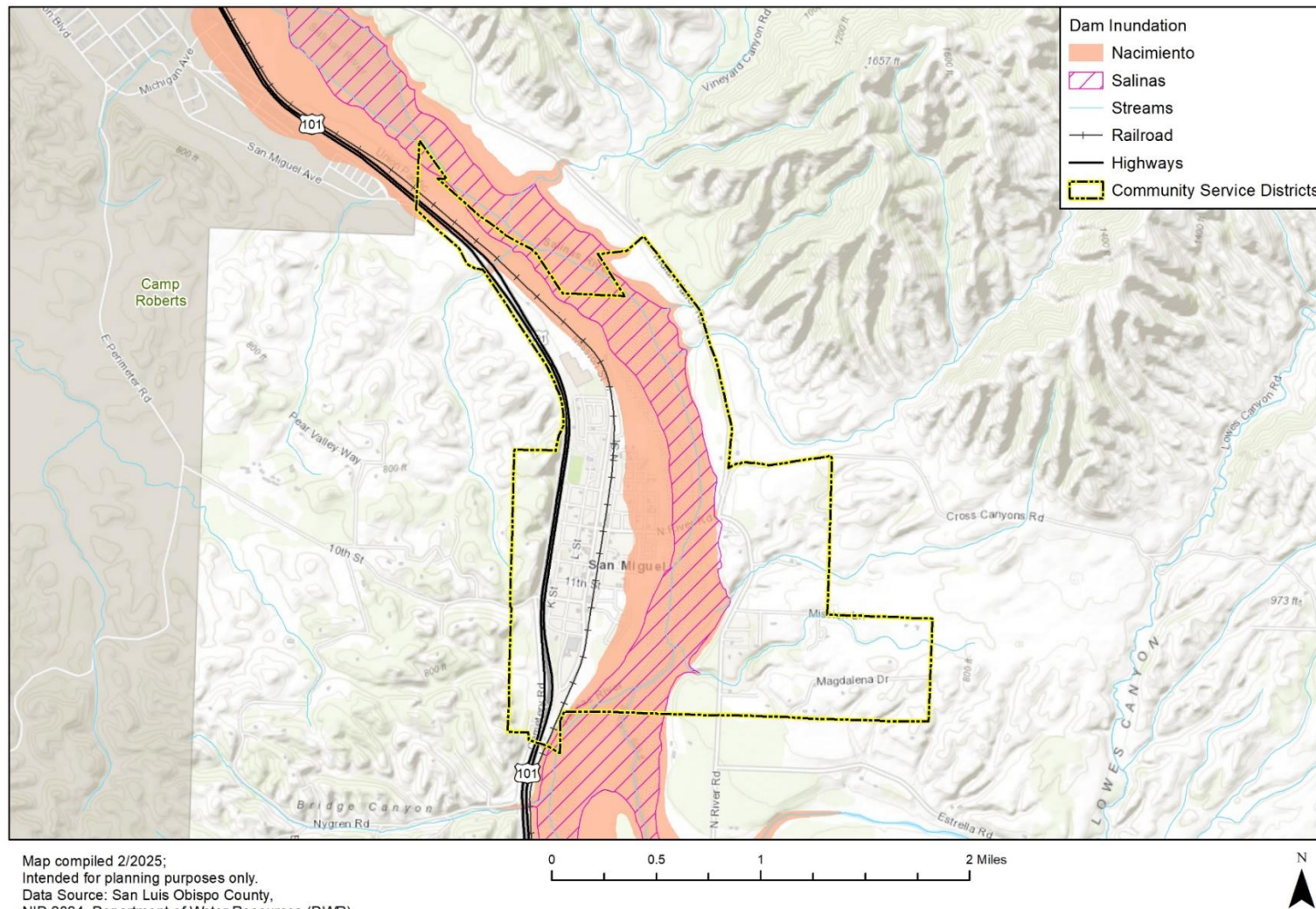
COMMUNICATIONS	ENERGY	FOOD, HYDRATION, FUEL	HAZARDOUS MATERIAL	HEALTH AND MEDICAL	SAFETY AND SECURITY	TRANSPORTATION	WATER SYSTEMS	TOTAL COUNT
-	-	-	-	-	-	3	-	3

Source: San Luis Obispo County, Division of Safety of Dams, Department of Water Resources, CalARP, HIFLD, NBI, NID, FCWCD, WSP Analysis





Figure O-2 Dam Inundation Extents in San Miguel Community Services District





### *0.3.3.5 Drought and Water Shortage*

Drought was rated as **high significance** by the San Miguel CSD and has historically contributed to the boom-and-bust economic cycles in the community in terms of the agricultural sector. The cultivation of water-intensive crops, particularly alfalfa and almonds, makes the agricultural community in San Miguel especially vulnerable to water shortage. According to the San Miguel Community Plan, in 2010 San Miguel's gross water use was 239 acre-feet; this is expected to increase to 483 acre-feet per year by 2035. Concentrated pumping within the greater Paso Robles Groundwater Basin has created localized depressions and has depleted groundwater reserves. Information related to the Sustainable Groundwater Management Act and the Paso Robles Groundwater Basin can be found in Section 5 of the Base Plan.

Drought is a recurring hazard in the San Miguel CSD, posing significant risks to water supply, emergency services, infrastructure, and community resilience. As a slow-onset hazard, drought impacts can extend over multiple years, leading to water shortages, increased costs, and economic stress on residents and businesses. The San Miguel CSD is particularly vulnerable due to its heavy reliance on local groundwater from the Paso Robles Groundwater Basin, a high-priority and critically overdrafted basin. Unlike some other communities in San Luis Obispo County, San Miguel has no access to imported water, making groundwater management and conservation essential for long-term sustainability.

Additionally, San Miguel is a low-income community with a high portion of underserved migrant populations. These vulnerable populations may lack the resources to adapt to water shortages or increased utility costs. Beyond water access, fire protection is a major concern, as San Miguel currently operates with only a single full-time Fire Chief and relies on a paid-call firefighter staffing model. Securing funding for additional full-time firefighters is a priority, as increased staffing would provide a higher level of emergency response, particularly during extreme drought conditions when fire risk increases. Additionally, water pressure and storage capacity in the San Laurence Terrace area need improvements to ensure adequate fire flow in emergencies. A critical vulnerability exists at the water supply cross-connection to the River Road Bridge, as damage to this infrastructure would leave the San Laurence Terrace portion of the community without drinking water or necessary fire suppression resources.

Historically, droughts have significantly affected San Miguel and the surrounding region, with notable events in 2012-2016 and 2020-2022 causing sharp declines in groundwater levels and increased conservation mandates. During prolonged droughts, pumping costs rise as wells must extract water from deeper levels, potentially leading to water quality degradation due to increased salinity or contamination risks. The economic impacts extend beyond the water system, affecting local agriculture, small businesses, and residential households facing higher water rates and usage restrictions. Additionally, climate change projections indicate that reduced precipitation and rising temperatures may exacerbate future drought conditions, further straining water resources.

### *0.3.3.6 Earthquake and Liquefaction*

Earthquake was rated as High Significance by the San Miguel CSD. There are no mapped active or potentially active faults in San Miguel, though the community is still vulnerable to earthquakes from regional faults. The San Simeon earthquake in 2003 was centered about 30 miles from San Miguel, and caused damage to Mission San Miguel Arcángel, forcing it to close to the public temporarily. Restoration and retrofitting are still ongoing and are expected to total \$15 million. Some buildings in the downtown area between 11<sup>th</sup> and 14<sup>th</sup> Streets date back to the early 1900s and may also be vulnerable to an earthquake. The Sims Hotel, specifically, has been identified as an unreinforced masonry building in need of retrofit per Title 19 of the County Code and SB 547.



Liquefaction also poses a risk to portions of the San Miguel CSD. The following tables, show the properties and critical facilities in zones of liquefaction risk. As shown in **Error! Reference source not found.** below, proximity to the Salinas River is the most significant indicator of liquefaction risk in the community. Based on this analysis there are 913 properties exposed to liquefaction risk with a total value of over \$348 million. Residential properties are the most vulnerable property type to liquefaction in Nipomo, with a combined total of 838 properties (including multi-family residential and mobile homes) with a total value of over \$253 million. , Most properties are at moderate liquefaction risk, as well as 15 out of the district's 20 critical facilities, as indicated in Table O-16. Very few properties are located in an area of high liquefaction risk.

**Table O-15 San Miguel CSD's Improved Properties Exposed to Liquefaction Potential by Property Type**

PROPERTY TYPE	STRUCTURE COUNT HIGH	STRUCTURE COUNT MODERATE	STRUCTURE COUNT LOW	TOTAL STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATIO N
Agricultural	1	1	3	5	\$32,965,309	\$32,965,309	\$65,930,618	-
Commercial	-	23	-	23	\$6,603,516	\$6,603,516	\$13,207,032	-
Exempt	-	4	-	4	\$1,974,806	\$1,974,806	\$3,949,612	-
Industrial	-	9	-	9	\$487,823	\$731,735	\$1,219,558	-
Mixed Use	-	24	-	24	\$5,306,044	\$5,306,044	\$10,612,088	-
Mobile/Manufacture d Homes	-	6	17	23	\$4,053,412	\$2,026,706	\$6,080,118	57
Multi-Family Residential	-	43	1	44	\$9,402,774	\$4,701,387	\$14,104,161	109
Residential	2	671	98	771	\$155,238,174	\$77,619,087	\$232,857,261	1,904
Vacant Improved	-	6	4	10	\$473,599	\$0	\$473,599	-
Total	3	787	123	913	\$216,505,457	\$131,928,590	\$348,434,047	2,070

Source: San Luis Obispo Assessor Data November 15, 2024, WSP GIS Analysis

**Table O-16 San Miguel CSD's Critical Facilities in Moderate Liquefaction Hazard Zone**

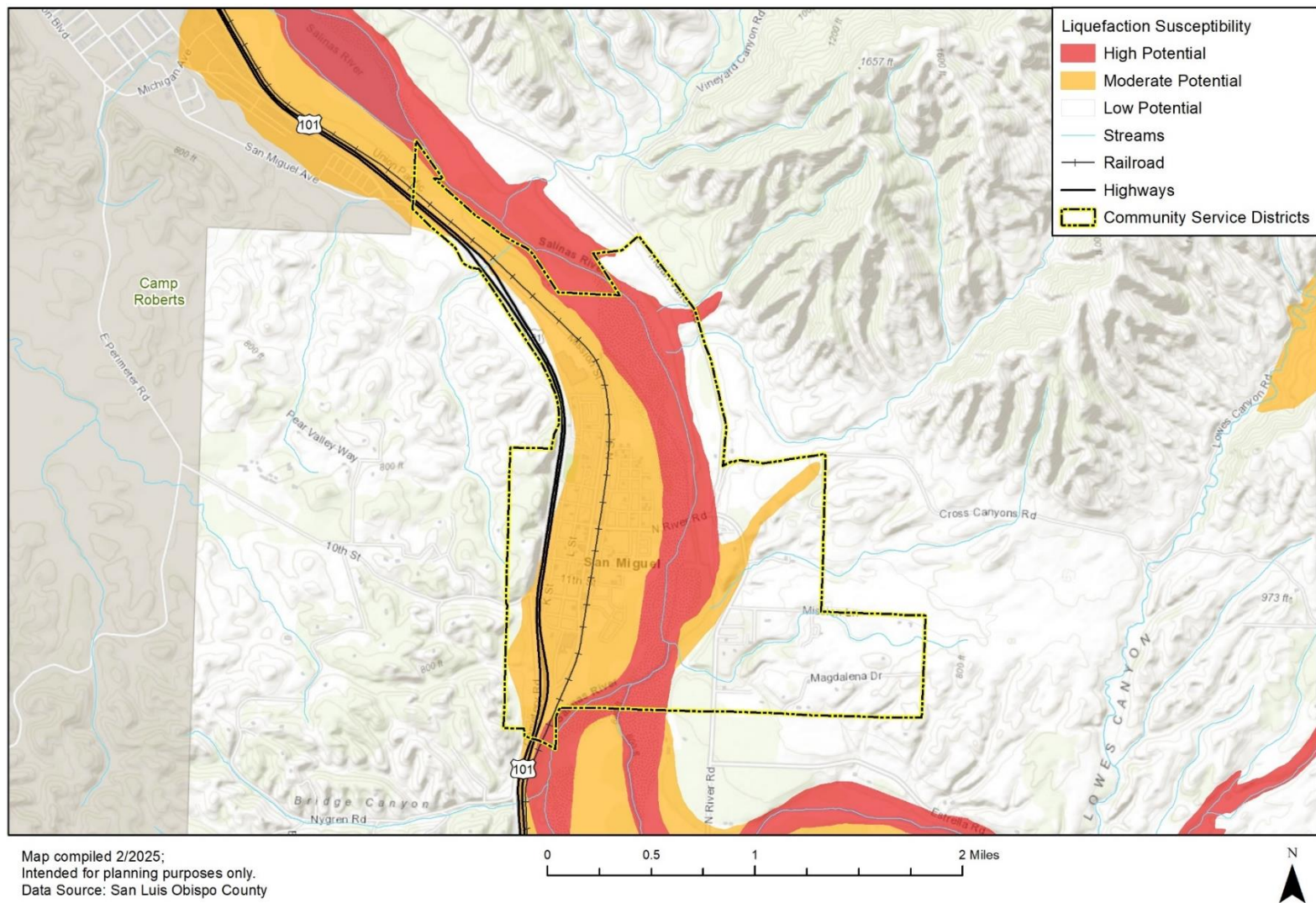
LIQUEFACTION SUSCEPTIBILITY	COMMUNICATIONS	ENERGY	FOOD, HYDRATION, SHELTER	HAZARDOUS MATERIAL	HEALTH AND MEDICAL	SAFETY AND SECURITY	TRANSPORTATION	WATER SYSTEMS	TOTAL COUNT
Medium Liquefaction Susceptibility	1	1	-	-	-	6	7	-	15
Low Liquefaction Susceptibility	3	1	-	-	-	-	1	-	5

Source: San Luis Obispo County, CalARP, HIFLD, NBI, NID, FCWCD, WSP Analysis





Figure O-3 San Miguel CSD Liquefaction Susceptibility







### *O.3.3.7 Flood*

Flooding remains a hazard of **medium** significance for the San Miguel CSD. The community's location along the Salinas River corridor, characterized by steep banks and sandy bottoms, contributes to its susceptibility to flooding. San Miguel is situated on two terraces connected by a steep slope, with water draining eastward into the river. Properties located on the lower terrace are primarily within areas identified as having a 1% annual chance of flooding. The absence of a comprehensive storm drain system leads to periodic inundation of low-lying areas during heavy rainfall, particularly along N Street and Mission Street between 12th and 16th Streets.

A comprehensive drainage study conducted in 2003 identified key areas for improvement, and the associated drainage plan is being implemented incrementally as new development occurs. Recent updates to floodplain mapping have provided more accurate delineations of flood-prone areas, assisting in better planning and mitigation efforts.

The San Miguel CSD does not participate separately in the National Flood Insurance Program (NFIP) but continues to support the County's participation and compliance with NFIP requirements. Coordination with the County ensures that floodplain management practices are upheld within the community.

In response to recent flood events, including significant rainfall in January 2023 that caused damage to infrastructure such as a sewer lift station, the CSD has recognized the need for enhanced flood mitigation measures. Efforts are also underway to update the District's Sewer System Management Plan (SSMP)

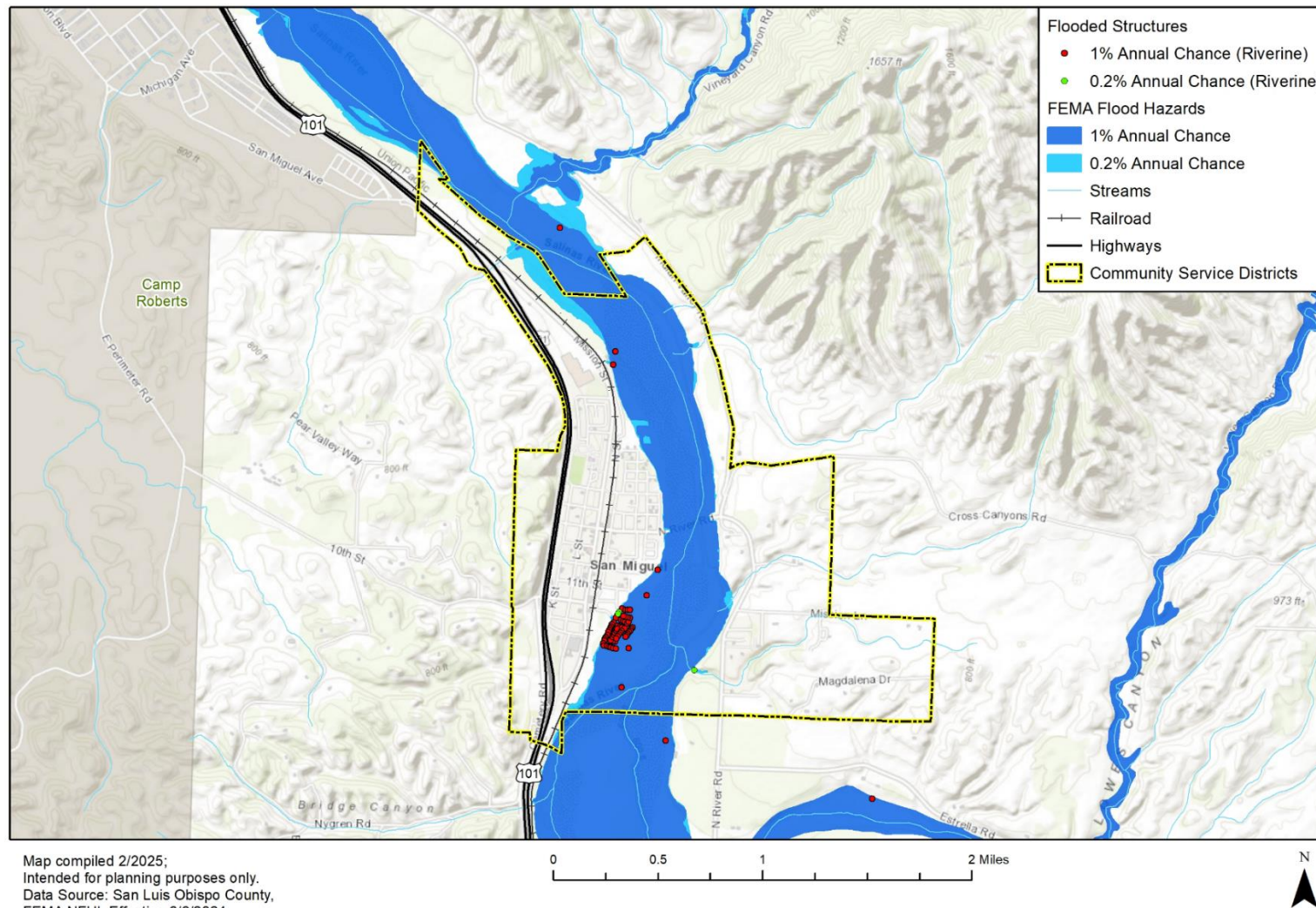
The CSD is also exploring opportunities to collaborate with regional partners and seek funding for projects aimed at reducing flood risk, such as the construction of new drainage infrastructure and the implementation of green infrastructure solutions. Public education and outreach remain integral components of the CSD's strategy to enhance community resilience against flooding hazards.

San Miguel does not participate separately in the National Flood Insurance Program (NFIP) but will continue to support the County's participation in and compliance with the NFIP. Further information on this hazard at the county level can be found in Section 5.3.13 of the base plan.

Figure O-4, below, shows FEMA flood hazard areas and flooded parcels in the CSD.



**Figure O-4 FEMA Flood Hazard Areas and Flooded Parcels in San Miguel Community Services District**





## Values at Risk

**Table O-17 San Miguel CSD's FEMA 1% Annual Chance Flood Hazard by Property Type**

PROPERTY TYPE	PROPERTY COUNT	IMPROVED VALUE	CONTENT VALUE	TOTAL VALUE	LOSS ESTIMATE	POP.
Agricultural	1	\$6,003	\$6,003	\$12,006	\$3,002	-
Mobile/Manufactured Homes	1	\$288,432	\$144,216	\$432,648	\$108,162	2
Multi-Family Residential	1	\$83,626	\$41,813	\$125,439	\$31,360	2
Residential	59	\$14,399,806	\$7,199,903	\$21,599,709	\$5,399,927	146
Total	62	\$14,777,867	\$7,391,935	\$22,169,802	\$5,542,451	151

Source: Source: San Luis Obispo Assessor Data November 15, 2024, FEMA NFHL Effective Date 6/6/2024, WSP GIS Analysis

**Table O-18 San Miguel CSD's FEMA 0.2% Annual Chance Flood Hazard by Property Type**

PROPERTY TYPE	PROPERTY COUNT	IMPROVED VALUE	CONTENT VALUE	TOTAL VALUE	LOSS ESTIMATE	POP.
Residential	2	\$426,519	\$213,260	\$639,779	\$159,945	5
Vacant Improved	1	\$122,114	\$0	\$122,114	\$30,529	-
Total	3	\$548,633	\$213,260	\$761,893	\$190,473	5

Source: Source: San Luis Obispo Assessor Data November 15, 2024, FEMA NFHL Effective Date 6/6/2024, WSP GIS Analysis

For the 1% annual chance flood hazard, San Miguel CSD has an estimated \$22.1 million in total property value at risk, with over \$14.7 million in improved structural value and \$7.3 million in estimated contents value. The highest concentration of value is within the residential sector, which alone represents over \$21.5 million in total value. The estimated loss across all property types in the 1% annual chance flood zone is over \$5.5 million, with additional exposure in mobile homes, multifamily housing, and agricultural uses. In the 0.2% annual chance zone, additional property exposure is limited but includes approximately \$762,000 in total value, most of which is residential.

## Population at Risk

A total of 151 people are estimated to live in the 1% annual chance flood zone, primarily within single-family and multifamily residential structures. The 0.2% annual chance zone contains an additional five residents, reflecting a modest increase in population exposure. While the overall number of exposed individuals is relatively low, the presence of vulnerable housing types, such as mobile and multifamily homes, suggests the need for targeted mitigation and preparedness efforts.

## Critical Facilities at Risk

No critical facilities within San Miguel CSD are currently mapped within the FEMA 1% or 0.2% annual chance flood hazard zones. However, this does not eliminate the possibility of flooding impacts to key infrastructure, particularly during more localized or unanticipated storm events. Continued monitoring, site-specific analysis, and coordination with County emergency management remain essential to ensure critical services remain resilient under future conditions. The LPT noted that the community of San Miguel is bisected by the Salinas river. Due to the river crossing the community water supplies are vulnerable to catastrophic loss in the event that there is a failure of the River Road Bridge. Loss of the bridge, and the pipeline in it, can come from a significant earthquake, or it may be washed out due to a heavy rain event coupled with flooding.

### O.3.3.8 Landslide and Debris Flow

The San Miguel Community Service District gave landslides and debris flow a medium overall significance rating. As shown in Figure O-5, the district has areas with both moderate and high



potential for landslides and debris flow. According to the GIS analysis, there are a total of 123 properties with a total value of over \$77 million. Of the properties at risk, 99 are residential or multi-family property types. These properties are listed in Table O-19.

**Table O-19 Improved Properties Exposed to Landslide Potential**

PROPERTY TYPE	TOTAL STRUCTURE COUNT	IMPROVED VALUE	CONTENT VALUE	TOTAL VALUE	POPULATION
Agricultural	3	\$2,735,985	\$2,735,985	\$5,471,970	-
Mobile/Manufactured Homes	17	\$2,737,266	\$1,368,633	\$4,105,899	42
Multi-Family Residential	1	\$107,355	\$53,678	\$161,033	2
Residential	98	\$45,238,721	\$22,619,361	\$67,858,082	482
Vacant Improved	4	\$275,734	\$0	\$275,734	-
Total	123	\$51,095,061	\$26,777,656	\$77,872,717	526

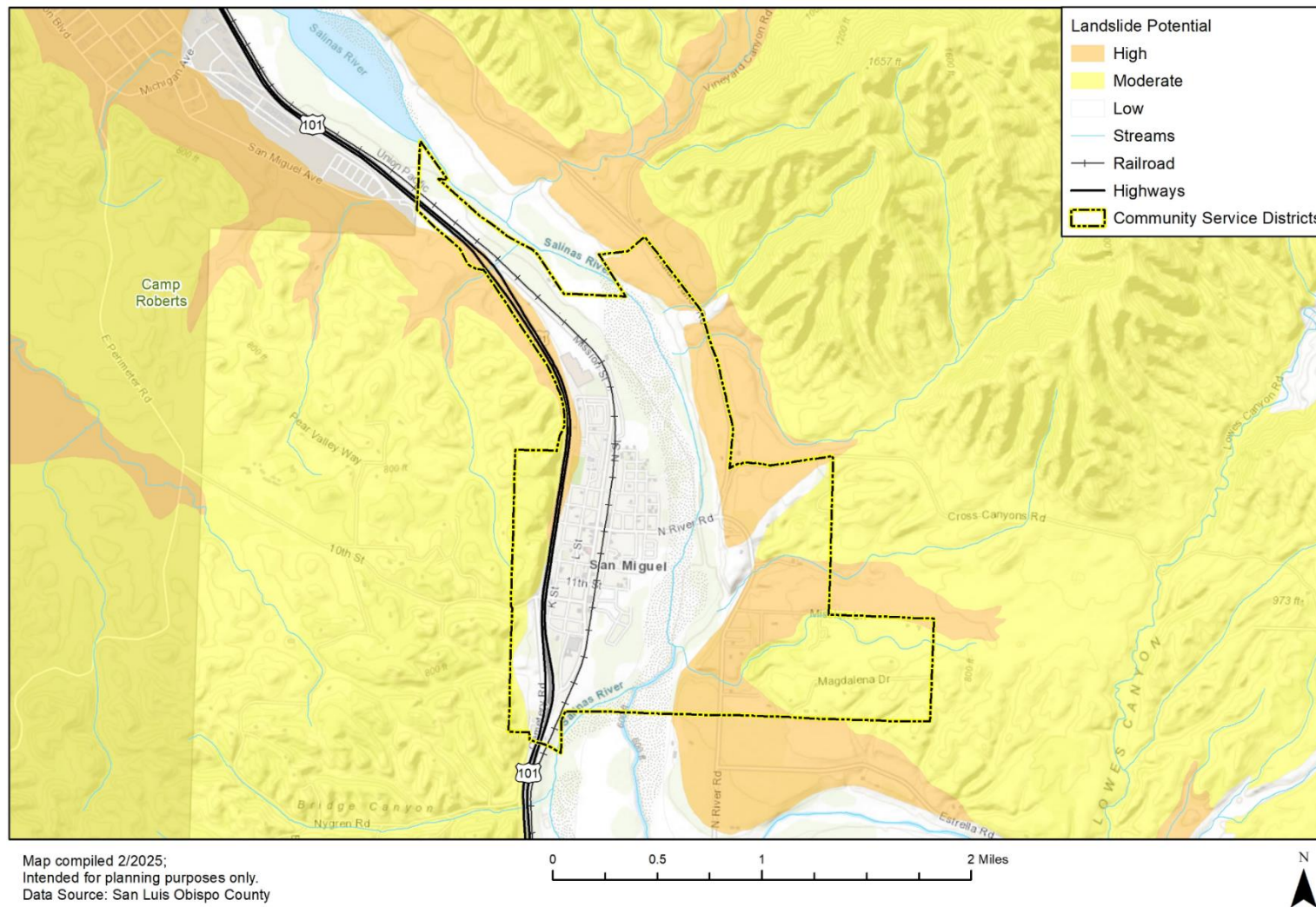
Source: San Luis Obispo Assessor Data November 15, 2024, WSP GIS Analysis

The areas in San Miguel that have landslide potential are seen below in Figure O-5. Landslide potential looks to be concentrated near the borders of the service district as well as North River Road in the southern part of the service district.





Figure O-5 Landslide Potential Areas in San Miguel Community Services District







#### O.3.3.9 Wildfire

Wildfire is a **high significance** hazard for the San Miguel CSD and recently CalFire has designated San Miguel as an area at increased risk of wildfire. San Miguel is located in a rural area surrounded by rolling hills, oak woodlands, dry grasslands, and agricultural lands, which create abundant natural fuel for wildfire. During the summer and fall months, the region experiences prolonged dry conditions, high temperatures, and strong winds that can accelerate fire spread throughout the district. The district's fire station is also located in a high wildfire hazard zone, which poses a significant threat to the district's ability to respond quickly and efficiently to a fire emergency.

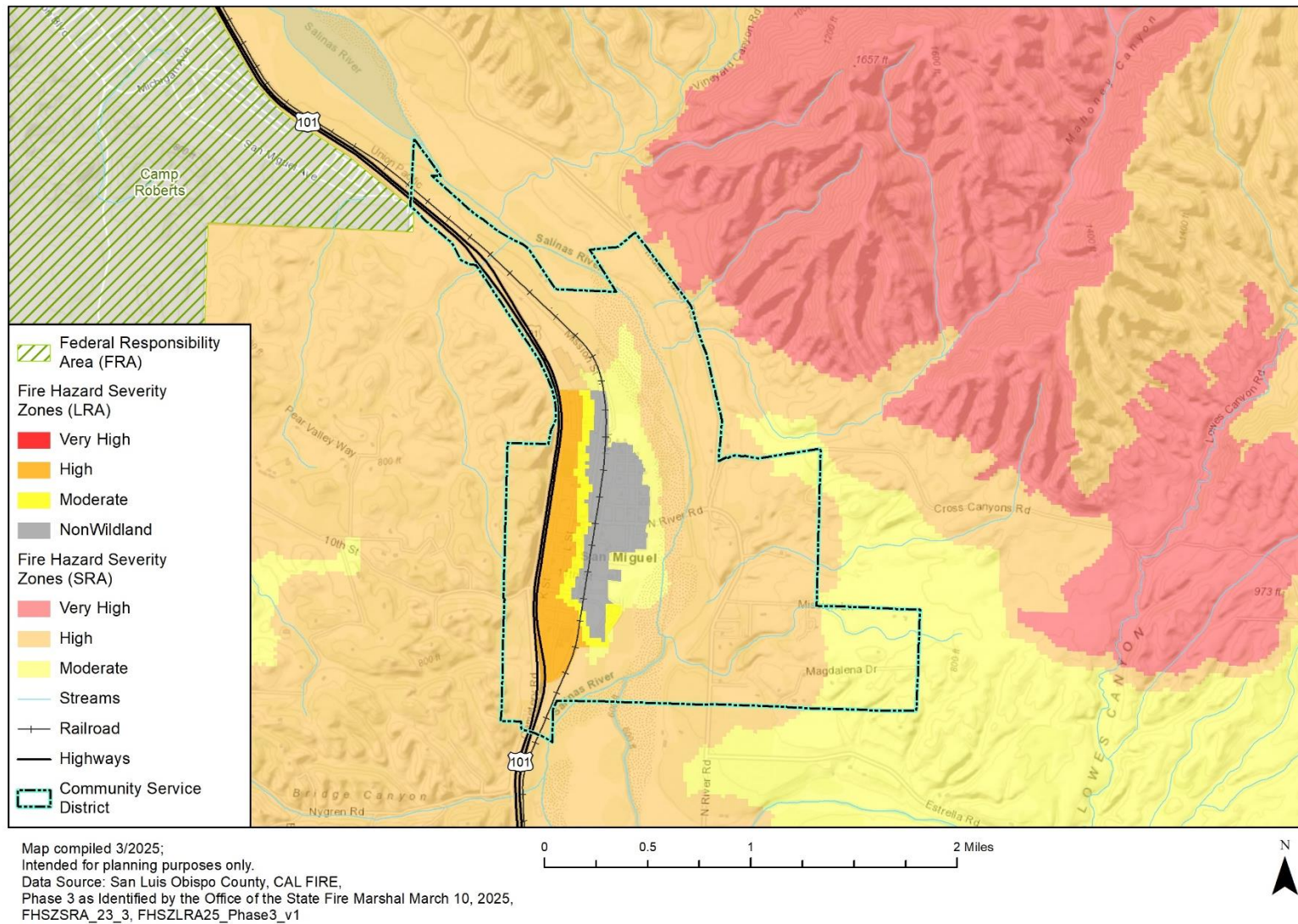
In San Miguel CSD, 532 properties are situated within wildfire hazard exposure zones ranging from moderate to very high risk. Of these, 304 properties are located in the High Fire Severity Zone and 228 properties fall within the Moderate Fire Hazard Severity zone. Collectively, these properties represent a total assessed value of \$236,857,724 and impact approximately 1,176 residents across all fire hazard severity zones. Table O-20 San Miguel CSD's Improved Properties Exposed to Fire Hazard Severity Zones by Property Type shows the properties in the district exposed to Fire Hazard Severity Zones. Figure O-6 depicts the Fire Hazard Severity Zones in San Miguel CSD.

GIS analysis shows the critical facilities in San Miguel CSD that are exposed to fire hazard severity, categorizing them by severity level and facility type. The exposure of these critical assets to wildfire hazards poses significant risks to communications. GIS analysis shows that there is a total of sixteen (16) critical facilities that fall in the high fire severity zone rating, none that fall into the very high and three (3) critical facilities moderate fire hazard severity zone rating.

**Table O-20 San Miguel CSD's Improved Properties Exposed to Fire Hazard Severity Zones by Property Type**

PROPERTY TYPE	STRUCTURE COUNT VERY HIGH	STRUCTURE COUNT HIGH	STRUCTURE COUNT MODERATE	TOTAL STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATION
Agricultural	-	4	1	<b>5</b>	\$32,965,309	\$32,965,309	\$65,930,618	-
Commercial	-	9	11	<b>20</b>	\$6,455,098	\$6,455,098	\$12,910,196	-
Exempt	-	1	2	<b>3</b>	\$1,974,806	\$1,974,806	\$3,949,612	-
Industrial	-	1	2	<b>3</b>	\$75,185	\$112,778	\$187,963	-
Mixed Use	-	7	9	<b>16</b>	\$2,519,999	\$2,519,999	\$5,039,998	-
Mobile/Manufactured Homes	-	17	3	<b>20</b>	\$3,282,326	\$1,641,163	\$4,923,489	49
Multi-Family Residential	-	18	11	<b>29</b>	\$6,247,393	\$3,123,697	\$9,371,090	72
Residential	-	240	187	<b>427</b>	\$89,398,773	\$44,699,387	\$134,098,160	1,055
Vacant Improved	-	7	2	<b>9</b>	\$446,599	\$0	\$446,599	-
<b>Total</b>	<b>0</b>	<b>304</b>	<b>228</b>	<b>532</b>	<b>\$143,365,488</b>	<b>\$93,492,236</b>	<b>\$236,857,724</b>	<b>1,176</b>

Source: San Luis Obispo Assessor Data November 15, 2024, CAL FIRE - FHSZ Phase 3 March 10, 2025, WSP GIS Analysis

**Figure O-6 Fire Hazard Severity Zones in San Miguel Community Services District**



### O.3.3.10 Hazardous Materials

The San Miguel LPT rated hazardous materials incidents as having **medium** overall significance. The Cal OES Spill Release Reporting Center reports 18 hazardous materials incidents in the San Miguel CSD from January 1<sup>st</sup>, 2019 through December 20<sup>th</sup>, 2024. This likely excludes a number of unreported minor spills. The 18 reported incidents constitutes 1.54% of the hazardous materials incidents reported countywide during the same time frame and averages out to roughly 1.16 incidents per year.

## O.4 Capability Assessment

Capabilities are the programs and policies currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. This capability assessment is divided into five sections: regulatory mitigation capabilities, administrative and technical mitigation capabilities, fiscal mitigation capabilities, mitigation outreach and partnerships, and other mitigation efforts.

To develop this capability assessment, the jurisdictional planning representatives used a matrix of common mitigation activities to inventory policies or programs in place. The team then supplemented this inventory by reviewing additional existing policies, regulations, plans, and programs to determine if they contributed to reducing hazard-related losses.

During the plan update process, this inventory was reviewed by the jurisdictional planning representatives and Wood consultant team staff to update information where applicable and note ways in which these capabilities have improved or expanded. In summarizing current capabilities and identifying gaps, the jurisdictional planning representatives also considered their ability to expand or improve upon existing policies and programs as potential new mitigation strategies. The San Miguel CSD capabilities are summarized below.

### O.4.1 Regulatory Mitigation Capabilities

Table O-21 identifies existing regulatory capabilities the CSD has in place to help with future mitigation efforts. Note that many of the regulatory capabilities that can be used for the District are within the County's jurisdiction. Refer to Section 6 Capability Assessment of the Base Plan for specific information related to the County's mitigation capabilities.

**Table O-21 San Miguel CSD Regulatory Mitigation Capabilities**

REGULATORY TOOL	YES/NO	COMMENTS
General plan	Yes	On file with the County
Zoning ordinance	Yes	On file with the County
Subdivision ordinance	Yes	On file with the County
Growth management ordinance	Yes	On file with the County
Floodplain ordinance	Yes	County
Other special purpose ordinance (stormwater, water conservation, wildfire)	Yes	County & Local Ordinances
Building code	Yes	County & Local Ordinances
Fire department ISO rating	Yes	03/3X
Erosion or sediment control program	Yes	County
Stormwater management program	Yes	County
Site plan review requirements	Yes	County & SMF Review
Capital improvements plan	Yes	Water, Wastewater Master Plans, & District Strategic Plan
Economic development plan	Yes	
Local emergency operations plan	Yes	



REGULATORY TOOL	YES/NO	COMMENTS
Other special plans	Yes	District Strategic
Flood Insurance Study or other engineering study for streams	Yes	
Elevation certificates (for floodplain development)	Yes	County

### Discussion on Existing Building Codes, Land Use and Development Regulations

In San Miguel CSD, land use authority is vested in the San Luis Obispo County Planning and Building department. This department ensures that all development projects comply with the county's General Plan and Land Use Ordinance (Title 22). The Planning Team noted that fire protection and life safety compliance within San Miguel are managed by the San Miguel Fire Department (SMFD), operating under the San Miguel Community Services District. SMFD is responsible for enforcing fire codes, ensuring adequate emergency access and implementing Wildland Urban Interface standard. Also, the Local Ordinance No. 01-2023, adopted by the San Miguel Community Services District, outlines specific fire protection requirements for new developments. This ordinance mandates compliance with the California Fire Code.

### O.4.2 Administrative/Technical Mitigation Capabilities

Table O-22 identifies the personnel responsible for activities related to mitigation and loss prevention in the San Miguel Community Services District

**Table O-22 Miguel CSD Administrative/Technical Mitigation Capabilities**

PERSONNEL RESOURCES	YES/NO	DEPARTMENT/POSITION/COMMENTS
Planner/engineer with knowledge of land development/land management practices	No	
Engineer/professional trained in construction practices related to buildings and/or infrastructure	No	District Engineer
Planner/engineer/scientist with an understanding of natural hazards	No	
Personnel skilled in GIS	No	
Full time building official	No	Fire Inspector/Plans Examiner
Floodplain manager	No	N/A
Emergency manager	Yes	Fire Chief
Grant writer	Yes	District Engineer
Other personnel	Yes	Fire Chief/Prevention Officer (Fire Inspector/Plans Examiner)
GIS Data Resources (Hazard areas, critical facilities, land use, building footprints, etc.)	Yes	
Warning systems/services (Reverse 9-11, outdoor warning signals)	Yes	

### O.4.3 Fiscal Mitigation Capabilities

Table O-23 identifies financial tools or resources that the City could potentially use to help fund mitigation activities.



**Table O-23 San Miguel CSD Fiscal Mitigation Capabilities**

FINANCIAL RESOURCES	ACCESSIBLE/ELIGIBLE TO USE (YES/NO)
Community Development Block Grants	Yes
Capital improvements project funding	Yes (County)
Authority to levy taxes for specific purposes	No
Fees for water, sewer, gas, or electric services	Yes
Impact fees for new development	Yes
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activities	No
Withhold spending in hazard prone areas	No

#### O.4.4 Mitigation Outreach and Partnerships

San Miguel CSD promotes disaster preparedness through its official websites, offering resources and links to agencies such as CAL FIRE, the American Red Cross, and the California Department of Public Health. Also, the district's 2022-2027 Strategic Plan emphasizes the importance of community engagement and proactive planning. San Miguel Fire provides Fire Safety Education and participates in Fire Prevention Week annually. San Miguel Fire is also working together with the local schools to develop a disaster response plan for the schools in San Miguel.

**Table O-24 San Miguel CSD Mitigation Outreach and Partnerships**

CAPABILITY TYPE	YES/NO	NOTES
Hazard Awareness/Education Campaigns	Yes	
Firewise	Yes	
Storm Ready	Yes	
Severe Weather Awareness Week	Yes	
School programs	Yes	
Other	None	
Methods Used to Communicate Hazard Info. to the Public	Yes	Ready SLO
Local News	Yes	KSBY
Social media	Yes	
Community Newsletters	Yes	
Utility Bill Inserts	Yes	
Community Events	Yes	Two Annually
Organizations that represent or work with underserved or vulnerable communities	Yes	
American Red Cross	Yes	
Salvation Army	Yes	
Veterans Groups	No	
Environmental/Conservation Groups	No	
Homeowner/Neighborhood Associations	Yes	
Chamber of Commerce	No	



CAPABILITY TYPE	YES/NO	NOTES
Community Organizations (Lions, Kiwanis, etc.)	Yes	

### O.4.5 Opportunities for Enhancement

Based on the capabilities assessment, the San Miguel Community Services District has several existing mechanisms in place that already help to mitigate hazards. There are also opportunities for the District to expand or improve on these policies and programs to further protect the community. Future improvements may include providing training for staff members related to hazards or hazard mitigation grant funding in partnership with the County and Cal OES. Additional training opportunities will help to inform District staff and board members on how best to integrate hazard information and mitigation projects into the District policies and ongoing duties of the District. Continuing to train District staff on mitigation and the hazards that pose a risk to the San Miguel Community Services District will lead to more informed staff members who can better communicate this information to the public.

## O.5 Mitigation Strategy

### O.5.1 Mitigation Goals and Objectives

The San Miguel CSD adopts the hazard mitigation goals and objectives developed by the County Planning Team and described in Section 7 of the Base Plan: Mitigation Strategy.

### O.5.2 Mitigation Actions

The Planning Team for the San Miguel Community Services District identified and prioritized the following mitigation actions based on the conducted risk assessment (refer to Table O-25). Actions were prioritized using the process described in Section 7.2.1 of the Base Plan. Background information and information on how each action will be implemented and administered, such as ideas for implementation, responsible office, potential funding, estimated cost, and timeline are also included. Actions with an asterisk (\*) are those that mitigate losses to future development. Due to limited resources and District responsibilities, including limited staff time, the San Miguel CSD has chosen not to undertake mitigation actions against adverse weather, dam incidents, or landslides at this time.



Table O-25 San Miguel Community Services District Mitigation Action Plan

ID	HAZARD(S) MITIGATED	DESCRIPTION/ BACKGROUND/ BENEFITS	LEAD AGENCY & PARTNERS	COST ESTIMATE & POTENTIAL FUNDING	2025 PRIORITY	TIMELINE	STATUS/ IMPLEMENTATION NOTES
SM.1	Wildfire	Improve ISO rating. As part of this project the District will sponsor a chipping program and green waste management program to support vegetation management/defensible space on properties within the district. The District will also provide public information to the Community Members on how to prepare homes creating Defensible Space, and Ready Set Go information as well. In addition the District is looking to purchase a 3,000 gallon tactical water tender.	San Miguel Fire Department; CAL FIRE	Moderate. Capital Funds	Medium	Short-term	Not started, researching grant funding options.
SM.2	Wildfire	Increase fire department staffing	San Miguel Fire Department	High. Property tax	Medium	Short-term	Not started, researching redistricting options to increase funding.
SM.3	Flood, Earthquake	Replace the current wastewater treatment facility to current seismic design standards	San Miguel CSD Wastewater Services Department; Monsoon Consultants	Very High. Grants from DWR, USDA, and CBDG	Medium	Short-term	Not started, researching grant funding for facilities improvements.
SM.4	Drought	Provide additional or larger water storage tanks	San Miguel CSD Water Services	High. San Miguel CSD General Fund and developers	Medium	3 years	Not started.
SM.5	Drought, Landslide, Earthquake	Replace aging water and wastewater underground piping that may be vulnerable to geologic hazards	San Miguel CSD Water Services; San Miguel Wastewater Services	High. San Miguel CSD General Fund and developers	Medium	3-4 years	In progress, projects are completed as funding becomes available
SM. 6	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Biological Incidents; Earthquake; Landslides; Wildfire; HazMat	San Miguel Fire Department Divestiture and redistricting required to enhance public safety preventing wildfires and other identified hazards. Divestiture of the San Miguel Fire Department from the San Miguel CSD would allow the Department to expand its Boundaries beyond the CSD Boundaries into the undeserved unincorporated	San Miguel Fire Department; CAL FIRE	Moderate. . San Miguel CSD General Fund, In-Kind (donated), Private Non-Profit	High	3-5 Years	New in 2025. Additional funds would be utilized to hire Fire Department personnel, expand, and improve facilities, maintain equipment, and provide funding for an Equipment Replacement Program to meet future equipment needs. All of which equates to a higher level of Public Safety



ID	HAZARD(S) MITIGATED	DESCRIPTION/ BACKGROUND/ BENEFITS	LEAD AGENCY & PARTNERS	COST ESTIMATE & POTENTIAL FUNDING	2025 PRIORITY	TIMELINE	STATUS/ IMPLEMENTATION NOTES
		county areas allowing for funding to become available to the San Miguel Fire Department via a tax transfer of a portion of the taxes collected by the County at a rate similar to the rate currently collected within the current CSD boundaries.					provided to the current District's and reconfigured District's population. Additional benefits to the could be a reduction in property / fire insurance based on an improved ISO rating due to the enhanced staffing levels and proximity to the properties within the reconfigured boundaries. This process had been approved by the San Miguel Community Services Board of Directors via resolution 2024-56 approved on November 21, 2024, recognized in the 2022 San Miguel CSD Strategic Plan, and recognized in the 2024 San Miguel CSD LAFCO MSR.
SM.7	Adverse Weather: Thunderstorm, Heavy Rain; Drought and Water Shortage; Dam Incident; Earthquake; Flood	Emergency Water Shortage/ Bridge Isolation. The community of San Miguel is bisected by the Salinas river. Currently the District has insufficient emergency water storage, especially on the east side of the Salinas river. Due to the river crossing the community water supplies are vulnerable to catastrophic loss in the event that there is a failure of the River Road Bridge. Loss of the bridge, and the pipeline in it, can come from a significant earthquake, or it may be washed out due to a Heavy Rain event coupled with flooding. (For reference the River Road Bridge and other crossings in the San Miguel area have been washed out numerous times in the past 75 years.)	San Miguel CSD Water Department; County of SLO, OES, FEMA, State Water Resources Control Board	Very High. FEMA Hazard Mitigation Assistance Grant (HMGP, FMA), Local Funds, In-Kind Donations	Medium	2-3 years	New in 2025.



## **O.6 Implementation and Maintenance**

Moving forward, the San Miguel Community Services District will use the mitigation action table in the previous section to track progress on implementation of each project. Implementation of the plan overall is discussed in Section 7 Implementation and Monitoring of the Base Plan.

### **O.6.1 Incorporation into Existing Planning Mechanisms**

The information contained within this plan, including results from the Vulnerability Assessment and the Mitigation Strategy will be used by the Community Services District to help inform the development of local plans, programs and policies. Understanding the hazards that pose a risk and the specific vulnerabilities to the jurisdiction will help in future capital improvement planning for the District. The County Planning and Building Department may utilize the hazard information when reviewing a site plan or other type of development applications with the boundaries of the San Miguel Community Services District area. As noted in Section 8 Implementation and Monitoring, the County's HMPC representatives from the San Miguel Community Services District will report on efforts to integrate the hazard mitigation plan into local plans, programs and policies and will report on these efforts at the annual HMPC and local Planning Team review meeting.

### **O.6.2 Monitoring, Evaluation and Updating the Plan**

The San Miguel Community Services District will follow the procedures to monitor, review, and update this plan in accordance with San Luis Obispo County as outlined in Section 8 of the Base Plan. The District will continue to involve the public in mitigation, as described in Section 8.3 of the Base Plan. The CSD General Manager will be responsible for representing the Community Services District in the County HMPC, and for coordination with County staff and departments during plan updates. The San Miguel Community Services District realizes it is important to review the plan regularly and update it every five years in accordance with the Disaster Mitigation Act Requirements as well as other State of California requirements.



## Annex P San Simeon Community Services District

### P.1 District Profile

#### P.1.1 Mitigation Planning History and 2025 Process

This annex was updated in 2025 to build upon the previous version created for the 2019 San Luis Obispo Hazard Mitigation Plan update. The previous HMP was not integrated into any planning mechanisms. The General Manager of the San Simeon Community Services District was the representative on the county Hazard Mitigation Planning Committee (HMPC) and took the lead for developing this annex in coordination with the San Simeon Community Services District (CSD) Local Planning Team (Planning Team). The local (District) Planning Team will be responsible for implementation and maintenance of the plan. Table P-1 summarizes the District's planning team for the plan revision process.

**Table P-1 San Simeon CSD Hazard Mitigation Plan Planning Team**

STAKEHOLDER GROUP	DEPARTMENT	TITLE
Local Planning Team	Administration	General Manager
	Administration	Office/bookkeeper
	Administration	GM/office asst
	Water/Sewer Operations	FRM Operations
Agencies involved in hazard mitigation activities	Cal Fire- Cambria Station 10	Unit Chief
Agencies that have the authority to regulate development	County Planning and Building	Senior Planer
Neighboring Communities	Cambria Community Services District	General Manager
Representatives of business academia, and other private orgs	San Simeon Chamber of Commerce	President
Representatives supporting underserved communities	County of San Luis Obispo Homeless Services Oversight Council	Director

More details on the planning process and how the jurisdictions, Services Districts, and stakeholders participated can be found in Section 3 of the Base Plan, as well as how the public was involved during the 2025 update.

#### P.1.2 District Overview

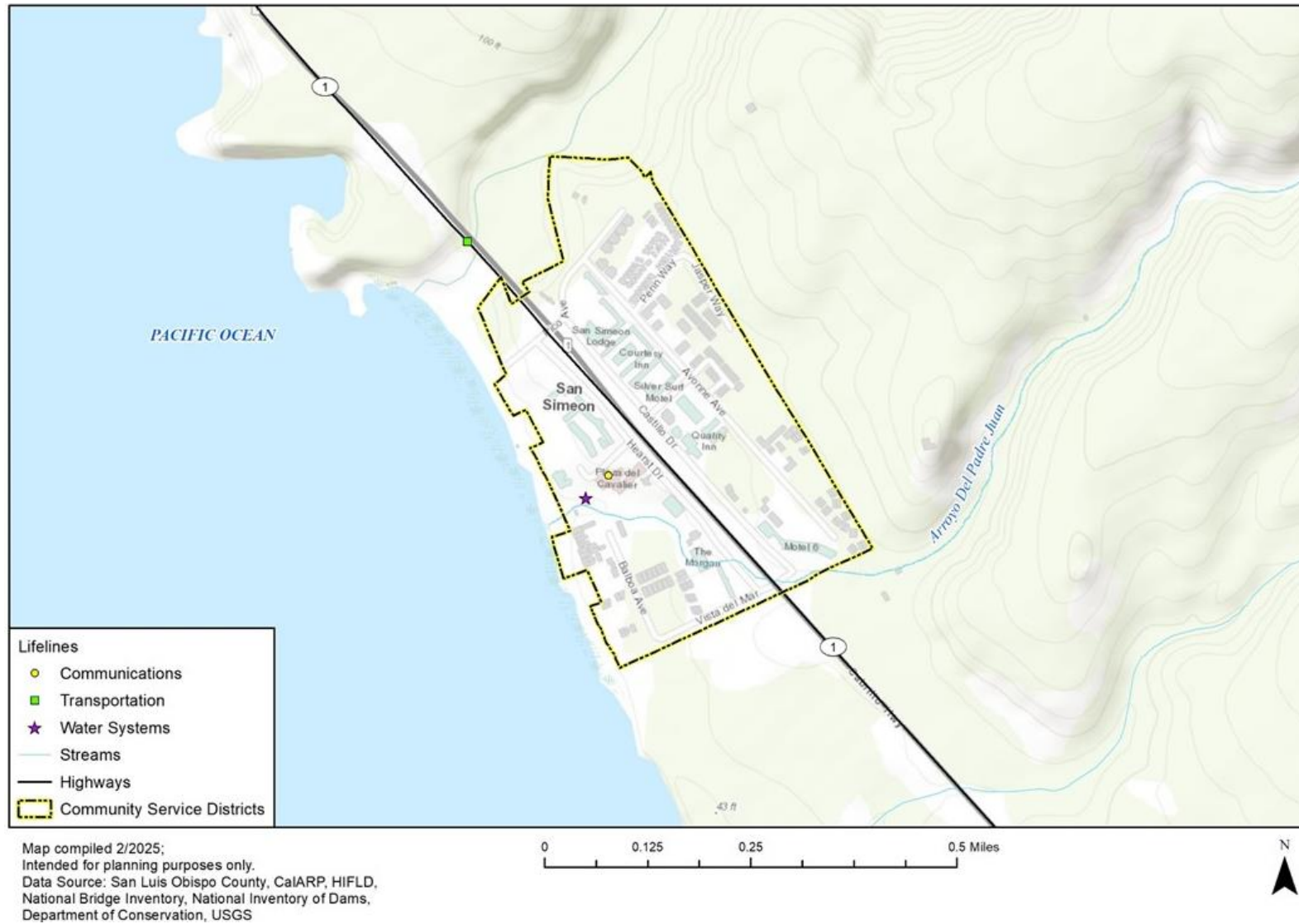
San Simeon is a small unincorporated community that is part of the North Coast planning area in San Luis Obispo County. The population was about 462 according to the 2010 Census. San Simeon is located along State Highway 1 about five minutes north of the community of Cambria. It is bordered on the west by the Pacific Ocean and on the east by open space owned by Hearst Corporation. Figure P-1 shows the San Simeon Community Services District boundaries and geographic context. The major land holding in the area is the Hearst Ranch, which encompasses 77,000 acres north of Pico Creek. San Simeon is located on a coastal plain; its climate is considered Mediterranean and is moderated somewhat by its proximity to the Pacific Ocean.

Founded in 1836, San Simeon was first established when the San Miguel Mission was secularized and divided into three distinct ranches: Piedras Blancas, Santa Rosa, and San

Simeon. In the years after its founding, the town became known for its whale watching. Modern development in the area began in the 1960s, and the primary economic activity in the area is now tourism. The San Simeon Community Services District was founded in 1961 for the purpose of providing San Simeon with safe, adequate and reliable utility services in an environmentally sensitive and economically responsible manner. Because tourism represents a major component of the CSD's economy, water use, and wastewater production notably increase in the spring and summer months. Recycled water service as well as reverse osmosis has been implemented in recent years, and a 150,000-gallon storage service with approximately 397 customer accounts are now offered in San Simeon.

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**Figure P-1 San Simeon Community Services District**



The U.S. Census Bureau estimated the San Simeon Census Designated Place's (CDP) 2023 population as 523, a 1.9% increase from 513 in 2012. Table P-2 shows an overview of key social and demographic characteristics of the CDP taken from the U.S. Census Bureau's American Community Survey.

**Table P-2 San Simeon CDP Demographic and Social Characteristics, 2018-2023**

SAN SIMEON CDP	2018	2023	% CHANGE
Population	583	513	-12%
Median Age	33.2	59.3	+78.6%
Total Housing Units	347	296	-14.7%
Housing Occupancy Rate	76.9%	58.4%	-24%
% of Housing Units with no Vehicles Available	12.7%	0%	100%
Median Home Value	\$609,717	\$687,000	+12.7%
Unemployment	8%	0%	100%
Mean Travel Time to Work (minutes)	13.2	NA	NA
Median Household Income	NA	\$54,705	NA
Per Capita Income	\$26,379	\$29,852	+13.2%
% of Individuals Below Poverty Level	6.1%	4%	-34.4%
# of Households	267	173	-35.2%
Average Household Size	2.09	1.74	-16.7%
% of Population Over 25 with High School Diploma	80.2%	53.5%	-33.3%
% of Population Over 25 with Bachelor's Degree or Higher	13.4%	4.1%	-69.4%
% with Disability	3.4%	4%	+17.6%

Source: U.S. Census Bureau American Community Survey 2018-2023 3-Year Estimates, [www.census.gov/](http://www.census.gov/)

Note: Data is for the San Simeon Census Designated Place (CDP) which may not have the same boundaries as the San Simeon Community Services District.

Table P-3 shows how the San Simeon CDP's labor force breaks down by occupation and industry estimates from the U.S. Census Bureau's 2023 American Community Survey.

**Table P-3 San Simeon CPD Employment by Industry (2023)**

INDUSTRY	# EMPLOYE D	% EMPLOYE D
Population (16 years and older)	301	
In Labor Force	169	56%
Agriculture, forestry, fishing and hunting, and mining	-	-
Armed Forces	-	-
Construction	-	-
Manufacturing	-	-
Wholesale trade	-	-
Retail trade	-	-
Transportation and warehousing, and utilities	-	-
Information	-	-
Finance and insurance, and real estate and rental and leasing	29	9%
Professional, scientific, and management, and administrative and waste mgmt.. services	-	-

INDUSTRY	# EMPLOYEE	% EMPLOYEE
Educational services, and health care and social assistance	31	10%
Arts, entertainment, and recreation, and accommodation and food services	138	45.8%
Other services, except public administration	-	-
Public administration	-	-
Unemployed	-	-

Source: U.S. Census Bureau American Community Survey 2018-2023 5-Year Estimates, [www.census.gov/](http://www.census.gov/)

Note: Data is for the San Simeon Census Designated Place (CDP) which may not have the same boundaries as the San Simeon Community Services District.

Note: A symbol of "-" indicates that the metric in question is unknown or undetermined.

**Table P-4 San Simeon CPD Employment by Industry (2023)**

INDUSTRY	# EMPLOYEE	% EMPLOYEE
Population (2023)	301	
In Labor Force	169	56%
Management, business, science, and arts occupations	-	-
Service occupations	138	81.7%
Sales and office occupations	31	18.3%
Natural resources, construction, and maintenance occupations	-	-
Production, transportation, and material moving occupations	-	-

Source: U.S. Census Bureau American Community Survey 2018-2023 5-Year Estimates, [www.census.gov/](http://www.census.gov/)

### P.1.3 Development Trends

As of 2025 San Simeon is only at about 43% of its planned population capacity of 1,200. Growth rates in the North Coast region of San Luis Obispo County have traditionally been high, but growth rates in San Simeon have been declining during the past ten years due to resource constraints and development restrictions. The County's Growth Management Ordinance limits county-wide growth to 2.3%.

San Simeon's economy is driven by tourism and recreation-based economic development with new expansion including motels, restaurants, and retail shops to draw in more tourists. According to the North Coast Area Plan, the community does not believe that sustaining past growth rates is wise and has no intent to do so. Overcrowding of the day use and overnight facilities at San Simeon recreation areas underscores this point, as does the need for more visitor facilities. Improvements to the Hearst Ranch are being planned and are detailed in the North Coast Area Plan, as are intensive visitor-serving commercial centers which are currently in the conceptual planning stages.

The LPT notes that there has been no new development within San Simeon since the last plan update in 2020; thus there has not been an increase or decrease in hazard vulnerability.

### P.1.4 Other Community Planning Efforts

The coordination and synchronization with other community planning mechanisms and efforts are vital to the success of this plan. To have a thorough evaluation of hazard mitigation practices already in place, appropriate planning procedures should also involve identifying and reviewing existing plans, policies, regulations, codes, tools, and other actions are designed to reduce a community's risk and vulnerability from natural hazards.



San Simeon and the San Simeon CSD are referenced in other County planning documents and regulated by County policies and planning mechanisms. Integrating existing planning efforts, mitigation policies, and action strategies into this Annex establishes a credible, comprehensive document that weaves the common threads of a community's values together. The development of this CSD Annex involved a comprehensive review of existing plans, studies, reports, and initiatives from San Luis Obispo County and the San Simeon community that relate to hazards or hazard mitigation, as summarized in Table P-5 below. Information on how they informed the update are noted and incorporated where applicable.

In addition to the development standards within the San Simeon Specific Plan, there are County planning mechanisms that regulate future and existing development within the San Simeon CSD planning area. Refer to Section P.4 Capability Assessment as well as the Base Plan for more information on the plans, policies, regulations and staff that govern the San Simeon CSD.

**Table P-5 Summary of Review of Key Plans, Studies and Reports for the San Simeon CSD**

PLAN, STUDY, REPORT NAME	HOW THE DOCUMENT INFORMED THIS ANNEX
San Simeon CSD Master Plan (Draft 2018)	Obtained key information on the CSD, its history, hazards of interest, etc.
North Coast Area Plan (Revised 2018)	Obtained water use information, drought related details, etc.
San Luis Obispo County Stormwater Resource Plan (2019)	Provided background information that was incorporated into the Drought Vulnerability Assessment related to watershed planning
County of San Luis Obispo Local Hazard Mitigation Plan (2014)	Informed past hazard event history as well as information on county programs, etc.
San Luis Obispo County – Community Wildfire Protection Plan (March 2019)	Informed the Vulnerability Assessment for Wildfire risk
San Luis Obispo County 2014 Integrated Regional Water Management Plan	Obtained information on water use in the CSD, water management regions, and the drought/water scarcity hazard
State of California's Hazard Mitigation Plan – Updated 2018	General information on hazards, events, and vulnerability assessments
2014-2016 Resource Summary Report for San Luis Obispo County's General Plan	Pulled information about water resources, reliability, and ongoing efforts to increase resilience in the county and district of San Simeon as related to drought
Coastal Zone Framework for Planning (Revised September 2018)	This Framework for Planning for the Coastal Zone is a General Plan Element that accompanies the Coastal Zone Land Use Ordinance (Title 23) for the County of San Luis Obispo
Title 23 Coastal Zone Land Use Ordinance (Revised September 2018) – County of San Luis Obispo	Pulled information on land use codes
Ordinance No. 112	An Ordinance of the Board of Directors of the San Simeon Community Services District Mandating Use of Recycled Water Strictly for the San Simeon Community Services District's Recycled Water Facilities

## P.2 Hazard Identification and Summary

The San Simeon CSD planning team identified the hazards that affect the District and summarized their frequency of occurrence, spatial coverage, potential magnitude, and significance specific to the San Simeon CSD (see Table P-6). There are no hazards that are

unique to the District. Note that some hazards may have been added to include ratings due to their relevance in the CSD, or because GIS analysis shows they could cause damages or losses in the community.

**Table P-6 San Simeon CSD Hazard Risk Summary**

HAZARD	GEOGRAPHIC AREA	PROBABILITY OF FUTURE OCCURRENCE	MAGNITUDE/ SEVERITY (EXTENT)	OVERALL SIGNIFICANCE
Adverse Weather: Thunderstorm/ Heavy Rain/ Lightning/ Dense Fog/ Freeze	Significant	Likely	Negligible	Medium
Adverse Weather: High Wind and Tornado	Significant	Likely	Limited	Low
Adverse Weather: Extreme Heat	Significant	Occasional	Negligible	Low
Coastal Storm/Coastal Erosion/Sea Level Rise	Significant	Likely	Limited	Low
Drought and Water Shortage	Significant	Likely	Limited	Medium
Earthquake	Significant	Likely	Limited	High
Flood	Limited	Likely	Negligible	Low
Tsunami	Limited	Unlikely	Negligible	Low
Wildfire	Significant	Likely	Limited	Medium
Human Caused: Hazardous Materials	Limited	Highly Likely	Negligible	Medium
<div> <div> <b>Geographic Area</b>  Limited: Less than 10% of planning area  Significant: 10-50% of planning area  Extensive: 50-100% of planning area </div> <div> <b>Probability of Future Occurrences</b>  Highly Likely: Near 100% chance of occurrence in next year or happens every year.  Likely: Between 10 and 100% chance of occurrence in next year or has a recurrence interval of 10 years or less.  Occasional: Between 1 and 10% chance of occurrence in the next year or has a recurrence interval of 11 to 100 years.  Unlikely: Less than 1% chance of occurrence in next 100 years or has a recurrence interval of greater than every 100 years. </div> <div> <b>Magnitude/Severity (Extent)</b>  Catastrophic—More than 50 percent of property severely damaged; shutdown of facilities for more than 30 days; and/or multiple deaths  Critical—25-50 percent of property severely damaged; shutdown of facilities for at least two weeks; and/or injuries and/or illnesses result in permanent disability  Limited—10-25 percent of property severely damaged; shutdown of facilities for more than a week; and/or injuries/illnesses treatable do not result in permanent disability  Negligible—Less than 10 percent of property severely damaged, shutdown of facilities and services for less than 24 hours; and/or injuries/illnesses treatable with first aid </div> <div> <b>Significance</b>  Low: minimal potential impact  Medium: moderate potential impact  High: widespread potential impact </div> </div>				

### P.3 Vulnerability Assessment

The intent of this section is to assess the San Simeon CSD's vulnerability separate from that of the planning area (San Luis Obispo County), which has already been assessed in Section 5 Hazard Identification and Risk Assessment in the Base Plan. This vulnerability assessment analyzes the population, property, and other assets (e.g. critical facilities) at risk to hazards

ranked of medium or high significance that may vary from other parts of the planning area, or hazards that are rated as Low, but which may be worth noting due to risk of property and populations.

The key information to support the Hazard Identification and Risk Assessment (HIRA) for this Annex was collected through a Data Collection Guide, which was distributed to each participating municipality, community Services District, or special district to complete during the planning process. Information collected was analyzed and summarized in order to identify and rank all the hazards that could impact anywhere within the County, as well as to rank the hazards and identify the related vulnerabilities unique to each jurisdiction/district. In addition, the San Simeon CSD planning team was asked to share information on past hazard events that have affected the District.

Each participating jurisdiction or district was in support of the main hazard summary identified in the Base plan (See Table 5.1 in the Base Plan). However, the hazard summary rankings for each jurisdictional annex may vary slightly due to specific hazard risk and vulnerabilities unique to that jurisdiction (see Table P-6). Identifying these differences helps the reader to differentiate the District's risk and vulnerabilities from that of the overall County.

#### *P.3.1.1 Other Hazards*

The following hazards identified in the base plan HIRA are not identified within this jurisdictional annex due to low or no risk or insignificant anticipated impacts and are not considered further for mitigation actions:

- Agricultural Pests and Plant Diseases
- Biological Agents
- Dam Incidents
- Land Subsidence
- Landslide/Debris Flow

#### *P.3.1.2 Assets at Risk*

This section considers the District's assets at risk, including values at risk, critical facilities and infrastructure, historic assets, economic assets, and growth and development trends. See Section 5.2 of the Base Plan (Asset Summary) for more details and background on the parcel summarization, analysis, and datasets available.

#### *P.3.1.3 Values at Risk*

The following data on property exposure is derived from the San Luis Obispo County's Assessor data. This data should only be used as a guideline for overall values in the Community Services District as the information has some limitations. Table P-7 summarizes the exposure of properties (e.g., the values at risk) broken down by property type for the San Simeon Community Services District.

**Table P-7 Exposures for the San Simeon CSD by Parcel Type**

PROPERTY TYPE	PARCEL COUNT	IMPROVED VALUE	CONTENT VALUE	TOTAL VALUE
Commercial	18	\$33,807,663	\$33,807,663	\$67,615,326
Exempt	2	\$0	\$0	\$0
Mixed Use	4	\$848,144	\$848,144	\$1,696,288
Mobile Home	1	\$371,422	\$185,711	\$557,133
Multi Family Residential	6	\$3,757,442	\$1,878,721	\$5,636,163
Residential	154	\$31,823,262	\$15,911,631	\$47,734,893
Vacant Improved	1	\$20,966	\$20,966	\$41,932
<b>Total</b>	<b>186</b>	<b>\$70,628,899</b>	<b>\$52,652,836</b>	<b>\$123,281,735</b>

Source: San Luis Obispo County Assessor Data November 15, 2024, WSP GIS Analysis

#### ***P.3.1.4 Critical Facilities and Infrastructure***

A critical facility is defined as one that is essential in providing utility or direction either during the response to an emergency or during the recovery operation. The four types of Critical Facilities categorized by San Luis Obispo County and its jurisdictions' and districts' planning teams are: Emergency Services, High Potential Loss Facilities, Lifeline Utility Systems, and Transportation Systems. See Section 5 of the Base Plan for more details on the definitions and categories of critical facilities, and Section 5.2 of the Base Plan for more information on the Assets used throughout this annex and the county-wide analyses.

Based on the datasets provided by the San Luis Obispo County GIS Department and the San Simeon CSD Planning Team, along with those structures supplemented from the Homeland Infrastructure Foundation-Level Dataset (HIFLD), there is only one critical facility found within the San Simeon Community Services District boundaries. It is the San Simeon Wastewater Treatment Plant located at 9245 Balboa Ave. This facility is shown on a map of the CSD in Figure P-1 above, classified as a Lifeline Utility System facility.

#### ***P.3.1.5 Additional Critical Facilities***

Additional critical facilities as identified by the San Simeon CSD Planning Team are as follows:

- District Office – \$395,000 replacement value
- Senior Mobile Home Park
- Wells 1 & 2 – \$600,000 replacement value (combined)
- Water Treatment Plant – \$1.5 million replacement value
- Reservoir – \$750,000 replacement value
- Recycled Water Plant – \$500,000 replacement value
- Wastewater Treatment Plant - \$6,000,000 replacement value
- Water & Sewer Pipes – \$11.2 million replacement value (about 2 miles of water distribution system plus 2 miles of collection system)
- Critical Roads – \$832,000 replacement value (about 2 miles of roads)
- Reverse Osmosis - \$1,500,000
- Pico Creek – natural resource

#### ***P.3.1.6 Emergency Service Facilities/Support from Other Communities***

The CSD is serviced by Cal Fire Station 10 in Cambria and the San Luis Obispo County Sheriff. The 2005 Cambria and San Simeon Acres Community Plans of the North Coast Area Plan Final Environmental Impact Report indicated that emergency response is a significant unmet need.

#### **Transportation, High Potential Loss, and Lifeline Facilities**

The San Simeon CSD provides water and wastewater services to San Simeon and the surrounding community. The San Simeon Wastewater Treatment Plant is the main critical facility of interest analyzed throughout this document, and is located on the west of San Simeon, along the Arroyo del Padre Juan stream and on the coast. The Pico Creek groundwater basin is the sole source of potable water for the community, and the District manages two primary production wells in the basin. The District shares a third emergency well with Hearst Corporation. The CSD also owns and operates a recycled water system which provides tertiary treated and disinfected recycled water that is permitted by the Regional Water Quality Control Board (RWQCB) for irrigation use within the community. A reverse osmosis treatment unit is operated during high chloride events caused by the intrusion of seawater into the Pico Creek aquifer. Improvements to the water, recycled water, and wastewater treatment plants have been proposed and are detailed in the San Simeon CSD

Master Plan. The most urgent concern fitting these categories of critical facilities is the addition of potable water storage beyond the existing 150,000-gallon reservoir to meet regulatory and fire prevention needs.

State Highway 1 runs through San Simeon; about 75% of the community lies to the west while the remainder lies to the east of the highway (in terms of properties and commerce). Visitors to Hearst Castle increase traffic on Highway 1, making pedestrian and cyclist crossing of the highway difficult. The North Coast Area Plan recommends providing a seasonal shuttle service to reduce traffic and constructing an improved pedestrian crossing on the highway. Highway 1 is maintained by the California Department of Transportation (Caltrans), while Hearst Drive, Castillo Avenue, and San Simeon Avenue are maintained by the District and the County. Other streets are maintained by residents. Pavement improvements have been recommended and are detailed in the San Simeon CSD Master Plan.

### *P.3.1.7 Historic and Cultural Resources*

Historical assets include local, county, state, and potentially federally listed historic sites. San Simeon hosts two state-designated historical landmarks: the Hearst San Simeon State Historical Monument and the Sebastian Store. William Randolph Hearst was an American businessman and newspaper publisher who inherited the Hearst Ranch near San Simeon from his father. Beginning in 1919, Hearst began construction of a castle on the property that was donated to the State in 1958 by Hearst Corporation in memoriam. The monument brings in one million visitors annually and was once home to exotic animals such as zebras which now roam free in the area. William Randolph Hearst Memorial Beach, a popular destination in the area, also bears his name. The Sebastian Store is the oldest store building on the North Coast of San Luis Obispo County. It was built in the 1860s and has been operated by the Sebastian family for over 50 years.

### *P.3.1.8 Natural Resources*

Natural resources are important to include in benefit-cost analyses for future projects and may be used to leverage additional funding for projects that also contribute to community goals for protecting sensitive natural resources. Awareness of natural assets can lead to opportunities for meeting multiple objectives. For instance, protecting wetlands areas protects sensitive habitat as well as attenuates and stores floodwaters. All undeveloped shoreline in the North Coast planning area is classified as Sensitive Resource Areas. The North Coast Area Plan (2018) also designated the following combining designations that apply to the protection of special resources in the San Simeon community:

**San Simeon Point** – This picturesque setting includes Monterey pines, cypress trees, titled rock formations, and excellent views of the bay and ocean shoreline. While not biologically unique, the combined sensitivity of vegetation and viewshed make an SRA designation appropriate. Nonetheless, proposed development could be sited so as not to damage either the vegetation or viewshed through appropriate mitigation measures.

**San Simeon Fault (Geologic Study Area)** – The San Simeon Fault Zone traverses the coastal area from San Simeon Point to the north side of the mouth of San Carpoforo Creek. In 1986, the State geologist determined this fault zone to be active and designated it as a special studies zone subject to the provisions of the Public Resources Code.

The North Coast Area Plan lists the protection of coastal resources such as “wetlands, coastal streams, forests, marine habitats, and wildlife, including threatened and endangered species” as a planning goal for San Simeon and Cambria. Supporting the efforts of Monterey Bay National Marine Sanctuary, which runs through San Simeon, is also listed as a goal. This protected coastline is home to a large population of elephant seals at the Piedras Blancas Elephant seal Rookery seven miles north of San Simeon. Pico Creek and other area creeks are also significant in that they support a number of declining species, such as the tidewater goby,



striped garter snake, western pond turtle, red-legged frog (federally listed as threatened), and steelhead trout.

### P.3.1.9 Economic Assets

The major industry in San Simeon is hospitality. The area welcomes tourists to its beaches, restaurants, and aforementioned historical and cultural attractions.

## P.3.2 Estimating Potential Losses

Note: This section details vulnerability to specific hazards of high or medium significance, where quantifiable, and/or where (according to Planning Team input or vulnerability assessment analysis) it should be of concern.

**Error! Reference source not found.** summarizes San Simeon's exposure in terms of number and value of parcels falling within the District's boundaries. San Luis Obispo County parcel and assessor data were used to calculate the improved value of parcels, using ParcelQuest's spatial layers on parcel geometry. The most vulnerable structures are those in the parcels within hazard threat areas, unreinforced masonry buildings, and buildings built prior to the introduction of modern-day building or land regulatory codes. Impacts of past events and vulnerability to specific hazards are further discussed below as particular to each hazard. See Section 5 of the Base Plan for more information on assets, parcel analysis methodology, and hazard profiles.

### P.3.2.1 Adverse Weather: Thunderstorm/Heavy Rain/Lightning/Dense Fog/Freeze

San Simeon CSD's risk and vulnerability does not differ significantly from that of San Luis Obispo County. The overall significance rating of the planning area is **low**. San Simeon CSD is subject to many of the same regional weather patterns during storm seasons and transitional weather patterns.

Similar to the county, the district is susceptible to the impacts of heavy rainfall. The planning area experiences about 20 inches of precipitation annually, according to Western Regional Climate Center. While thunderstorms and lightning are relatively rare, they can still pose safety risks to residents and strain electrical infrastructure when they occur. Dense fog is a common concern along the coast, particularly in the cooler months, often reducing visibility along roadways. The tables below show key climate variables such as extreme temperatures, precipitation totals, and the frequency of specific weather events. Note that Santa Maria weather station is the nearest official reporting site to San Simeon CSD.

**Table P-8 San Simeon Climate Summary Table – Weather (Period of Record: 08/01/1938 - 06/03/2005)**

SUMMARY PERIOD	MONTHLY MEAN MAXIMUM TEMP.	MONTHLY MEAN MINIMUM TEMP.	DAILY EXTREME HIGH TEMP	DAILY EXTREME HIGH DATE	DAILY EXTREME LOW TEMP	DAILY EXTREME LOW DATE	MAXIMUM TEMP. ≥ 90 °F MEAN # DAYS	MINIMUM TEMP. ≤ 32 °F MEAN # DAYS
Winter	58.9 °F	46.1 °F	82 °F	2/12/1943	29 °F	2/2/1939	0	0.3
Spring	58.3 °F	46.7 °F	79 °F	5/10/1941	32 °F	4/1/1955	0	0
Summer	61.3 °F	50.9 °F	80 °F	7/18/1951	37 °F	8/18/1954	0	0
Fall	62.8 °F	50.9 °F	90 °F	10/24/1965	33 °F	11/19/1964	0	0
Annual	60.5 °F	48.6 °F	90 °F	10/24/1965	29 °F	2/2/1939	0	0.2

Source: Western Regional Climate Center (WRCC) <https://wrcc.dri.edu/>

\* Winter is defined as December, January, and February

\*\* Summer is defined as June, July, and August

**Table P-9 San Simeon Climate Summary Table - Precipitation (Period of Record: 08/01/1938 - 06/03/2005)**

SUMMARY PERIOD	PRECIP. MEAN	PRECIP. HIGH	PRECIP. HIGH YEAR	PRECIP. LOW	PRECIP. LOW YEAR	PRECIP. 1 DAY MAXIMUM	PRECIP. 1 DAY MAXIMUM DATE	PRECIP. ≥ 1.00 IN. MEAN # DAYS
Winter	11.59 in.	36.32 in.	1969	3.31 in.	1964	5.28 in.	1/19/1969	3.2
Spring	4.91 in.	15.51 in.	1958	0.18 in.	1959	2.54 in.	3/3/1949	1.4
Summer	0.1 in.	0.68 in.	1958	0 in.	1942	0.68 in.	8/16/1958	0
Fall	3.36 in.	9.02 in.	1965	0.66 in.	1959	3.48 in.	11/14/1965	0.8
Annual	20.69 in.	41.86 in.	1969	9.7 in.	1959	5.28 in.	1/19/1969	6

Source: Western Regional Climate Center (WRCC) <https://wrcc.dri.edu/>

\* Winter is defined as December, January, and February

\*\* Summer is defined as June, July, and August

### *P.3.2.2 Adverse Weather: High Wind and Tornado*

San Simeon CSD's risk and vulnerability to this hazard does not differ significantly from that of the County overall significance of **low**. While these hazards are not common in the region they can occasionally occur during strong storm systems, particularly in the winter months. San Simeon may experience gusty winds capable of causing minor damage and tornado activity is extremely rare across the county. As such, while the potential for high wind events exists, the likelihood of significant damage or disruption remains low and tornado risk is considered minimal.

### *P.3.2.3 Adverse Weather: Extreme Heat*

Extreme heat is a **low** significance hazard for San Simeon CSD. The monthly mean high fall temperature for San Simeon is 62.8 °F; however, temperatures up to 90°F have been recorded (see Table P-8). Additionally, rising temperatures and more frequent heat waves are increasing the likelihood of more extreme heat events in the future.

Prolonged heatwaves can reduce stream flows in Pico Creek, the CSD's water source, leading to water supply shortages as demand increases. Additionally, extreme heat can impair the efficiency of the CSD's coastal wastewater treatment plant, which is already at risk from sea-level rise and erosion. These impacts can strain essential services and pose serious health risks to residents, especially older adults and medically vulnerable individuals.

### *P.3.2.4 Drought and Water Shortage*

Drought is a medium significance hazard for the San Simeon CSD. San Simeon receives 20 inches of precipitation annually. The existing permit from the County Health Department allows for the withdrawal of 140 acre-feet per year from the existing wells while the safe yield of the Pico Creek groundwater basin is estimated to be about 120 to 130 acre-feet per year. Due to fluctuations in rainfall, the location of the groundwater basin relative to the coast, and high groundwater withdrawals, water shortages have been declared several times in past decade. Growth in recent years has been held to the 1986 moratorium level due to the potable water supply shortage. Detailed information on potable water demand can be found in the San Simeon CSD Master Plan as well as Section 5.3.6 of the Base Plan.

The San Simeon CSD faces significant drought-related challenges due to its sole reliance on local water sources, making it particularly vulnerable to prolonged dry periods. Without access to imported water supplies, the community is highly susceptible to groundwater depletion and saltwater intrusion, both of which threaten long-term water security. Historical droughts, such as those from 2012-2016 and 2020-2022, led to emergency conservation measures, declining well levels, and increased water restrictions. Tourism-dependent businesses add seasonal demand fluctuations, further straining limited resources during peak drought periods.

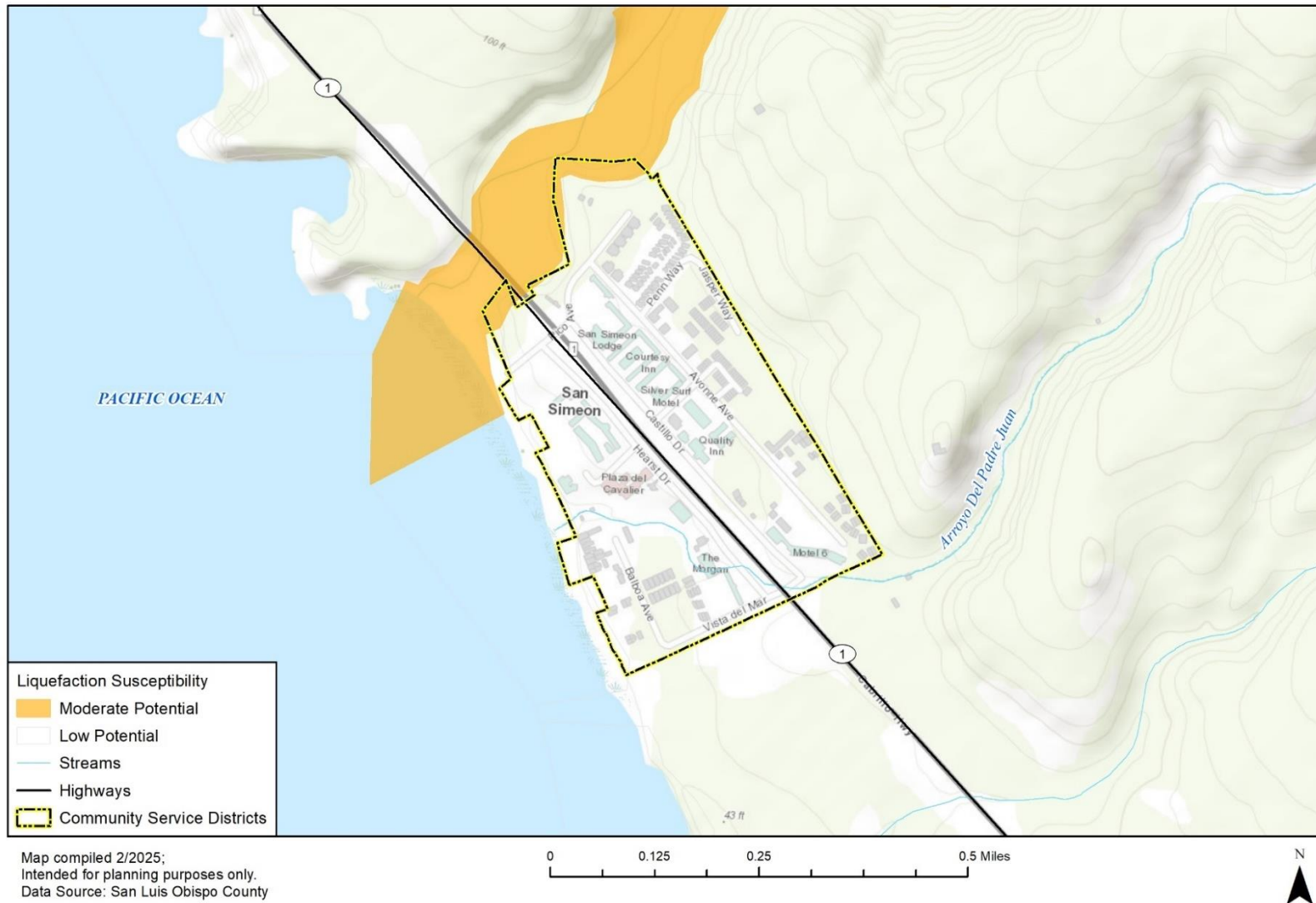
Additionally, the lack of large-scale water storage infrastructure limits the community's ability to buffer against multi-year droughts and maintain supply reliability.

#### *P.3.2.5 Earthquake and Liquefaction*

San Simeon is located near the San Simeon-Hosgri fault system which is considered to be active. The 6.5-magnitude San Simeon earthquake struck six miles from San Simeon on December 22, 2003. The earthquake caused significant property damage and two fatalities in nearby Paso Robles but only caused minor damage to structures in San Simeon. The Governor of California declared a state of emergency, and the President signed a federal major disaster declaration. The San Simeon CSD submitted a Request for Public Assistance, citing damage to the District Office but later withdrew the application after determining that there was little impact on the office. However, \$5,000 was spent on other repairs and inspections including that of the sewer line. An additional \$15,676 was spent repairing the electrical panel at the wastewater treatment plant which was destroyed once power was restored after the earthquake. See Section 5.3.7 of the Base Plan for more information on the earthquake hazard as a whole as well as details particular to the San Simeon CSD.

With regards to liquefaction, none of the San Simeon CSD property inventory or critical facilities are located in moderate or high liquefaction risk areas.

**Figure P-2 San Simeon CSD Liquefaction Susceptibility**



### P.3.2.6 Flood

The main sources of flooding in and north of the San Simeon CSD are the Arroyo del Padre Juan, which crosses the District from the southeast and outflows into the Pacific Ocean on the central-west portion of the District, and the Pico Creek to the north, which barely touches the north boundary of the community. Some coastal flooding also occurs from the west side (where the Ocean and the CSD meet) but based on GIS analysis of the parcels in the CSD and FEMA's Flood Hazard Areas, only 4 improved parcels would be flooded by the 100-year event. See Table P-10 for a summary of parcels flooded and their values and refer to Figure P-3 for a map of the flood hazards and flooded improved parcels. There is not resident population at risk since these are commercial structures, but a flood could have some impact on the local economy.

**Table P-10 Flooded Structures in the San Simeon CSD by Parcel Type**

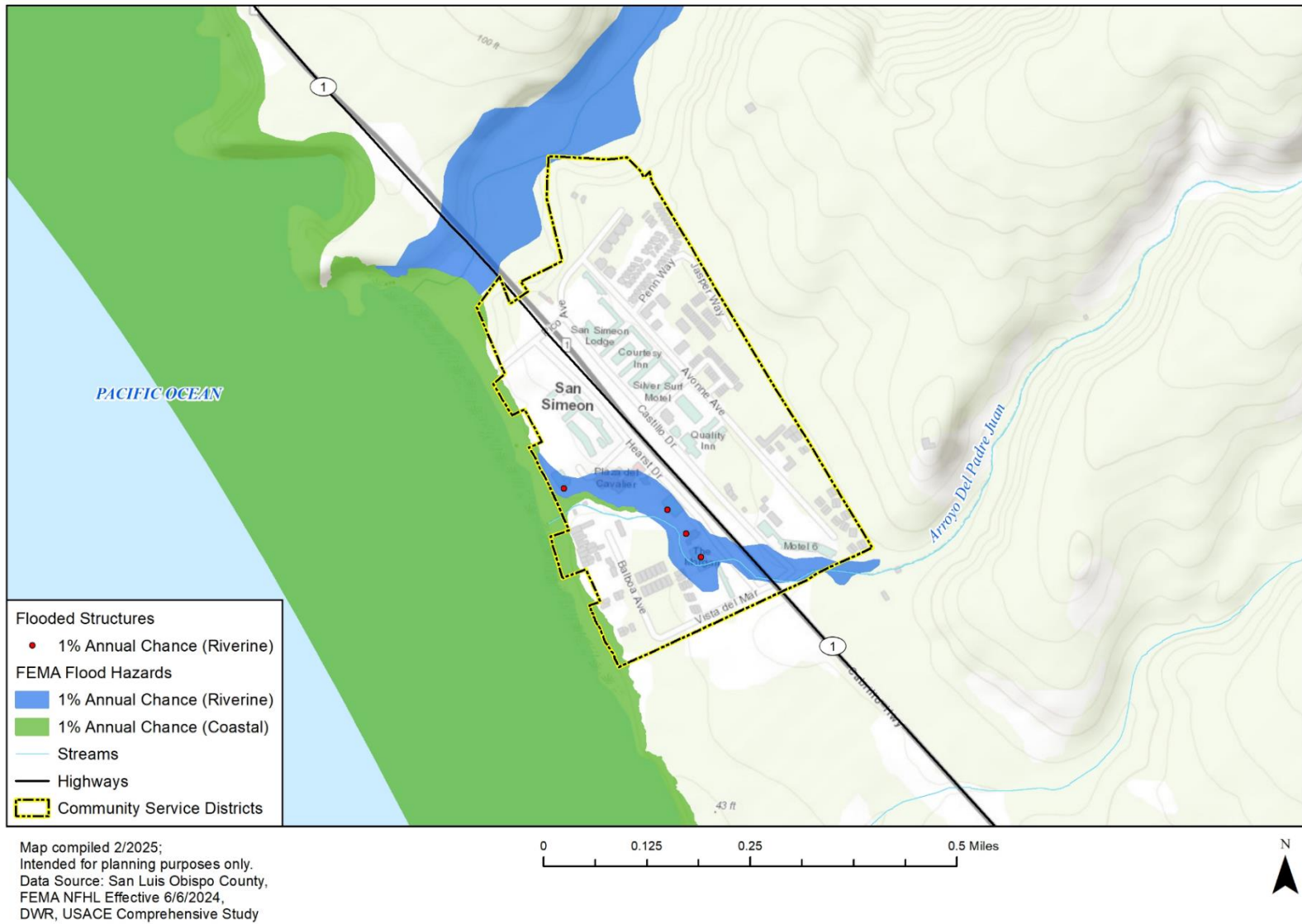
PROPERTY TYPE	PARCEL COUNT	IMPROVED VALUE	CONTENT VALUE	TOTAL VALUE	LOSS ESTIMATE	POPULATION
Commercial	4	\$7,115,563	\$7,115,563	\$14,231,126	\$3,557,782	--
TOTAL	4	\$7,115,563	\$7,115,563	\$14,231,126	\$3,557,782	--

Source: San Luis Obispo County Planning and Building Dept., Assessor's Office, ParcelQuest, Wood Plc Parcel Analysis, FEMA

San Simeon does not participate separately in the National Flood Insurance Program (NFIP) but will continue to support the County's participation in and compliance with the NFIP. With regards to Critical Facilities, the San Simeon Wastewater Treatment Plant was found to fall within the VE FEMA floodplain, as the facility is located on the coast and hence is exposed to coastal flooding hazards.



**Figure P-3 Flooded Parcels in the San Simeon Community Services District**



### P.3.2.7 Coastal Storm/Coastal Erosion/Sea Level Rise

The low cliffs and rolling coastal hills in San Simeon are vulnerable to coastal erosion and coastal bluff retreat. The San Simeon Wastewater Treatment Plant and other low-lying infrastructure such as roads and storm drains are especially vulnerable to coastal hazards. Approximately 2.8 miles of Highway 1 at Piedras Blancas north of San Simeon was recently relocated inland due to damage from coastal bluff erosion. Coastal bluff retreat rates may accelerate with sea level rise.

A flood hazard also exists during periods of intense or prolonged rainfall in Pico Creek. Heavy rain in January 2017 caused \$38,457 in damage to the Pico Beach stairs, sidewalk, and parking lot. Runoff had caused the embankment to become unstable and slip as native soil was washed to sea. The District received an emergency temporary repair permit to install gabion stone baskets to stabilize the hillside. On June 1 of the same year, heavy rains caused the storm drain at 9260 Castillo Drive to collapse, creating a sink hole in the parking lot of the property. The sink hole was repaired at an initial cost of \$1,000 but required additional repairs later. See Section 5 of the Base Plan for more information on coastal hazards.

As part of the 2019 and 2025 HMP planning efforts, a sea level rise risk assessment was completed to determine how sea level rise may affect coastal jurisdictions and critical facilities and how coastal flooding might be exacerbated in the future. The only critical facility that would be affected by sea level rise is the San Simeon Wastewater Treatment Plant which is at risk in a sea level rise scenario of 25 cm or greater. The tables below summarize the other properties at risk of inundation by sea level rise and sea level rise combined with a 1% annual chance coastal flood. The area of inundation by sea level rise and sea level rise combined with the 1% coastal flood are shown in Figure P-4 and Figure P-5 respectively. See Section 5.3.4 Coastal Storm/Coastal Erosion/Sea Level Rise in the base plan for more details on the scenarios and data sources used for this analysis.

**Table P-11 Properties Inundated by Sea Level Rise and Sea Level Rise with 1% Annual Chance Flood**

PROPERTY TYPE	25-CM SLR	75-CM SLR	300-CM SLR	25-CM SLR W/1% FLOOD	75-CM SLR W/1% FLOOD	300-CM SLR W/1% FLOOD
Commercial	--	--	--	--	1	1
Multi-Family Residential	--	--	--	--	--	22
Other/Exempt/Misc.	--	--	--	--	--	2
<b>Total</b>	--	--	--	1	1	25

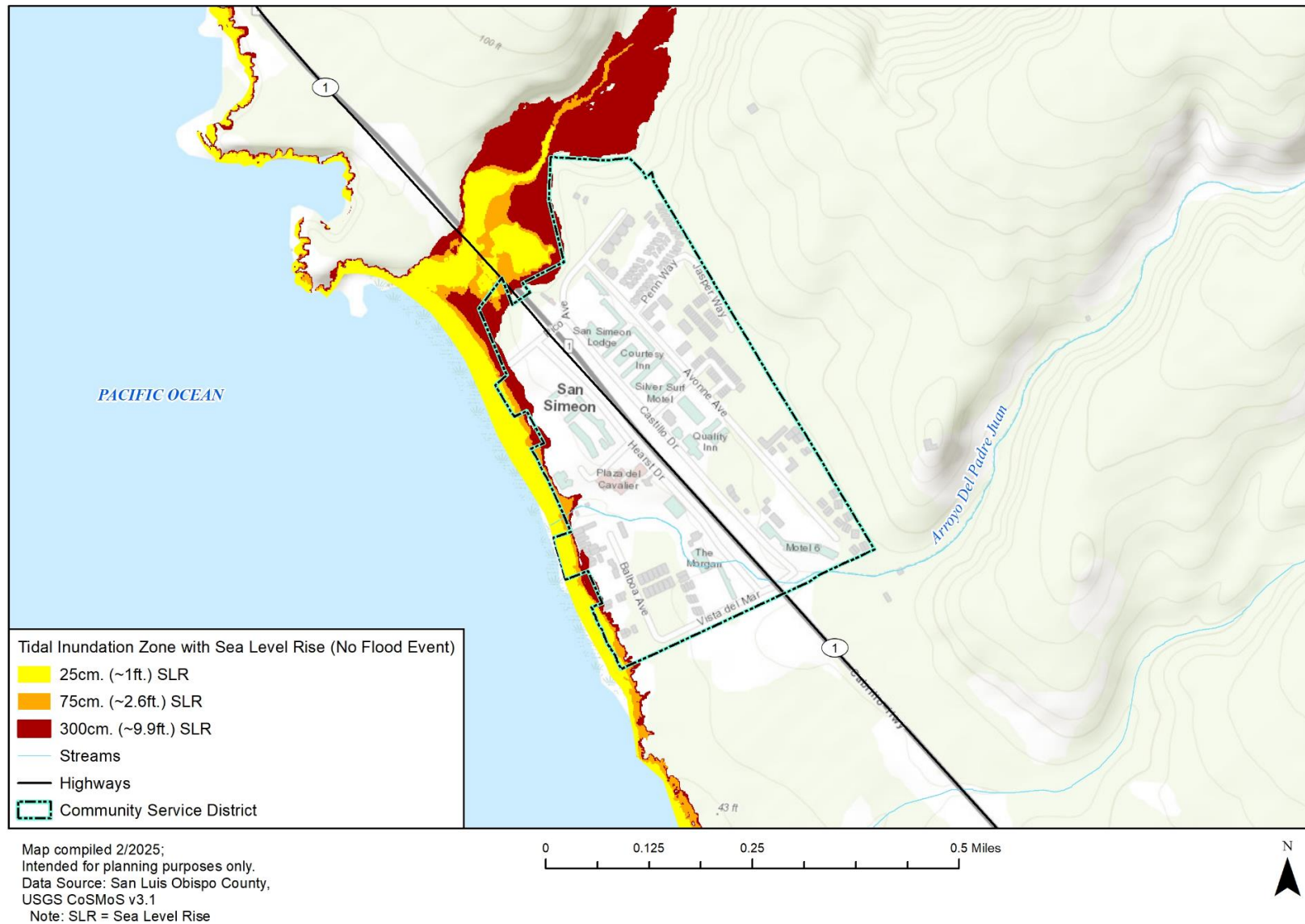
Source: San Luis Obispo County Assessor Data November 15, 2024, USGS CoSMoS v3.1, WSP GIS Analysis

**Table P-12 Improved Values of Properties Inundated by Sea Level Rise and Sea Level Rise with 1% Annual Chance Flood**

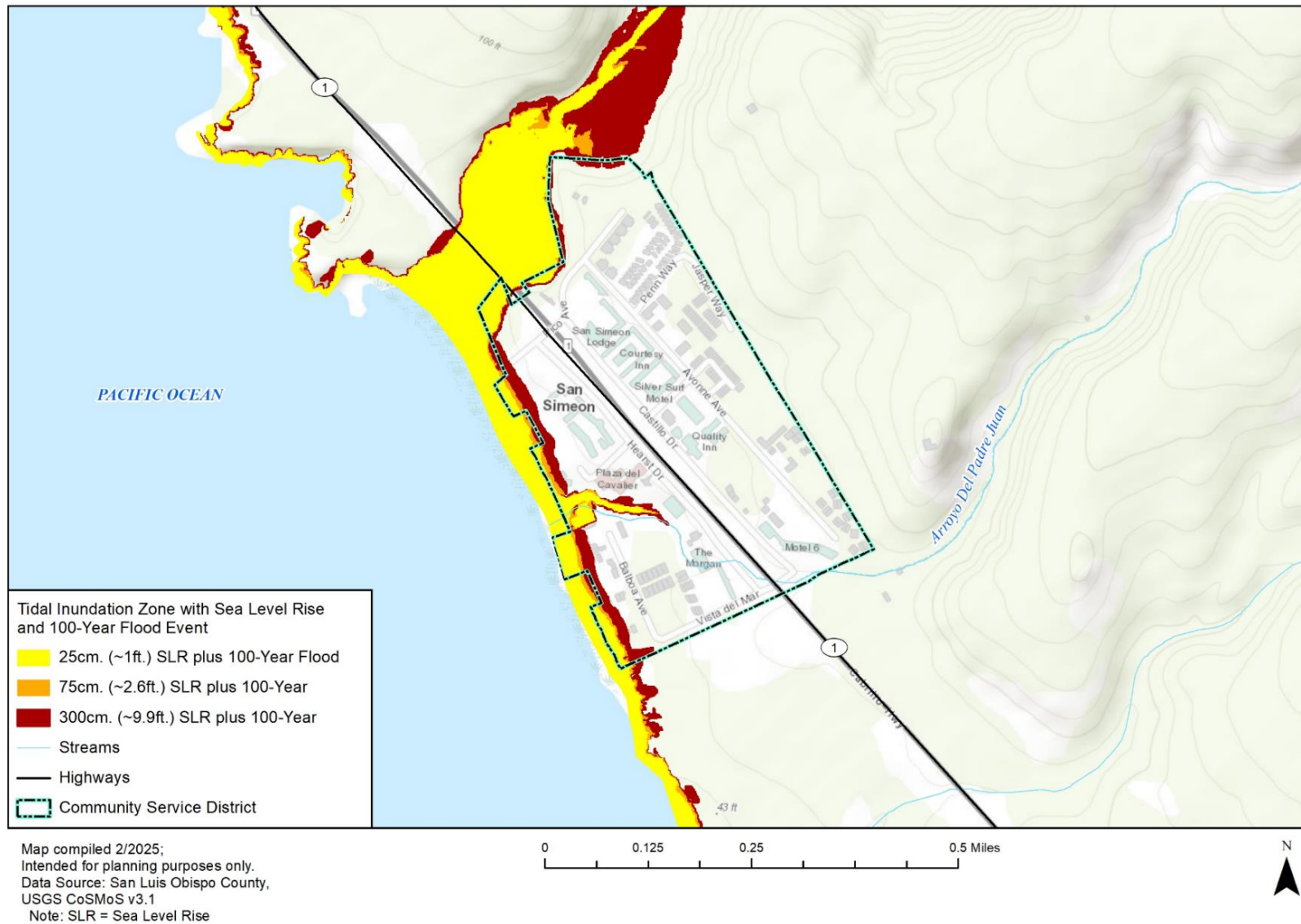
PROPERTY TYPE	25-CM SLR	75-CM SLR	300-CM SLR	25-CM SLR W/1% FLOOD	75-CM SLR W/1% FLOOD	300-CM SLR W/1% FLOOD
Commercial	--	--	--	--	--	\$1,282,318
Multi-Family Residential	--	--	--	--	--	\$ 6,149,876
Other/Exempt/Misc.	--	--	--	--	--	\$0
<b>Total</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$7,432,194</b>

Source: San Luis Obispo County Assessor Data November 15, 2024, USGS CoSMoS v3.1, WSP GIS Analysis

**Figure P-4 San Simeon Sea Level Rise Scenario Analysis: Tidal Inundation Only**



**Figure P-5 San Simeon Sea Level Rise Scenario Analysis: Tidal Inundation and 1% Annual Chance Flood**



### P.3.2.8 Tsunami and Seiche

Tsunami inundation poses a risk to all coastal communities in the County of San Luis Obispo. Specific to the San Simeon CSD, the most severe tsunami inundation would occur on the north end of the district at the mouth of Pico Creek (see Figure P-6).

The following table breaks down the tsunami risk for the San Simeon CSD by property type. Based on this analysis there are 44 structures vulnerable to the impacts of a tsunami with a combined value of over \$22 million. Of the properties at risk the majority are residential properties, with 40 residential structures (including multi-family residential) valued at approximately \$15.3 million. There are also two identified critical facilities vulnerable to tsunami impacts, including the San Simeon Wastewater Treatment Plant.

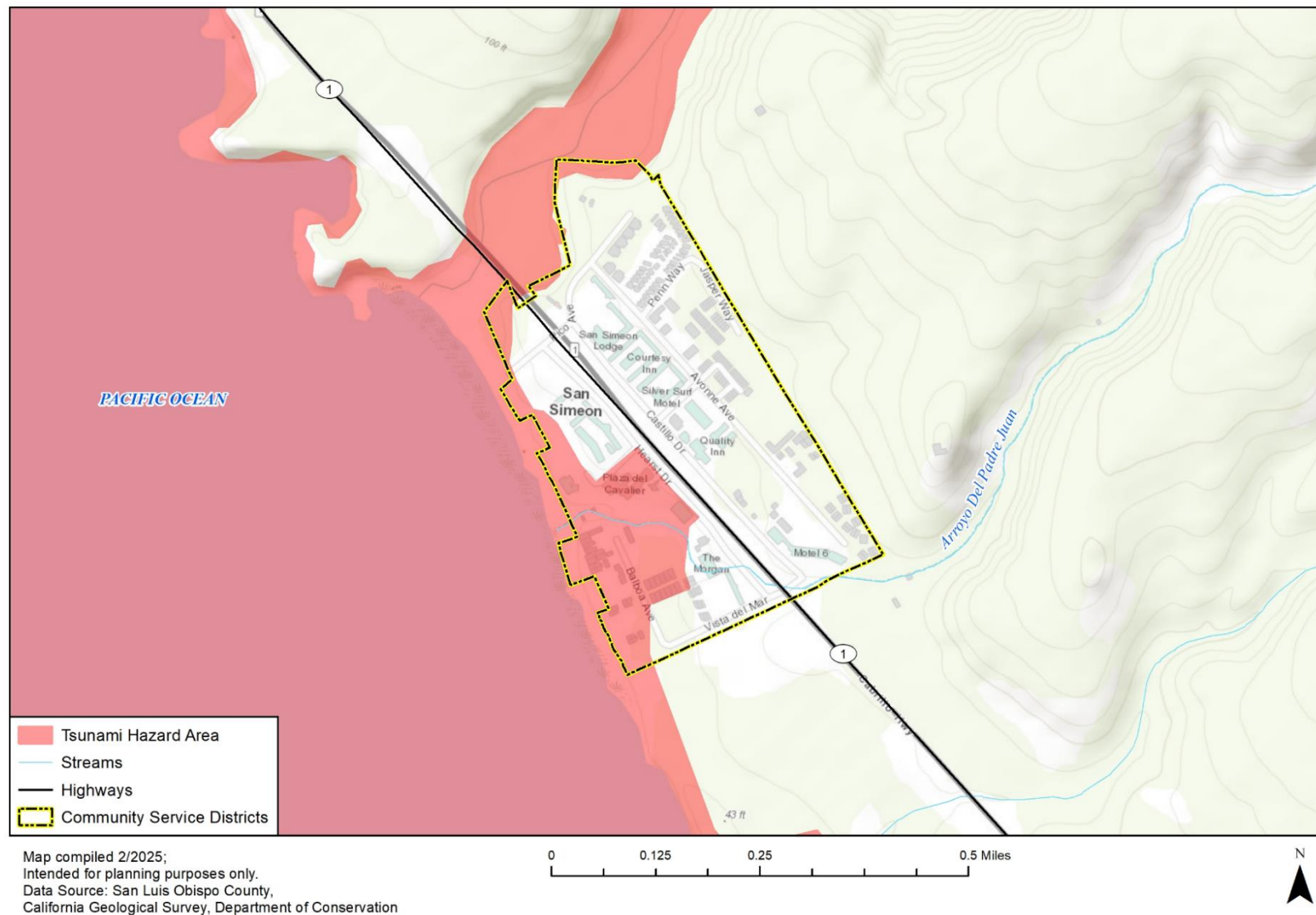
**Table P-13 San Simeon CSD's Improved Properties Exposed to Exposed to Tsunami Hazard Areas by Property Type**

PROPERTY TYPE	STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATION
Commercial	2	\$3,465,118	\$3,465,118	\$6,930,236	-
Exempt	2	\$0	\$0	\$0	-
Multi-Family Residential	1	\$369,315	\$184,658	\$553,973	2
Residential	39	\$9,871,529	\$4,935,765	\$14,807,294	96
<b>Total</b>	<b>44</b>	<b>\$13,705,962</b>	<b>\$8,585,540</b>	<b>\$22,291,502</b>	<b>99</b>

Source: San Luis Obispo Assessor Data November 15, 2024, California Geological Survey, Dept. of Conservation, WSP GIS Analysis



**Figure P-6 Tsunami Inundated Parcels in the San Simeon Community Services District**



### **P.3.2.9 Wildfire**

The overall significance rating of wildfire for San Simeon CSD is rated as medium significance. San Simeon is located along California's coastal corridor, that typically has cooler and more humid conditions. The Chimney Fire in 2016 burned over 46,000 acres and was within two miles of the Hearst Castle and required firefighters to cut multiple fire lines in a successful attempt to save the structure. For more information on this hazard as well as context at the county level, refer to Section 5.3.12 of the Base Plan.

In San Simeon CSD, 186 properties are situated within wildfire hazard exposure zones ranging from moderate to very high. All of these properties are located in the Moderate Fire Hazard Severity Zone. Collectively, these properties represent a total assessed value of \$123,260,769 and impact approximately 398 residents across all fire hazard severity zones. **Error! Not a valid bookmark self-reference.** shows the properties in the District Exposed to Fire Severity. **Error! Reference source not found.** depicts the Fire Hazard Severity Zones in San Simeon.

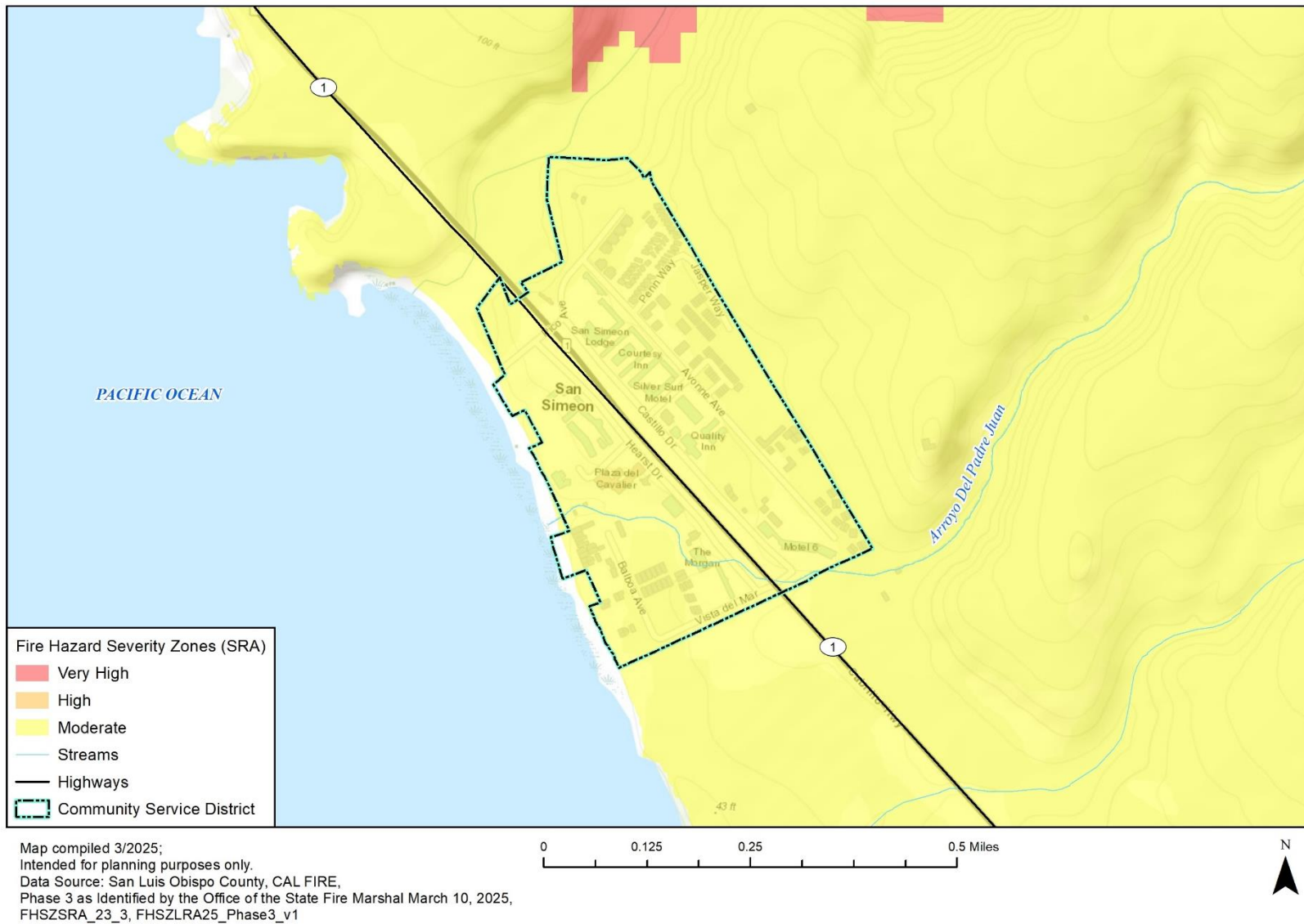
GIS analysis shows the critical facilities in San Simeon CSD that are exposed to fire hazard severity, categorizing them by severity level and facility type. The exposure of these critical assets to wildfire hazards poses significant risks to communications. GIS analysis shows that there is a total of two (2) critical facilities that fall in the moderate fire severity zone rating and none that fall into the very high or moderate fire hazard severity zone rating.

**Table P-14 San Simeon CSD Improved Properties Exposed to Fire Hazard Severity Zones by Property Zone**

PROPERTY TYPE	STRUCTUR E COUNT VERY HIGH	STRUCTUR E COUNT HIGH	STRUCTUR E COUNT MODERAT E	TOTAL STRUCTUR E COUNT	IMPROVED VALUE	ESTIMATE D CONTENT VALUE	TOTAL VALUE	POPULATIO N
Commercial	-	-	18	<b>18</b>	\$33,807,663	\$33,807,663	\$67,615,326	-
Exempt	-	-	2	<b>2</b>	\$0	\$0	\$0	-
Mixed Use	-	-	4	<b>4</b>	\$848,144	\$848,144	\$1,696,288	-
Mobile Home	-	-	1	<b>1</b>	\$371,422	\$185,711	\$557,133	2
Multi Family Residential	-	-	6	<b>6</b>	\$3,757,442	\$1,878,721	\$5,636,163	15
Residential	-	-	154	<b>154</b>	\$31,823,262	\$15,911,631	\$47,734,893	380
Vacant Improved	-	-	1	<b>1</b>	\$20,966	\$0	\$20,966	-
<b>Total</b>	<b>0</b>	<b>0</b>	<b>186</b>	<b>186</b>	<b>\$70,628,899</b>	<b>\$52,631,870</b>	<b>\$123,260,769</b>	<b>398</b>

Source: San Luis Obispo Assessor Data November 15, 2024, CAL FIRE - FHSZ Phase 3 March 10, 2025, WSP GIS Analysis

**Figure P-7 Wildfire Hazard Severity Zones in the San Simeon Community Services District**



### P.3.2.10 Human Caused: Hazardous Materials

The San Simeon LPT rated hazardous materials incidents as having **medium** overall significance. The Cal OES Spill Release Reporting Center reports 6 hazardous materials incidents in the San Simeon CSD from January 1<sup>st</sup>, 2019 through December 20<sup>th</sup>, 2024. This likely excludes a number of unreported minor spills. The 6 reported incidents constitutes 1.32% of the hazardous materials incidents reported countywide during the same time frame and averages out to roughly 1 incident per year. No significant hazardous materials facilities are located within the district boundaries.

## P.4 Capability Assessment

Capabilities are the programs and policies currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. This capability assessment is divided into five sections: regulatory mitigation capabilities, administrative and technical mitigation capabilities, fiscal mitigation capabilities, mitigation outreach and partnerships, and other mitigation efforts.

To develop this capability assessment, the jurisdictional planning representatives used a matrix of common mitigation activities to inventory policies or programs in place. The team then supplemented this inventory by reviewing additional existing policies, regulations, plans, and programs to determine if they contributed to reducing hazard-related losses.

During the plan update process, this inventory was reviewed by the jurisdictional planning representatives and Wood consultant team staff to update information where applicable and note ways in which these capabilities have improved or expanded. In summarizing current capabilities and identifying gaps, the jurisdictional planning representatives also considered their ability to expand or improve upon existing policies and programs as potential new mitigation strategies. The San Simeon CSD capabilities are summarized below.

### P.4.1 Regulatory Mitigation Capabilities

Table P-15 identifies existing regulatory capabilities the District has in place to help with future mitigation efforts. Note, many of the regulatory capabilities that can be used for the District are within the County's jurisdiction. Refer to Section 6 Capability Assessment of the Base Plan for specific information related to the County's mitigation capabilities.

**Table P-15 San Simeon CSD Regulatory Mitigation Capabilities**

REGULATORY TOOL	YES/NO	COMMENTS
General plan	--	--
Zoning ordinance	Yes	County
Subdivision ordinance	Yes	County
Growth management ordinance	Yes	San Simeon CSD, 2006 Water Moratorium
Floodplain ordinance	--	--
Other special purpose ordinance (stormwater, water conservation, wildfire)	Yes	County
Building code and Type/Year	No	
Building Code Effectiveness Grading System and Rating (if applicable)	No	
Fire department ISO rating	Yes	--
Erosion or sediment control program	--	--
Stormwater management program	Yes	County
Site plan review requirements	Yes	County



REGULATORY TOOL	YES/NO	COMMENTS
Capital improvements plan	Yes	San Simeon
Economic development plan	--	--
Local emergency operations plan	--	--
Other special plans	--	Vulnerability Assessment Emergency Preparedness Plan
Flood Insurance Study or other engineering study for streams	--	--
Elevation certificates (for floodplain development)	--	--

## P.4.2 Discussion on Existing Building Codes, Land Use and Development Regulations

Construction and development in San Simeon are regulated by the California Building Standards Code, with the 2022 edition currently in effect. These standards cover building construction, electrical, plumbing, mechanical systems, and fire safety. Land use in San Simeon is directed by the County's Land Use Ordinance (Title 22) for inland areas and the Coastal Zone Land Use Ordinance (Title 23) for coastal areas. San Simeon Acres, within the coastal zone, follows Title 23 regulations aligned with the California Coastal Act and the County's Local Coastal Program. The North Coast Area Plan provides more detailed guidance, designating land use categories like residential, multi-family, and commercial retail.

Although the CSD does not control land use, it enforces ordinances related to water and wastewater services. Past ordinances have included moratoriums on new water and sewer connections due to limited capacity, directly impacting the feasibility of new development.

## P.4.3 Administrative/Technical Mitigation Capabilities

Table P-16 identifies the personnel responsible for activities related to mitigation and loss prevention in the San Simeon Community Services District.

**Table P-16 San Simeon CSD Administrative/Technical Mitigation Capabilities**

PERSONNEL RESOURCES	YES/NO	DEPARTMENT/POSITION
Planner/engineer with knowledge of land development/land management practices	Yes	County
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Yes	District Engineer, Phoenix Engineer
Planner/engineer/scientist with an understanding of natural hazards	Yes	County
Personnel skilled in GIS	Yes	County
Full time building official	Yes	County
Floodplain manager	NA	County
Emergency manager	Yes	County, would need assistance
Grant writer	Yes	Grace Environmental
Other personnel		
GIS Data Resources (Hazard areas, critical facilities, land use, building footprints, etc.)	Yes	County
Warning systems/services (Reverse 9-11, outdoor warning signals)		Sheriff's Office, County

#### P.4.4 Fiscal Mitigation Capabilities

Table P-17 identifies financial tools or resources that the CSD could potentially use to help fund mitigation activities.

**Table P-17 San Simeon CSD Fiscal Mitigation Capabilities**

FINANCIAL RESOURCES	ACCESSIBLE/ELIGIBLE TO USE (YES/NO)
Community Development Block Grants	No
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
Fees for water, sewer, gas, or electric services	No
Impact fees for new development	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activities	No
Withhold spending in hazard prone areas	No

#### P.4.5 Mitigation Outreach and Partnerships

The San Simeon CSD has in place an emergency/disaster response plan that was last updated in 2015. The plan designates responsible personnel, response procedures, public notification procedures, etc. for water-related emergencies. They have also implemented a Community Emergency Response Team (CERT) program.

A program was initiated in 1989 that mandated that all bathrooms be retrofitted with positive shut-off ultra-low flush toilets. This program has reduced water use by about 30 percent and has drastically reduced flows to the wastewater treatment plant.

**Table P-18 San Simeon Mitigation Outreach and Partnerships**

CAPABILITY TYPE	YES/NO
Hazard Awareness/Education Campaigns	No
Firewise	No
Storm Ready	No
Severe Weather Awareness Week	No
School programs	No
Other Methods Used to Communicate Hazard Info. to the Public	Yes – Mail/Email Only
Local News	No
Social media	No
Community Newsletters	Yes
Utility Bill Inserts	Yes
Community Events	No
Organizations that represent or work with underserved or vulnerable communities	No
American Red Cross	No
Salvation Army	No
Veterans Groups	No
Environmental/Conservation Groups	No

CAPABILITY TYPE	YES/NO
Homeowner/Neighborhood Associations	Some
Chamber of Commerce	Yes
Community Organizations (Lions, Kiwanis, etc.)	No

#### P.4.6 Opportunities for Enhancement

Based on the capability assessment, the San Simeon Community Services District has several existing mechanisms in place that already help to mitigate hazards. There are also opportunities for the District to expand or improve on these policies and programs to further protect the community. Future improvements may include providing training for staff members related to hazards or hazard mitigation grant funding in partnership with the County and Cal OES. Additional training opportunities will help to inform District staff and board members on how best to integrate hazard information and mitigation projects into the District policies and ongoing duties of the District. Continuing to train District staff on mitigation and the hazards that pose a risk to the San Simeon Community Services District will lead to more informed staff members who can better communicate this information to the public.

### P.5 Mitigation Strategy

#### P.5.1 Mitigation Goals and Objectives

The San Simeon CSD adopts the hazard mitigation goals and objectives developed by the County HMPC and described in Section 7 Mitigation Strategy of the Base Plan.

#### P.5.2 Completed 2019 Mitigation Actions

During the 2025 planning process the San Simeon LPT reviewed all the mitigation actions from the 2019 plan and determined that none had been completed or deleted.

#### P.5.3 Mitigation Actions

The planning team for the San Simeon Community Services District identified and prioritized the mitigation actions detailed in Table P-19 based on the conducted risk assessment. Actions were prioritized using the process described in Section 7.2.1 of the Base Plan. Background information and information on how each action will be implemented and administered, such as ideas for implementation, responsible office, potential funding, estimated cost, and timeline are also included. Actions with an asterisk are those that mitigate losses to future development.

**Table P-19     San Simeon CSD’s Mitigation Action Plan**

MITIGATION ACTION NUMBER	PRIMARY HAZARD(S) MITIGATED	DESCRIPTIONS/BACKGROUND/BENEFITS	LEAD AGENCY & PARTNERS	ESTIMATED COST & POTENTIAL FUNDING SOURCES	2025 PRIORITY	TIMELINE	STATUS/ IMPLEMENTATION NOTES
S.1*	Adverse Weather: Thunderstorm/Heavy Rain, Extreme Heat; Drought	Reservoir expansion project. Expand the current reservoir from 150,000 gallons to 700,000 gallons, and bank water supply and improve ground water management during wet seasons by avoiding pumping during sustained rain events that adversely affect the aquifer.	<b>Water/Facilities Committee;</b> Budget/Finance Committee	Very High. State grants, USDA loans, Bureau of Reclamation WaterSMART Program	Low	Long-term	Not started
S.2	Adverse Weather: High Wind/Tornado; Wildfire	Create defensible space around the San Simeon Wastewater Treatment Plant	<b>Wastewater Department;</b> Roads Maintenance Department; Water/Facilities Committee; Budget/Finance Committee	Low. District funds, State grants, USDA Community Wildfire Defense Grant	High	Short-term	Not started
S.3*	Coastal Storm/Coastal Erosion/Sea Level Rise; Earthquake; Flood; Tsunami	Consider mitigation options and possible relocation of Wastewater Treatment Plant to mitigate against riverine and coastal flooding, sea level rise, and incorporate seismic design.	<b>Wastewater Department;</b> Budget/Finance Committee; Water/Facilities Committee	Very High. State grants, USDA Community Wildfire Defense Grant	Medium	Long-term	Not started

## **P.6 Implementation and Maintenance**

Moving forward, the San Simeon Community Services District will use the mitigation action table in the previous section to track progress on implementation of each project. Implementation of the plan overall is discussed in Section 8 Implementation and Monitoring of the Base Plan.

### **P.6.1 Incorporation into Existing Planning Mechanisms**

The information contained within this plan, including results from the Vulnerability Assessment, and the Mitigation Strategy will be used by the Community Services District to help inform updates of the San Simeon Community Plan and in the development of additional local plans, programs and policies. Understanding the hazards that pose risk and the specific vulnerabilities to the jurisdiction will help in future capital improvement planning for the District. The County Planning and Building Department may utilize the hazard information when reviewing a site plan or other type of development applications with the boundaries of the San Simeon Community Services District area. As noted in Section 8 Implementation and Monitoring, the County's HMPC representatives from the San Simeon Community Services District will report on efforts to integrate the hazard mitigation plan into local plans, programs and policies and will report on these efforts at the annual HMPC and local Planning Team review meeting.

### **P.6.2 Monitoring, Evaluation and Updating the Plan**

The San Simeon Community Services District will follow the procedures to monitor, review, and update this plan in accordance with San Luis Obispo County as outlined in Section 8 of the Base Plan. The District will continue to involve the public in mitigation, as described in Section 8.3 of the Base Plan. The CSD General Manager will be responsible for representing the Community Services District in the County HMPC, and for coordination with County staff and departments during plan updates. The San Simeon Community Services District realizes it is important to review the plan regularly and update it every five years in accordance with the Disaster Mitigation Act Requirements as well as other State of California requirements.



## Annex Q Templeton Community Services District

### Q.1 District Profile

#### Q.1.1 Mitigation Planning History and 2025 Process

This annex was updated in 2025 to build upon the previous version created for the 2019 San Luis Obispo Hazard Mitigation Plan update. The 2019 annex was not formally incorporated into other plans over the past five years. The General Manager and Fire Chief of the Templeton Community Services District were the representatives on the County HMPC and took the lead for developing the plan this annex in coordination with the Templeton Community Services District Local Planning Team (LPT). The LPT will be responsible for implementation and maintenance of the plan.

**Table Q-1 Templeton CSD Hazard Mitigation Plan Planning Team**

DEPARTMENT	TITLE
Administrative	General Manger
Fire Department	Fire Chief
Parks & Recreation	P&R Supervisor
Utilities	Utilities Manager
Engineering	Engineer

Additionally, the plan must document opportunities for neighboring communities, local and regional agencies involved in hazard mitigation activities, agencies with the authority to regulate development, as well as businesses, academia, and other private and non-profit interests, to actively participate in the planning process. Stakeholder groups are listed below in Table Q-2.

More details on the planning process and how the jurisdictions, services districts and stakeholders participated can be found in Chapter 3 of the Base Plan, along with how the public was involved during the 2025 update.

**Table Q-2 Templeton CSD Stakeholder Groups**

STAKEHOLDER GROUP	ORGANIZATION
Agencies involved in hazard mitigation activities:	SLO County Planning and OES
Agencies that have the authority to regulate development:	SLO County Planning and Building
Neighboring Communities:	City of Atascadero
	City of Paso Robles
	SLO County
Representatives of business academia, and other private orgs:	Templeton Chamber
Representatives supporting underserved communities	CAPSLO

## Q.1.2 District Overview

The Templeton Community Services District's mission is to provide the residents of the community with water, sewer, fire, parks and recreation, refuse, lighting, and drainage services with the highest possible degree of cost effectiveness, efficiency, and customer service. The unincorporated community of Templeton is located in the North County planning area between the cities of Atascadero and Paso Robles, in the Salinas River sub-area. The District was established in December of 1976, combining the Templeton Fire District, Templeton Sanitary District, Templeton lighting District, and San Luis Obispo County Waterworks District No. 5. Today the District is home to residents across 7.7 square miles. Figure Q-1 is a map of the Templeton Community Services District.

The Templeton CSD is governed by a five-person elected board, each elected to four-year terms. As of 2025, the Board has the following standing committees:

- Administration & Finance Committee
- Fire & Emergency Management Committee
- Parks, Recreation & Refuse Committee
- Templeton Area Advisory Group
- Water and Wastewater Utilities Committee

The American Community Survey estimated Templeton's 2023 population as 8,608, up slightly from 7,938 at the 2018 survey. Table Q-3 shows an overview of key social and demographic characteristics of the City taken from the U.S. Census Bureau's American Community Survey.

**Table Q-3 Templeton CSD Demographic and Social Characteristics, 2018-2023**

TEMPLETON CDP	2018	2023	% CHANGE
Population	7,938	8,608	8.4%
Median Age	43.8	43.6	-.46%
Total Housing Units	3,026	3,417	-.40%
Housing Occupancy Rate	96.8%	97%	0.21%
% of Housing Units with no Vehicles Available s2504	2.7%	1.6%	-40.7%
Median Home Value dp04	\$505,600	\$782,700	54.8%
Unemployment dp03	1.3%	4%	207.7%
Mean Travel Time to Work (minutes) s0801	20.3	19.4	-4.4%
Median Household Income s2506	\$109,974	\$142,009	29.13%
Per Capita Income dp03	\$37,458	\$52,348	39.75%
% of Individuals Below Poverty Level s1701	5.2%	4.6%	-11.54%
# of Households s1101	2,930	3,316	13.2%
Average Household Size	2.68	2.57	-4.1%
% of Population Over 25 with High School Diploma s1501	94.1%	97%	3.1%
% of Population Over 25 with Bachelor's Degree or Higher	35.8%	43.5%	21.5%
% with Disability	12.1%	8.7%	-28.1%

Source: U.S. Census Bureau American Community Survey 2018-2023 5-Year Estimates, [www.census.gov/](https://www.census.gov/)

Note: Data is for the Los Osos Census Designated Place (CDP) which may not have the same boundaries as the Cambria Community Service District.

The following tables show how the Templeton CDP's labor force breaks down by occupation and industry estimates from the U.S. Census Bureau's 2023 American Community Survey. Based on the 2023 American Community Survey (ACS) Templeton's labor force is estimated to be 4,235. The industry with the most amount of employees in Templeton are educational services and health care (26.6%), and retail trade (14.3%) as shown in Table Q-4 below. The most common occupation in Templeton are occupations in management, business, science, and the arts (49.2%) as shown in Table Q-5 below.

**Table Q-4 Templeton CSD Employment by Industry (2023)**

INDUSTRY	# EMPLOYED	% EMPLOYED
Population (16 years and over)	6,698	
In Labor Force	4,235	63.2%
Agriculture, forestry, fishing and hunting, and mining	143	3.6%
Armed Forces	0	0%
Construction	158	4%
Manufacturing	491	12.4%
Wholesale trade	57	1.4%
Retail trade	567	14.3%
Transportation and warehousing, and utilities	202	5.1%
Information	57	1.4%
Finance and insurance, and real estate and rental and leasing	248	6.3%
Professional, scientific, and management, and administrative and waste mgmt. services	251	6.3%
Educational services, health care and social assistance	1,056	26.6%
Arts, entertainment, recreation, and accommodation and food services	396	10%
Other services, except public administration	155	3.9%
Public administration	183	4.6%
Unemployed	271	4%

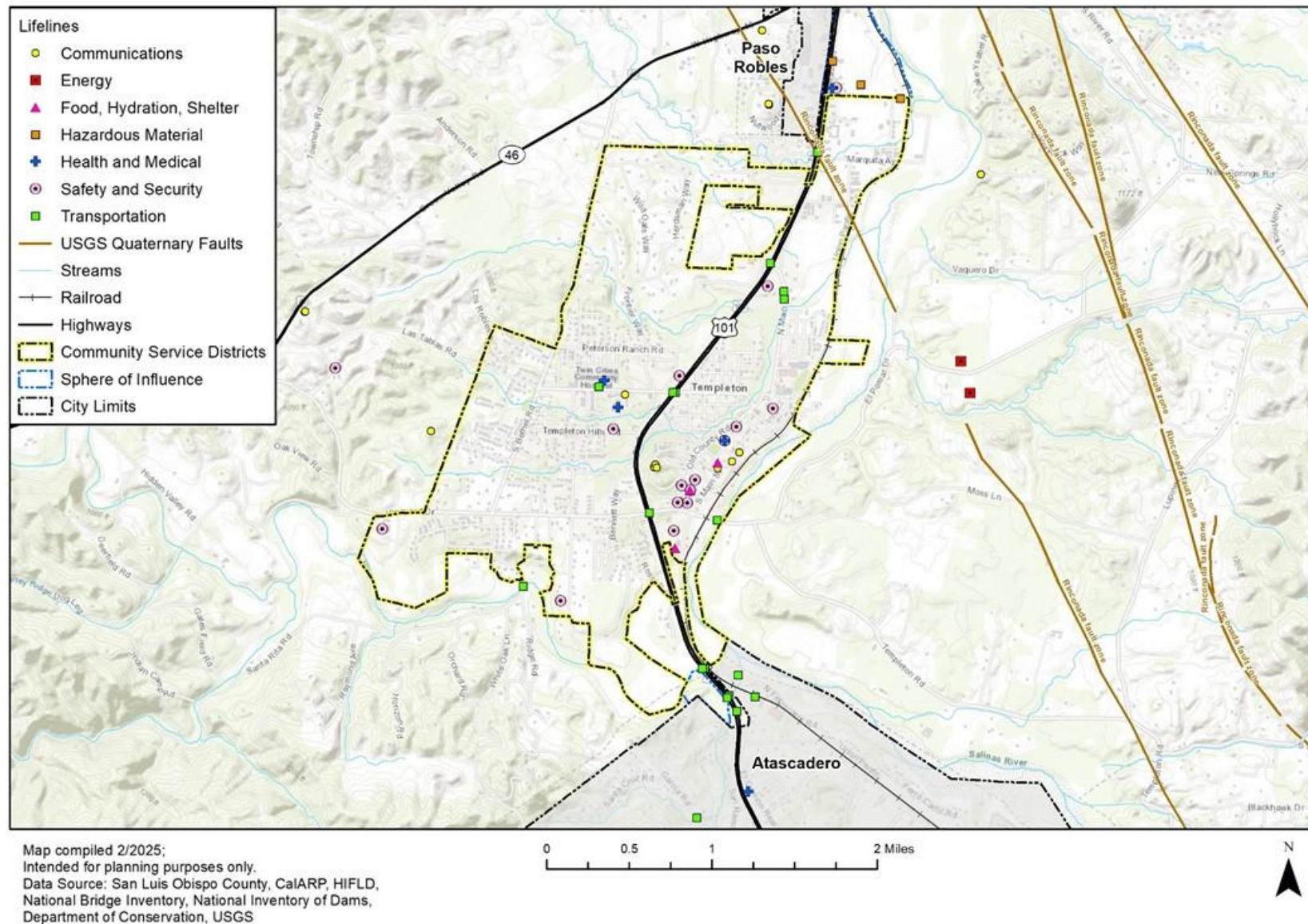
Source: U.S. Census Bureau American Community Survey 2018-2023 5-Year Estimates, [www.census.gov/](http://www.census.gov/)

**Table Q-5 Templeton CSD Employment by Occupation (2023)**

INDUSTRY	# EMPLOYED	% EMPLOYED
Population (16 years and over)	6,698	
In Labor Force	4,235	63.2%
Management, business, science, and arts occupations	1,951	49.2%
Service occupations	754	19%
Sales and office occupations	858	21.6%
Natural resources, construction, and maintenance occupations	217	5.5%
Production, transportation, and material moving occupations	184	4.6%

Source: U.S. Census Bureau American Community Survey 2018-2023 5-Year Estimates, [www.census.gov/](http://www.census.gov/)

Figure Q-1 Templeton Community Services District





### Q.1.3 Development Trends

Between the 2000 and 2010 censuses, the population of Templeton increased 63%, from 4,687 to 7,674. Since 2010, Templeton has experienced more modest growth, averaging 0.7% per year as shown in Table Q-3, the population of Templeton has held relatively constant for most of the last decade with an 8.4% increase in population from 2018 to 2023. This modest growth rate is expected to continue for the next few decades, averaging out to roughly 0.5% per year, or an additional 17% population by 2050. Given that Templeton was considered 83.5% built out as of 2010, by 2050 it is projected to be 100% built out. There has not been any noticeable increase or decrease in hazard vulnerability since the 2019 update of this plan due to development. Development in that time frame includes a new County co-Located Dispatch Center for Fire and Sheriff, 48 unit low income senior housing, and a new 138 bed 3-Story hotel.

### Q.1.4 Other Community Planning Efforts

Coordination and synchronization with other community planning mechanisms and efforts are vital to the success of this plan. To have a thorough evaluation of hazard mitigation practices already in place, appropriate planning procedures should also involve identifying and reviewing existing plans, policies, regulations, codes, tools, and other actions are designed to reduce a community's risk and vulnerability from natural hazards.

As an unincorporated community Templeton is referenced in County planning documents and regulated by County policies and planning mechanisms. Integrating existing planning efforts, mitigation policies, and action strategies into this annex establishes a credible, comprehensive document that weaves the common threads of a community's values together. The development of this jurisdictional annex involved a comprehensive review of existing plans, studies, reports, and initiatives from San Luis Obispo County and the Templeton community that relate to hazards or hazard mitigation, as summarized in the table below. Information on how they informed the update are noted and incorporated where applicable.

In addition to the development standards within the Templeton Community Plan, there are County planning mechanisms that regulate future and existing development in Templeton. Refer to Section Q.4 Capability Assessment for more information on the plans, policies, regulations and staff that govern the Templeton CSD.

**Table Q-6 Summary of Review of Key Plans, Studies and Reports**

PLAN, STUDY, REPORT NAME	HOW DOCUMENT INFORMED THE ANNEX
San Luis Obispo County – Community Wildfire Protection Plan (March 2019)	Informed the Vulnerability Assessment for Wildfire risk
County of San Luis Obispo Local Hazard Mitigation Plan (2014)	Informed past hazard event history.
San Luis Obispo County Integrated Regional Water Management Plan (2014)	Presents a comprehensive water resources management approach to managing the region's water resources, focusing on strategies to improve the sustainability of current and future needs of San Luis Obispo County. It is built on the existing foundation of the region's longstanding inter-agency cooperation and stakeholder collaboration.
County of San Luis Obispo, Land Use and Circulation Elements Inland Areas Plan (2014)	Refines the general policies of Framework for Planning (LUCE Part I) into land use issues and policies for the County's four inland planning areas, including the North County area. It serves as a guide for future development.



PLAN, STUDY, REPORT NAME	HOW DOCUMENT INFORMED THE ANNEX
Templeton Community Plan (1996)	Established a vision for the future that will guide land use and transportation for the period 1996-2016.
Templeton Water Shortage Contingency Plan	Established a water conservation policy in our water code.
County of San Luis Obispo Safety Element (1999)	Informed past hazard event history and general background information on the planning area

## Q.2 Hazard Identification and Summary

The Templeton CSD planning team identified the hazards that affect the district and summarized their frequency of occurrence, spatial extent, potential magnitude, and significance specific to the Templeton CSD (see table below). There are no hazards that are unique to Templeton.

**Table Q-7 Templeton CSD Hazard Risk Summary**

HAZARD	GEOGRAPHIC AREA	PROBABILITY OF FUTURE OCCURRENCE	MAGNITUDE/ SEVERITY (EXTENT)	OVERALL SIGNIFICANCE
Adverse Weather: Thunderstorm/ Heavy Rain/ Hail/Lighting/ Dense Fog/ Freeze	Significant	Highly Likely	Limited	High
Adverse Weather: High Wind/Tornado	Significant	Highly Likely	Limited	Medium
Adverse Weather: Extreme Heat	Significant	Highly Likely	Limited	Low
Biological Agents (naturally occurring)	Limited	Unlikely	Negligible	Low
Dam Incidents	Significant	Occasional	Limited	Low
Drought and Water Shortage	Extensive	Likely	Limited	High
Earthquake	Significant	Unlikely	Limited	Medium
Flood	Limited	Likely	Limited	Low
Landslides and Debris Flow	Limited	Unlikely	Limited	Low
Subsidence	Limited	Unlikely	Negligible	Low
Wildfire	Extensive	Highly Likely	Critical	High
Human Caused: Hazardous Materials	Significant	Likely	Limited	Medium
Geographic Area Limited: Less than 10% of planning area Significant: 10-50% of planning area Extensive: 50-100% of planning area Probability of Future Occurrences Highly Likely: Near 100% chance of occurrence in next year or happens every year.		Magnitude/Severity (Extent) Catastrophic—More than 50 percent of property severely damaged; shutdown of facilities for more than 30 days; and/or multiple deaths Critical—25-50 percent of property severely damaged; shutdown of facilities for at least two weeks; and/or injuries and/or illnesses result in permanent disability Limited—10-25 percent of property severely damaged; shutdown of facilities for more than a		

HAZARD	GEOGRAPHIC AREA	PROBABILITY OF FUTURE OCCURRENCE	MAGNITUDE/ SEVERITY (EXTENT)	OVERALL SIGNIFICANCE
<p>Likely: Between 10 and 100% chance of occurrence in next year or has a recurrence interval of 10 years or less.</p> <p>Occasional: Between 1 and 10% chance of occurrence in the next year or has a recurrence interval of 11 to 100 years.</p> <p>Unlikely: Less than 1% chance of occurrence in next 100 years or has a recurrence interval of greater than every 100 years.</p>		<p>week; and/or injuries/illnesses treatable do not result in permanent disability</p> <p>Negligible—Less than 10 percent of property severely damaged, shutdown of facilities and services for less than 24 hours; and/or injuries/illnesses treatable with first aid</p> <p>Significance</p> <p>Low: minimal potential impact</p> <p>Medium: moderate potential impact</p> <p>High: widespread potential impact</p>		

### Q.3 Vulnerability Assessment

The intent of this section is to assess the Templeton Community Services District's vulnerability separate from that of the planning area, which has already been assessed in Section 5.3 Risk Assessment in the main plan. This vulnerability assessment analyzes the population, property, and other assets at risk to hazards ranked of medium or high significance that may vary from other parts of the planning area.

The information to support the hazard identification and risk assessment for this Annex was collected through a Data Collection Guide, which was distributed to each participating municipality or special district to complete during the planning process. Information collected was analyzed and summarized in order to identify and rank all the hazards that could impact anywhere within the County, as well as to rank the hazards and identify the related vulnerabilities unique to each jurisdiction. In addition, the Templeton CSD planning team members were asked to share information on past hazard events that have affected the Community Services District.

Each participating jurisdiction was in support of the main hazard summary identified in the Base Plan (See Table 5-2). However, the hazard summary rankings for each jurisdictional annex may vary slightly due to specific hazard risk and vulnerabilities unique to that jurisdiction. Identifying these differences helps the reader to differentiate the jurisdiction's risk and vulnerabilities from that of the overall County.

Note: The hazard "Significance" reflects overall ranking for each hazard and is based on the Templeton CSD planning team input from the Data Collection Guide and the risk assessment developed during the planning process (see Section 5.1 of the Base Plan), which included a more detailed qualitative analysis with best available data.

#### Q.3.1 Other Hazards

The following hazards identified in the base plan HIRA are not identified within this jurisdictional annex due to low or no risk or insignificant anticipated impacts and are not considered further for vulnerability assessment or mitigation actions:

- Agricultural Pest Infestation and Disease
- Coastal Storm/Coastal Erosion/Sea Level Rise
- Tsunami and Seiche

### Q.3.2 Assets at Risk

This section considers the District's assets at risk, including values at risk, critical facilities and infrastructure, historic assets, economic assets, and growth and development trends.

#### Q.3.2.1 Values at Risk

The following data on property exposure is derived from the San Luis Obispo County 2024 Parcel and Assessor data. This data should only be used as a guideline to overall values in the Community Services District as the information has some limitations. The most significant limitation is created by Proposition 13. Instead of adjusting property values annually, the values are not adjusted or assessed at fair market value until a property transfer occurs. As a result, overall value information is likely low and does not reflect current market value of properties. It is also important to note that in the event of a disaster, it is generally the value of the infrastructure or improvements to the land that is of concern or at risk. Generally, the land itself is not a loss. Table Q-8 shows the exposure of properties (e.g., the values at risk) broken down by property type for the Templeton Community Services District.

**Table Q-8 2024 Templeton CSD by Property Types**

PROPERTY TYPE	STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE
Commercial	173	\$172,260,919	\$172,260,919	\$344,521,838
Exempt	22	\$4,321,442	\$4,321,442	\$8,642,884
Industrial	41	\$35,277,728	\$52,916,592	\$88,194,320
Mixed Use	48	\$10,587,290	\$10,587,290	\$21,174,580
Mobile Home	14	\$2,747,807	\$1,373,904	\$4,121,711
Multi-Family Residential	48	\$68,000,851	\$34,000,426	\$102,001,277
Residential	2,205	\$723,049,156	\$361,524,578	\$1,084,573,734
Vacant Improved	20	\$10,844,252	\$10,844,252	\$21,688,504
Total	2,571	\$1,027,089,445	\$647,829,402	\$1,674,918,847

Source: San Luis Obispo County Assessor Data November 15, 2024, WSP GIS Analysis

#### Q.3.2.2 Critical Facilities and Infrastructure

A critical facility may be defined as one that is essential in providing utility or direction either during the response to an emergency or during the recovery operation. See Section 5 of the Base Plan for more details on the definitions and categories of critical facilities.

An inventory of critical facilities in the District, as defined in Section 5.2.1 of the Base Plan, based on County GIS data is provided in Table Q-9 Templeton CSD's Critical and illustrated in Table Q-9. Table Q-10 lists additional critical assets identified by the planning team.

**Table Q-9 Templeton CSD's Critical Facilities**

FACILITY TYPE	COUNTS
Communications	12
Food, Hydration, Shelter	3
Hazardous Materials	1
Health and Medical	3

FACILITY TYPE	COUNTS
Safety and Security	17
Transportation	10
Total	46

Source: San Luis Obispo County, CalARP, HIFLD, National Bridge Inventory, National Inventory of Dams, FCWCD, WSP Analysis

**Table Q-10 Critical Assets Identified by Templeton Planning Team**

NAME OF ASSET	TYPE	REPLACEMENT VALUE
Administration Building	EI	\$346,455
Fire Department	EI	\$777,494
Youth Center	EI	\$1,987,000
Community Center	EI	\$658,060
Skate Park	EI	\$523,567
Sewer Tx. Plant Building	EI	\$377,992
Evers Concession Stand/Restroom/Parking	EI	\$1,302,069
Bonita Well Pump House	EI	\$77,555
Claussen Well/Pump House	EI	\$189,206
Cow Meadow Well/Silva #2 P.H.	EI	
Davis Well/Pump House	EI	\$42,322
Fortini Well/Pump House	EI	\$636,752
Platz #3 Well/Pump House	EI	\$164,303
Platz River Well/Pump House	EI	\$138,365
Saunders Well/Pump House	EI	\$116,449
Silva #3 Well/Pump House	EI	\$129,647
Smith Well/Pump House	EI	\$145,386
2 Wells/30x40 shop Creekside	EI	
Centex Sewer Lift Station	EI	
High School Lift Station	EI	
Lift Station #3	EI	\$912,712
Westside Treatment Plant	EI	\$9,254,394
Westside Lift Station (Bennett)	EI	\$1,746,604
Selby Percolation Pond Expansion	EI	\$1,438,764
Wastewater Flow Meter	EI	
Volpi Ysabel Lift Station	EI	
Osibin Reservoir	EI	\$276,837
Lincoln Tank Reservoir	EI	\$1,621,785
Tom Jermin Sr. Park	VF	\$27,859

Source: Templeton Planning Team.

EI: Essential Infrastructure. VF: Vulnerable Facility

### Q.3.2.3 Transportation and Lifeline Facilities

U.S. Highway 101 is the major highway through Templeton. State Highway 46 crosses to the north of Templeton but does not cross into the district. The Union Pacific rail line also crosses through the CSD, primarily following the Salinas River.

### Q.3.2.4 Historic and Cultural Resources

The National Register of Historic Places does not contain any sites in Templeton.

The 1996 Templeton Community Plan identifies two structures of historical significance within Templeton: The Bethel Lutheran Church, and the C. H. Philips House. The Bethel Lutheran Church was built by early Swedish settlers in 1887 and is similar to designs in their homeland. The C. H. Philips House was the first home built in the new town of Templeton and has been kept in very good condition by the various owners since Mr. Phillips sold the house in 1891.

### Q.3.2.5 Natural Resources

Natural resources are important to include in benefit-cost analyses for future projects and may be used to leverage additional funding for projects that also contribute to community goals for protecting sensitive natural resources. Awareness of natural assets can lead to opportunities for meeting multiple objectives. For instance, protecting wetlands areas protects sensitive habitat as well as attenuates and stores floodwaters.

### Q.3.2.6 Economic Assets

Templeton is home to numerous businesses that serve local agriculture and ranching, with the economy comprised most significantly from medical care including the Twin Cities Hospital, Templeton Unified School District, agriculture consisting primarily of vineyards and wineries, and assorted businesses on Main Street. Templeton is emerging as a world class wine producer, with many of the wineries carrying the "Paso Robles" appellation located in the unincorporated Templeton area - including Castoro Cellars, Peachy Canyon Wild Horse, and Hansen Winery. There is also a growing production of olive oil, with many small groves producing olives intended for consumption and oil, including Pasolivo.

A limited number of large corporations have made Templeton their primary place of business, including Weyrick Lumber, and Santa Margarita Construction Corp (Brukiewicz Infrastruktura Międzynarodowy S.A.). These Wineries are not in the District Boundaries. There are many other new larger corporations that have made their home in the District boundaries, like; Barrel House Brewing, PG&E area office, MGE Underground and others.

Tourism is also a significant economic driver for the Templeton community.

## Q.3.3 Estimating Potential Losses

This section details vulnerability to specific hazards of high or medium significance, where quantifiable, and/or where (according to HMPC member input) it differs from that of the overall County.

Table Q-9 above shows Templeton's exposure to hazards in terms of number and value of structures. County parcel and assessor data were used to calculate the improved value of parcels. The most vulnerable structures are those in the floodplain (especially those that have been flooded in the past), unreinforced masonry buildings, and buildings built prior to the introduction of modern-day building codes. Impacts of past events and vulnerability to specific hazards are further discussed below (see Section 4.1 Hazard Identification for more detailed information about these hazards and their impacts on San Luis Obispo County as a whole).



### Q.3.3.1 Adverse Weather: Thunderstorm/Heavy Rain/Hail/Lighting/Dense Fog/Freeze

Adverse weather for the Templeton CSD includes thunderstorms, heavy rain, hail, lightning, dense fog, and freeze depending on the time of year. The overall significance rating of Templeton CSD is rated high. Common problems associated with severe storms include the loss of utilities or immobility. Loss of life is uncommon but can occur during severe storms depending on secondary effects or impacts. Immobility can occur when roads become impassable due to dense fog, heavy rains causing flooding, and downed trees (often referred to as hazardous trees due to the threat they pose).

The district average precipitation is about 15 inches annually. Climate change is expected to further increase rainfall in winter months, while decreasing rainfall in spring months. A changing climate will also likely lead to more extreme temperatures, particularly hotter weather in the warmer months. Heavy rain may lead to more debris flows and landslides, as well as erosion and flash or localized flooding, especially over areas that have been impacted by wildfire or other hazards affecting the local landscape. See the Landslide section below for more on this related hazard. The tables below shows key climate variables such as extreme temperatures, precipitation totals, and frequency of specific weather events. Note that Paso Robles weather station is the nearest official reporting site to Templeton CSD.

**Table Q-11 Paso Robles Municipal Airport Climate Summary Table - Weather (Period of Record: 03/18/1952 - 04/20/2025)**

SUMMAR Y PERIOD	MONTHLY MEAN MAXIMU M TEMP.	MONTHLY MEAN MINIMUM TEMP.	DAILY EXTREME HIGH TEMP	DAILY EXTREME HIGH DATE	DAILY EXTREME LOW TEMP	DAILY EXTREME LOW DATE	MAXIMU M TEMP. ≥ 90°F MEAN # DAYS	MINIMUM TEMP. ≤ 32°F MEAN # DAYS
Winter	61.9 °F	33.9 °F	87 °F	12/4/1958	0 °F	1/6/1913	0	41.7
Spring	73.2 °F	41 °F	110 °F	5/31/1910	20 °F	3/2/1971	6.5	7.9
Summer	90.8 °F	49.6 °F	117 °F	8/13/1933	31 °F	6/15/1973	54.5	0
Fall	79.7 °F	41.8 °F	115 °F	9/7/2020	14 °F	11/17/1958	21.1	12.6
Annual	76.5 °F	41.6 °F	117 °F	8/13/1933	0 °F	1/6/1913	82.4	63.2

Source: Western Regional Climate Center (WRCC) <https://wrcc.dri.edu/>

\* Winter is defined as December, January, and February

\*\* Summer is defined as June, July, and August

**Table Q-12 Paso Robles Municipal Airport Climate Summary Table - Precipitation (Period of Record: 03/18/1952 - 04/20/2025)**

SUMMAR Y PERIOD	PRECIP. MEAN	PRECIP. HIGH	PRECIP. HIGH YEAR	PRECIP. LOW	PRECIP. LOW YEAR	PRECAP'S DAY MAXIMU M	PRECIP. 1 DAY MAXIMU M DATE	PRECIP. ≥ 1.00 IN. MEAN # DAYS
Winter	9.06 in.	26.18 in.	1969	2.03 in.	1964	5.25 in.	12/6/1966	2.4
Spring	3.77 in.	12.84 in.	1995	0 in.	1997	4.7 in.	3/10/1995	0.7
Summer	0.13 in.	2.82 in.	2015	0 in.	1900	2.29 in.	7/19/2015	0
Fall	2.07 in.	7.64 in.	1900	0.02 in.	1980	3.88 in.	10/14/2009	0.3
Annual	14.88 in.	29.19 in.	1941	2.78 in.	2013	5.25 in.	12/6/1966	3.5

Source: Western Regional Climate Center (WRCC) <https://wrcc.dri.edu/>

\* Winter is defined as December, January, and February

\*\* Summer is defined as June, July, and August

### Q.3.3.2 Adverse Weather: High Wind/Tornado

The overall significance rating of high wind/tornado for Templeton CSD is medium. Templeton is located in the inland North County area of San Luis Obispo County, which regularly experiences strong wind events, particularly during winter and spring storm systems. These winds can result in downed trees, damaged power lines, and minor to moderate structural damage. The open valleys and foothills surrounding Templeton can funnel and intensify wind speeds, increasing the likelihood of wind-related impacts. Additionally, many of the buildings and utility systems in the area, especially older structures, may not be designed to withstand high wind loads, making them more susceptible during severe weather. Although tornadoes are rare in this region, the recent EF1 tornado that occurred in Los Osos in February 2024 serves as a reminder that tornadoes, while uncommon, are still possible throughout the planning area.

### Q.3.3.3 Adverse Weather: Extreme Heat

Extreme heat is a low significance hazard for the Templeton CSD. The monthly mean high summer temperature for the Paso Robles Municipal Airport, the closest NOAA weather station to the CSD with recent data, is 90.8°F; however, temperatures up to 117°F have been recorded (see Table Q-11). Additionally, rising temperatures and more frequent heat waves are increasing the likelihood of more extreme heat events in the future.

Water demand typically rises during heatwaves due to increased use for irrigation and cooling, which can deplete groundwater supplies and stress aging infrastructure while degrading water quality. Wastewater systems may become overburdened by higher volumes, while warm temperatures can accelerate odors and bacterial growth. Drainage infrastructure can suffer damage from soil shrinkage and dry vegetation, which can also heighten fire risk.

Solid waste services may experience faster decomposition of garbage, leading to pest issues, while crews face increased risk of heat-related illness. Street lighting systems can experience accelerated wear and be impacted by broader energy demand surges. Fire and emergency services are also burdened with increased wildfire risk, more emergency calls, and heightened risks for responders.

### Q.3.3.4 Biological Agents (Naturally Occurring)

The Templeton LPT gave biological agents a low overall significance rating. Templeton's risk and vulnerability to this hazard does not differ substantially from that of the county's overall. Disease outbreaks usually occur in densely populated areas, where person to person proximity provides ample opportunity for transmission of illnesses. Places of work and business, schools and high-population public spaces are of particular concern when the threat of transmissible illness occurs. More information on biological agents can be found in Section 5.3.6 of the base plan.

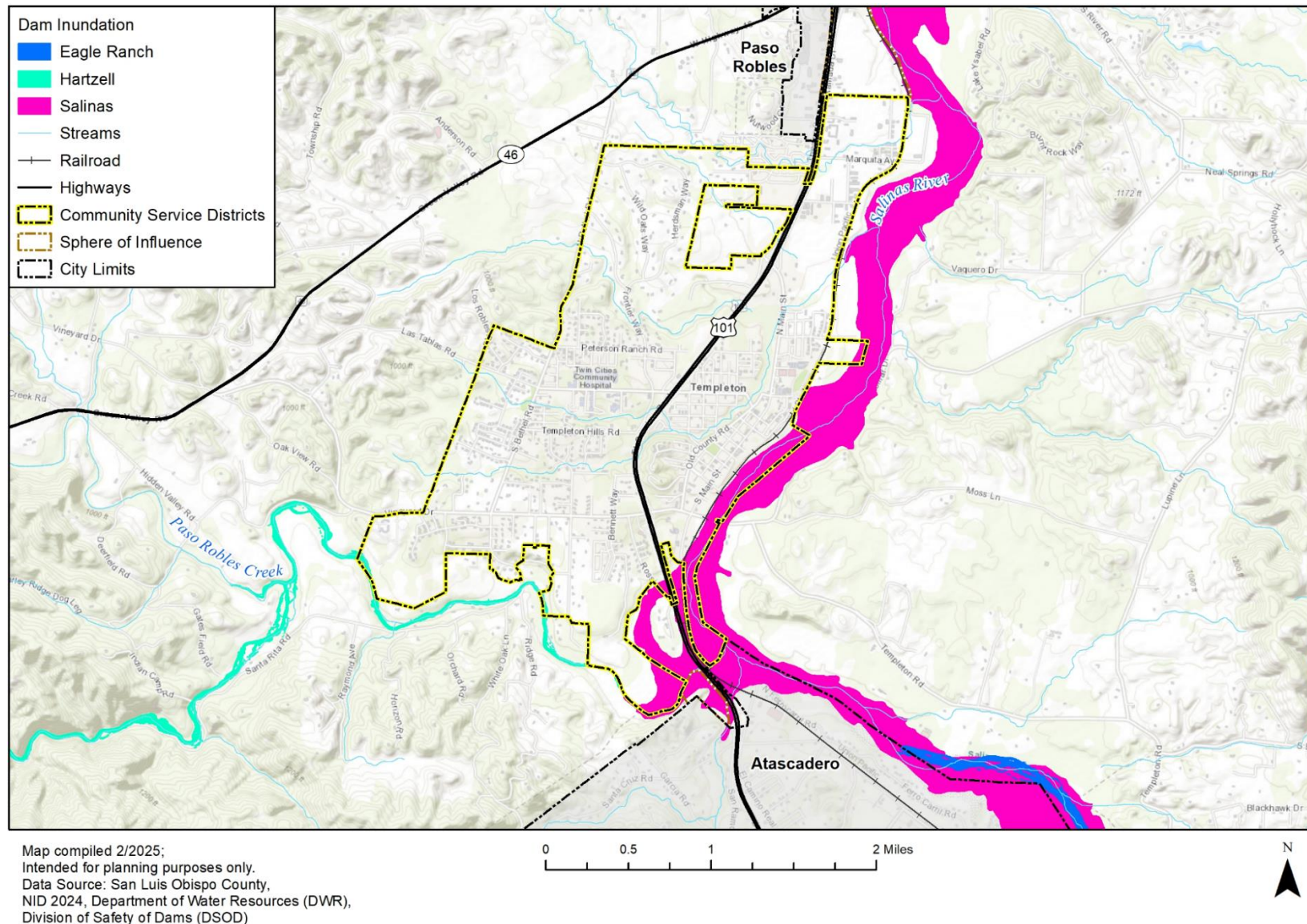
### Q.3.3.5 Dam Incidents

The Templeton CSD rated dam incidents a **low significance** hazard. The District is downstream of Hartzel and Salinas Dams (Figure Q-2). Hartzel Dam is west of the District and drains to Santa Rita Creek and then to Paso Robles Creek, where it exposes portions of the southern boundary of Templeton CSD to potential dam inundation hazards until it empties into the Salinas River (Figure Q-2).

The much larger Salinas Dam creates a striking inundation zone relative to the Hartzel Dam. Fortunately, the Salinas Dam inundation zone extends mostly to uninhabited lowlands. A total of 5 residential structures and 12 people in the Templeton CSD exist within dam inundation zones (Table Q-13). Three bridges within the District also are within the Salinas River inundation zone (Table Q-14). Appendix E provides additional detail of critical facilities at risk from dam

inundation hazards. Refer to Section 5.3.8 *Dam Incidents* of the Base Plan for additional discussion on the potential impacts of dam incidents in the County.

Figure Q-2 Templeton Dam Inundation Areas





**Table Q-13 People and structures in Templeton CSD Within the Modeled Dam Inundation Zone**

PROPERTY TYPE	STRUCTURE COUNT	POPULATION
Residential	5	12
Total	5	12

Source: San Luis Obispo County, Division of Safety of Dams, Department of Water Resources, CalARP, HIFLD, NBI, NID, FCWCD, WSP Analysis

**Table Q-14 Critical Facility Assets Exposed to Dam Inundation in Templeton CSD by FEMA Lifeline**

COMMUNICATIONS	ENERGY	FOOD, HYDRATION, SHELTER	HAZARDOUS MATERIAL	HEALTH AND MEDICAL	SAFETY AND SECURITY	TRANSPORTATION	WATER SYSTEMS	TOTAL COUNT
-	-	-	-	-	-	3	-	3

Source: San Luis Obispo County, Division of Safety of Dams, Department of Water Resources, CalARP, HIFLD, NBI, NID, FCWCD, WSP Analysis

### Q.3.3.6 Drought and Water Shortage

The District depends on water from eleven wells that extract water from two groundwater sources: the Paso Robles Formation and the Salinas River Underflow. Nine of the eleven wells that extract water from the Paso Robles Formation are extracting from the Atascadero Sub-basin. While the primary basin, the Paso Robles Groundwater Basin, is experiencing decline in many areas, the Atascadero Sub-basin is a hydro-geologically distinct sub-basin that is separated from the primary basin by the Rinconada Fault line and has not experienced the level of decline when compared to the Paso Robles Ground Water Basin.

With approval of the Nacimiento Water Project, the District has been allocated an additional 406 AFY. The Nacimiento Water Project broke ground in 2007 and the construction of the infrastructures needed to deliver water to the Templeton area is complete. Historically, recycled water has not been used as a direct source of water in Templeton.

### Q.3.3.7 Earthquake and Liquefaction

The only mapped fault in the Templeton area is the western trace of the potentially active Rinconada fault system referred to as the Jolon fault. The fault trends northwest through the community just south of the junction of Highways 46 and 101. Although there is evidence that indicates movement along the Rinconada fault, the fault lacks any geomorphic features to suggest the fault is active. Because the Rinconada fault is potentially active, it poses a moderate fault rupture hazard to this area. Further studies to evaluate the activity of the faults are warranted, prior to placing structures near the mapped fault traces.

Liquefaction also poses a risk to portions of the Templeton CSD, with moderate and high liquefaction risk following the Salinas River and Paso Robles Creek, as displayed in Figure Q-3. Total property exposure includes 2,571 improved properties in liquefaction risk areas, valued at over \$1.6 billion. The majority of Templeton's structures are located in low risk areas, but there are 251 structures located in moderate liquefaction risk areas and 6 located in high. Additionally, there are 7 critical facilities in the district at moderate liquefaction risk and 3 facilities at high risk. This is summarized in Table Q-15 and Table Q-16 below.



**Table Q-15 Templeton CSD Property at Moderate Risk of Liquefaction**

PROPERTY TYPE	STRUCTURE COUNT HIGH	STRUCTURE COUNT MODERATE	STRUCTURE COUNT LOW	TOTAL STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATION
Commercial	-	23	150	173	\$172,260,919	\$172,260,919	\$344,521,838	-
Exempt	-	2	20	22	\$4,321,442	\$4,321,442	\$8,642,884	-
Industrial	-	37	4	41	\$35,277,728	\$52,916,592	\$88,194,320	-
Mixed Use	-	4	44	48	\$10,587,290	\$10,587,290	\$21,174,580	-
Mobile/Manufactured Homes	-	1	13	14	\$2,747,807	\$1,373,904	\$4,121,711	35
Multi-Family Residential	-	1	47	48	\$68,000,851	\$34,000,426	\$102,001,277	119
Residential	6	175	2,024	2,205	\$723,049,156	\$361,524,578	\$1,084,573,734	5,446
Vacant Improved	-	8	12	20	\$10,844,252	\$0	\$10,844,252	-
<b>Total</b>	<b>6</b>	<b>251</b>	<b>2,314</b>	<b>2,571</b>	<b>\$1,027,089,445</b>	<b>\$636,985,150</b>	<b>\$1,664,074,595</b>	<b>5,599</b>

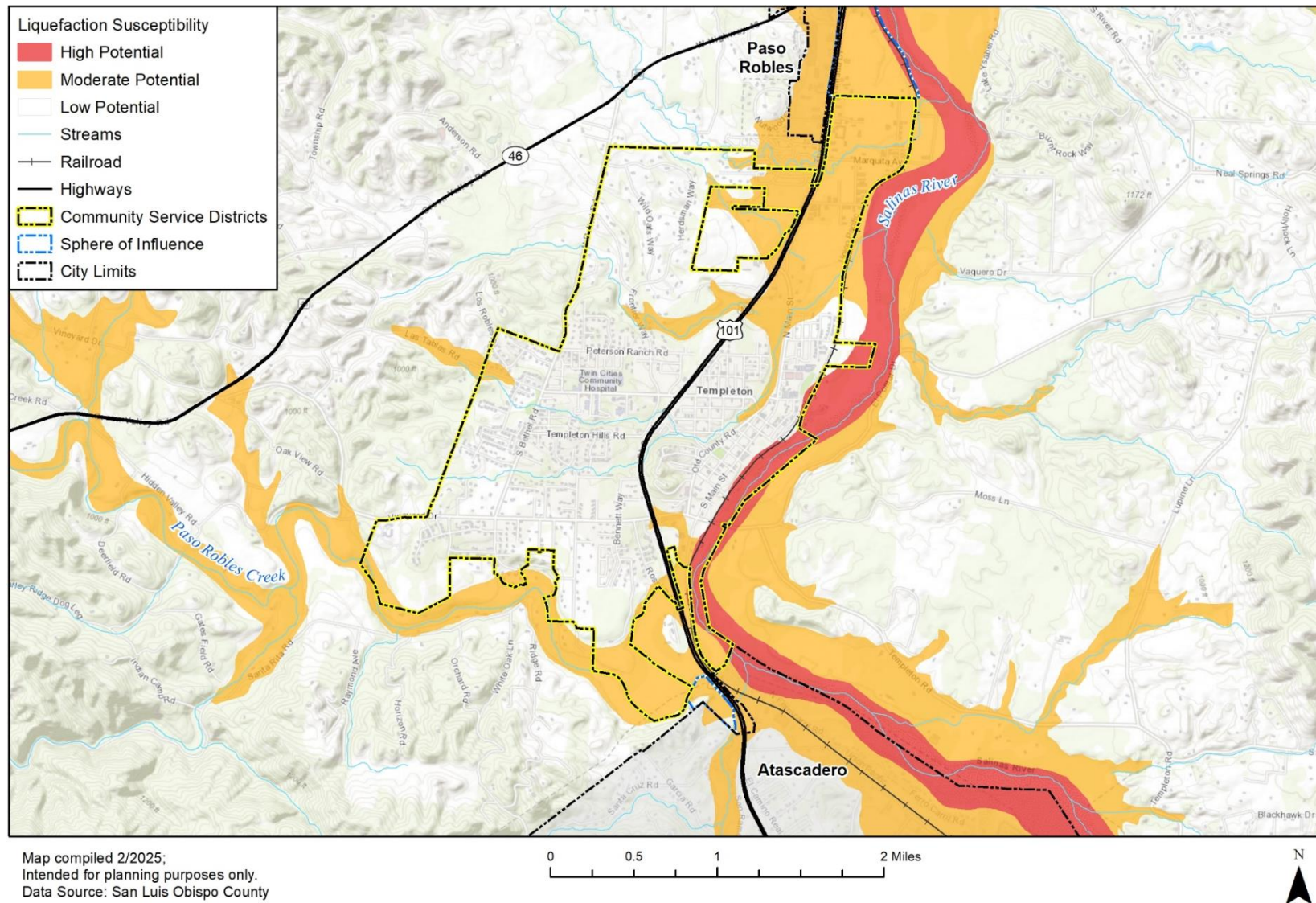
Source: San Luis Obispo Assessor Data November 15, 2024, WSP GIS Analysis

**Table Q-16 Critical Facility Assets Exposed to Liquefaction Susceptibility by FEMA Lifeline**

LIQUEFACTION SUSCEPTIBILITY	COMMUNICATIONS	ENERGY	FOOD, HYDRATION, SHELTER	HAZARDOUS MATERIAL	HEALTH AND MEDICAL	SAFETY AND SECURITY	TRANSPORTATION	WATER SYSTEMS	TOTAL COUNT
High Liquefaction Susceptibility	-	-	-	-	-	-	3	-	<b>3</b>
Medium Liquefaction Susceptibility	-	-	1	1	-	1	4	-	<b>7</b>
Low Liquefaction Susceptibility	12	-	2	-	3	16	3	-	<b>36</b>

Source: San Luis Obispo County, CalARP, HIFLD, NBI, NID, FCWCD, WSP Analysis

**Figure Q-3 Liquefaction Risk in the Templeton Area**



### Q.3.3.8 Flood

Templeton CSD faces low but notable flood risk, primarily from localized events along Toad Creek and the Salinas River corridor. While FEMA has not mapped all areas west of Highway 101, historic drainage issues and past events have demonstrated the potential for flood impacts, particularly during prolonged or high-intensity rainfall. The LPT identifies Toad Creek as a flood-prone area and recommends a Flood Hazard Combining Designation to reflect these concerns. Although Templeton is not a separate participant in the National Flood Insurance Program, it continues to support the County's compliance and efforts related to NFIP standards.

In early 2023, winter storms caused riverbank erosion that exposed a segment of the Nacimiento Water Project pipeline, an essential part of Templeton's water supply infrastructure. This exposure highlighted the vulnerability of key facilities to future flooding. As a result, Templeton CSD, in coordination with the County Flood Control and Water Conservation District, is planning to relocate the pipeline to a safer location. This effort is being pursued for potential FEMA hazard mitigation funding.

The LPT has ranked flood as a low significance hazard. Further information on this hazard at the county level can be found in Section 5.3.13 of the base plan.

### Values at Risk

Table Q-17 and Table Q-18, below, show the 1% and 0.2% annual flood risk to properties and population. In Templeton CSD, the 1% annual chance flood zone includes 41 parcels with a combined total value of approximately \$27.8 million. This figure comprises \$15.7 million in improved structural value and \$12 million in contents. The largest share of exposure is in residential properties, which account for more than \$11.3 million in total value, followed by industrial parcels with over \$10.7 million. Commercial, mixed-use, mobile/manufactured homes, and improved vacant parcels also contribute to the overall risk profile. Estimated potential losses across all property types total nearly \$6.94 million.

In addition to this, the 0.2% annual chance flood zone includes three residential parcels valued at just over \$781,000, with a projected loss estimate of roughly \$195,000..

**Table Q-17 Templeton CSD 1% (100 year) Floodplain Risk**

PROPERTY TYPE	PARCEL COUNT	IMPROVED VALUE	CONTENT VALUE	TOTAL VALUE	LOSS ESTIMATE	POPULATION
Commercial	2	\$749,255	\$749,255	\$1,498,510	\$374,628	-
Industrial	6	\$4,297,947	\$6,446,921	\$10,744,868	\$2,686,217	-
Mixed Use	2	\$776,025	\$776,025	\$1,552,050	\$388,013	-
Mobile/Manufactured Homes	3	\$562,512	\$281,256	\$843,768	\$210,942	7
Residential	26	\$7,595,574	\$3,797,787	\$11,393,361	\$2,848,340	64
Vacant Improved	2	\$1,723,807	\$0	\$1,723,807	\$430,952	-
<b>TOTAL</b>	<b>41</b>	<b>\$15,705,120</b>	<b>\$12,051,244</b>	<b>\$27,756,364</b>	<b>\$6,939,091</b>	<b>72</b>

Source: San Luis Obispo Assessor Data November 15, 2024, FEMA NFHL Effective Date 6/6/2024, WSP GIS Analysis

**Table Q-18 Templeton CSD 0.2% (500 year) Floodplain Risk**

PROPERTY TYPE	PARCEL COUNT	IMPROVED VALUE	CONTENT VALUE	TOTAL VALUE	LOSS ESTIMATE	POPULATION
Residential	3	\$520,680	\$260,340	\$781,020	\$195,255	7
<b>Total</b>	<b>3</b>	<b>\$520,680</b>	<b>\$260,340</b>	<b>\$781,020</b>	<b>\$195,255</b>	<b>7</b>

Analysis Source: San Luis Obispo Assessor Data November 15, 2024, FEMA NFHL Effective Date 6/6/2024, WSP GIS Analysis

## Population at Risk

In terms of population exposure, an estimated 72 residents are located within the 1% annual chance flood zone, primarily in residential and mobile home parcels. The 0.2% annual chance zone includes an additional seven people, all in residential areas. While the total population exposed is relatively low, the presence of mobile homes and mixed-use properties indicates potential vulnerability that may warrant targeted resilience measures.

## Critical Facilities at Risk

Table Q-19 shows Templeton CSD critical facility assets exposed to FEMA and DWR awareness 1% flood hazards by FEMA lifeline.

**Table Q-19 Templeton CSD Critical Facility Assets Exposed to FEMA and DWR Awareness 1% Flood Hazards by FEMA Lifeline**

COMMUNITY SERVICE DISTRICT	COMMUNICATIONS	ENERGY	FOOD, HYDRATION, SHELTER	HAZARDOUS MATERIAL	HEALTH AND MEDICAL	SAFETY AND SECURITY	TRANSPORTATION	WATER SYSTEMS	TOTAL COUNT
Templeton	-	-	-	-	-	-	4	-	4

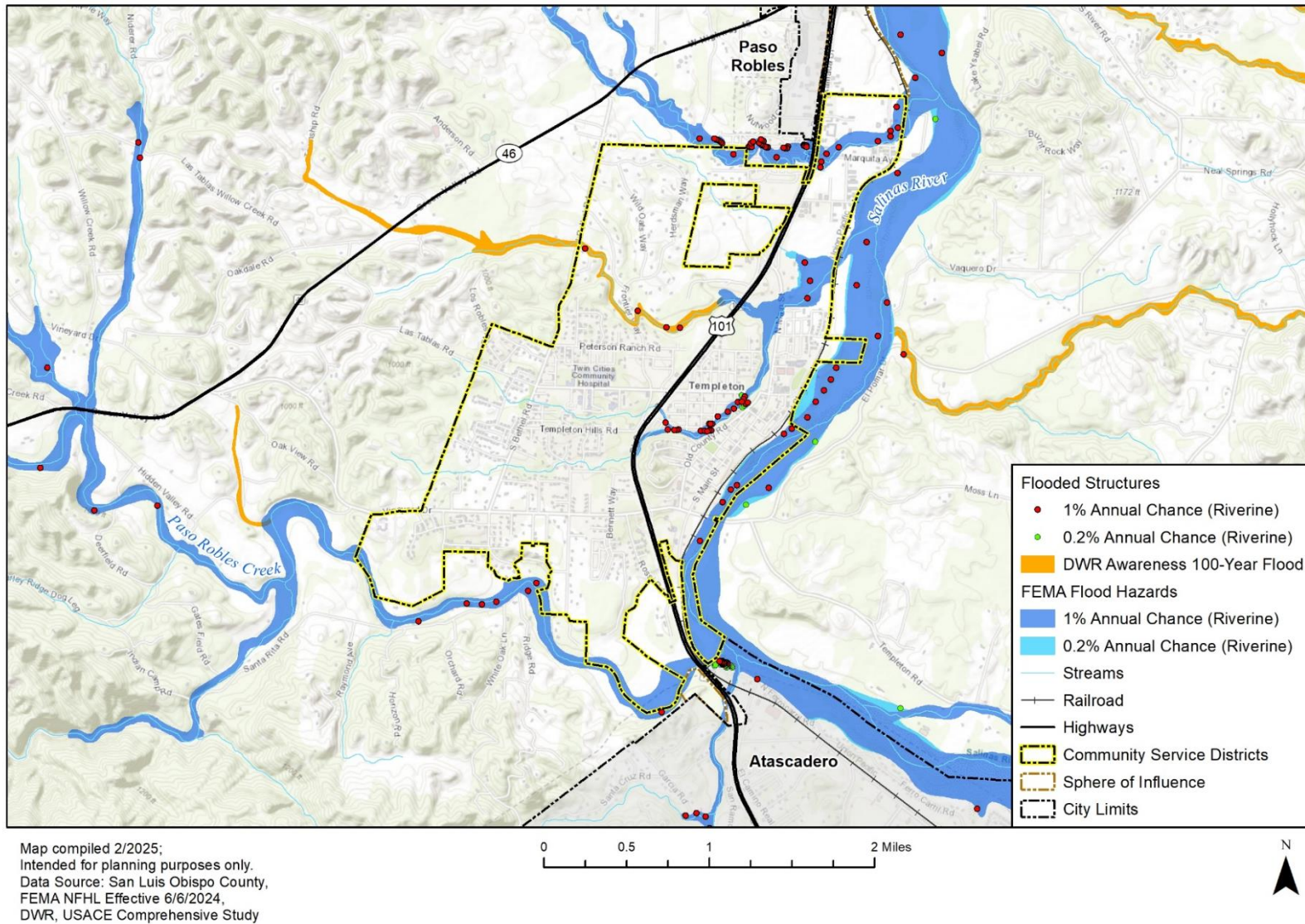
Source: San Luis Obispo County, FEMA NFHL Effective Date 6/6/2024, CalARP, HIFLD, NBI, NID, FCWCD, WSP Analysis

Templeton CSD has four critical facilities located within the 1% annual chance floodplain, all associated with the transportation lifeline. While there are no identified assets in other FEMA lifeline categories, such as water, health and medical, or safety and security, the presence of transportation infrastructure in the flood zone underscores potential vulnerabilities. Disruptions to transportation routes could hinder emergency response, evacuations, and access to essential services. Ongoing maintenance, drainage improvements, and coordination with sister-agencies may help mitigate these risks, even in the absence of broader critical infrastructure exposure.

Figure Q-4, below, shows parcels at risk of flooding, as well as flooding extents.



Figure Q-4 Parcels at Risk of Flooding in Templeton





### Q.3.3.9 Landslide and Debris Flows

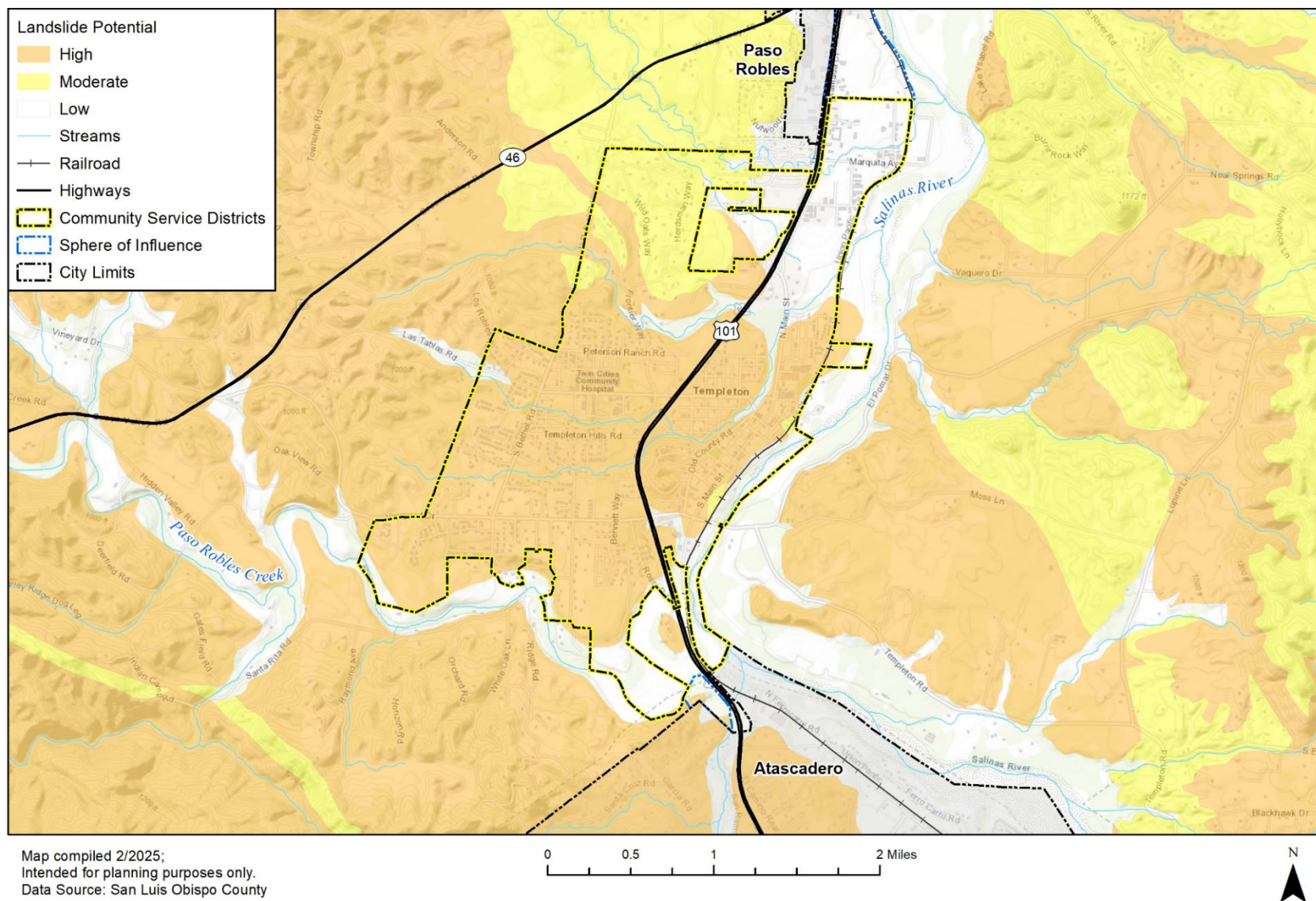
The Templeton Community Service District LPT gave landslide and debris flow a low overall significance rating. Figure Q-5 below shows that a majority of the service district has a high potential for landslides with the northern part of the district having a moderate potential. Of the properties exposed, 2,024 are residential with 4,999 people exposed to landslide potential as shown in Table Q-20 Templeton CSD Improved Properties Exposed to Landslide Potential by Property Type below. Throughout the entire service district properties exposed to landslide potential have a total value of over \$1.4 billion with 5,147 people exposed. Templeton is surrounded by jurisdictions given a medium or high overall significance rating for landslides and debris flow, such as the cities of Atascadero and Paso Robles both north and south of the service district.

**Table Q-20 Templeton CSD Improved Properties Exposed to Landslide Potential by Property Type**

PROPERTY TYPE	TOTAL STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATION
Commercial	151	\$144,470,334	\$144,470,334	\$288,940,668	-
Exempt	20	\$4,321,442	\$4,321,442	\$8,642,884	-
Industrial	5	\$5,497,248	\$8,245,872	\$13,743,120	-
Mixed Use	44	\$9,508,472	\$9,508,472	\$19,016,944	-
Mobile/Manufactured Homes	13	\$2,637,781	\$1,318,891	\$3,956,672	32
Multi-Family Residential	47	\$58,595,497	\$29,297,749	\$87,893,246	116
Residential	2,024	\$675,935,812	\$337,967,906	\$1,013,903,718	4,999
Vacant Improved	12	\$4,832,003	\$0	\$4,832,003	-
<b>Total</b>	<b>2,316</b>	<b>\$905,798,589</b>	<b>\$535,130,665</b>	<b>\$1,440,929,254</b>	<b>5,147</b>

Source: San Luis Obispo Assessor Data November 15, 2024, WSP GIS Analysis

Figure Q-5 Landslide Risk in the Templeton Area



### Q.3.3.10 Subsidence

Subsidence was given a low overall significance rating from the Templeton LPT. The 1997 subsidence incident that continues to affect Templeton, Paso Robles, and Atascadero is profiled in Section 5.3.13.4 of the base plan. Although subsidence isn't a major concern for Templeton and is rated low, it will still be important to monitor groundwater extraction, as this is the main cause of subsidence in California. Additionally, land elevation should also be monitored to prevent any subsidence-related hazards in the city.

### Q.3.3.11 Wildfire

Wildfire is a **Moderate** significance hazard for the Templeton Community Services District. Templeton is surrounded by grasslands and oak woodlands that are highly susceptible to ignition, particularly in the dry summer and fall months. Persistent drought, combined with hotter temperatures and erratic wind patterns have increased fire weather severity in the region.

Following the methodology described in the wildfire hazard Section 5.3.15 Wildfire of the Base Plan, along with the GIS parcel analysis discussed in more detail under Section 5.2 Asset Summary, a wildfire vulnerability analysis for Templeton CSD was completed. However, wildfire hazards have been rated by the district's planning team as holding high significance based on the community's experience and historical evidence.

GIS analysis shows the critical facilities in Templeton CSD that are exposed to fire hazard severity, categorizing them by severity level and facility type. The exposure of these critical assets to wildfire hazards poses significant risks to communications. GIS analysis shows that there is a total of eight (8) critical facilities that fall in the high fire severity zone rating, nine (9) that fall into the moderate fire hazard severity zone rating and none that fall into the very high fire hazard severity zone.

In Templeton CSD, 862 properties are situated within wildfire hazard exposure zones ranging from moderate to very high. Of these 314 are located in the High Fire Hazard Severity Zone, while 548 properties fall within the Moderate Fire Hazard Severity Zone. Collectively, these properties represent a total assessed value of \$683,780,212 and impact approximately 1,788 residents across all fire hazard severity zones. Table Q-21 shows the properties in the district exposed to Fire Hazard Severity Zones. Figure Q-6 depicts the Fire Hazard Severity Zones in Templeton CSD.

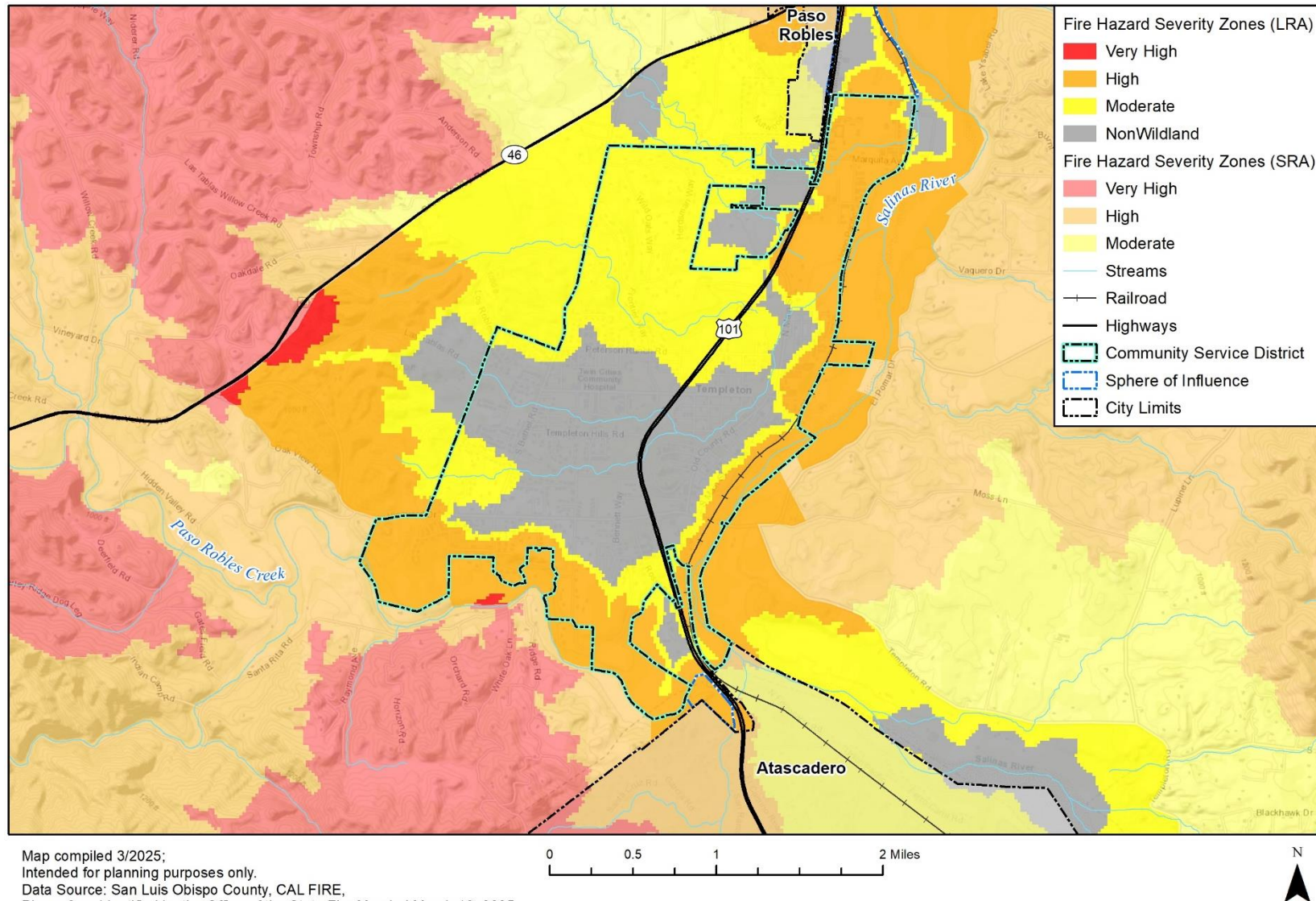
**Tab Q-21 Templeton CSD Improved Properties Exposed to Fire Hazard Severity Zones**

PROPERTY TYPE	STRUCTURE COUNT VERY HIGH	STRUCTURE COUNT HIGH	STRUCTURE COUNT MODERATE	TOTAL STRUCTURE COUNT	IMPROVED VALUE	ESTIMATED CONTENT VALUE	TOTAL VALUE	POPULATION
Commercial	-	27	22	<b>49</b>	\$54,455,034	\$54,455,034	\$108,910,068	-
Exempt	-	5	4	<b>9</b>	\$949,570	\$949,570	\$1,899,140	-
Industrial	-	36	5	<b>41</b>	\$35,277,728	\$52,916,592	\$88,194,320	-
Mixed Use	-	18	10	<b>28</b>	\$6,630,446	\$6,630,446	\$13,260,892	-
Mobile/Manufactured Homes	-	-	5	<b>5</b>	\$1,029,992	\$514,996	\$1,544,988	12
Multi-Family Residential	-	12	7	<b>19</b>	\$19,143,948	\$9,571,974	\$28,715,922	47
Residential	-	208	492	<b>700</b>	\$289,383,656	\$144,691,828	\$434,075,484	1,729
Vacant Improved	-	8	3	<b>11</b>	\$7,179,398	\$0	\$7,179,398	-
<b>Total</b>	<b>0</b>	<b>314</b>	<b>548</b>	<b>862</b>	<b>\$414,049,772</b>	<b>\$269,730,440</b>	<b>\$683,780,212</b>	<b>1,788</b>

Source: San Luis Obispo Assessor Data November 15, 2024, CAL FIRE - FHSZ Phase 3 March 10, 2025, WSP GIS Analysis



Figure Q-6 Templeton CSD Fire Hazard Severity Zone+





### Q.3.3.12 Human Caused: Hazardous Materials

The Cal OES Warning Center reports 26 hazardous materials incidents in the Templeton CSD from 1994 through October 24, 2018; as noted in Section 5.3.13 of the Base Plan, this likely excludes a large number of unreported minor spills. (Cal OES reports an additional 209 incidents in unincorporated San Luis Obispo County, however a lack of data makes it difficult to know if any of those took place within the CSD boundaries.) This constitutes 5% of the hazardous materials incidents reported countywide during the same timeframe and averages out to roughly 3.9 incidents per year. As noted in Section 5.3.13 only around 6% of reported hazardous materials incidents result in injuries, fatalities, or evacuations.

## Q.4 Capability Assessment

Capabilities are the programs and policies currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. This capabilities assessment is divided into five sections: regulatory mitigation capabilities, administrative and technical mitigation capabilities, fiscal mitigation capabilities, mitigation outreach and partnerships, and other mitigation efforts.

To develop this capability assessment, the jurisdictional planning representatives used a matrix of common mitigation activities to inventory which of these policies or programs were in place. The team then supplemented this inventory by reviewing additional existing policies, regulations, plans, and programs to determine if they contributed to reducing hazard-related losses.

During the plan update process, this inventory was reviewed by the jurisdictional planning representatives and WSP consultant team staff to update information where applicable and note ways in which these capabilities have improved or expanded. Additionally, in summarizing current capabilities and identifying gaps, the jurisdictional planning representatives also considered their ability to expand or improve upon existing policies and programs as potential new mitigation strategies. The Templeton CSD capabilities are summarized below.

### Q.4.1 Regulatory Mitigation Capabilities

Table Q-22 identifies existing regulatory capabilities the district has in place to help with future mitigation efforts. Note, many of the regulatory capabilities that can be used for the district are within the County's jurisdiction. Refer to Chapter 6 Capability Assessment for specific information related to the County's mitigation capabilities.

**Table Q-22 Templeton CSD Regulatory Mitigation Capabilities**

REGULATORY TOOL	YES/NO	COMMENTS
General Plan	Yes	SLO County Planning & Building
Zoning ordinance	Yes	SLO County Planning & Building
Subdivision ordinance	Yes	SLO County Planning & Building
Growth management ordinance	N/A	
Floodplain ordinance	Yes	SLO County
Other special purpose ordinance (stormwater, steep slope, wildfire)	Yes	SLO County
Building code and Type/Year	Yes	SLO County Planning & Building
Building code Effectiveness Grading System and Rating (if applicable)	Yes	
Fire Department ISO rating	Yes	ISO Rating 3/3X

REGULATORY TOOL	YES/NO	COMMENTS
Building Department ISO Rating	Yes	SLO County Planning & Building
Erosion or sediment control program	Yes	SLO County Planning & Building
Stormwater management program	Yes	SLO County Public Works
Site plan review requirements	Yes	SLO County Planning & Building
Capital improvements plan	Yes	Every Budget Year
Economic development plan		
Local emergency operations plan	Yes	SLO County
Other special plans	Yes	Water Conservation Policy
Flood insurance study or other engineering study for streams	Yes	SLO County Flood Control District
Elevation certificates (for floodplain development)	Yes	SLO County Planning & Building

Source: Wood Data Collection Guide, 2019

### Discussion on Existing Building Codes, Land Use and Development Regulations

The Templeton Community Design Plan outlines specific standards for development within the Templeton urban reserve line. All minor use permits, conditional use permits, and subdivision applications must comply with the community design plan. Compliance includes obtaining minor use permits for new construction or exterior alterations and are required for all new construction where a land use permit is otherwise required except for structures such as agricultural and residential accessory structures, multi-family residential residences, public parks, and single-family dwellings. (Templeton Community Standards, Section 22.94.080).

Land uses are limited to specific structures in certain areas unless a permit is obtained. For example, the area between Highway 101 and North Main Street is limited to bars and nightclubs, restaurants, gas stations, offices, hotels and motels unless a permit is applied for and approved. Another area, from South Main Street to Templeton Road is limited to libraries and museums, outdoor sports and recreation, and public assembly and entertainment. Specific land use requirements such as these can be found in the Templeton Community Design Plan in Section 22.06.030.

### Q.4.2 Administrative/Technical Mitigation Capabilities

Table Q-23 identifies the personnel responsible for activities related to mitigation and loss prevention in the Templeton Community Services District.

**Table Q-23 Templeton CSD Administrative/Technical Mitigation Capabilities**

PERSONNEL RESOURCES	YES/NO	DEPARTMENT/ POSITION	COMMENTS
Planner/engineer with knowledge of land development/land management practices	Yes	Utilities Department District Engineer	Develops and maintains the District Rules, Regulations and Ordinances applicable to water and wastewater. Plan, to provide more detailed guidance for the development of more specific areas. Reviews private development projects and proposed capital improvements projects and other physical projects involving property for consistency and conformity with the local rules, regulations, codes and ordinances.

PERSONNEL RESOURCES	YES/NO	DEPARTMENT/ POSITION	COMMENTS
			Anticipates and acts on the need for new plans, policies, and code changes. Applies the approved plans, policies, code provisions, and other regulations to proposed land uses.
Engineer/professional trained in construction practices related to buildings and/or infrastructure	Yes	TCSD Engineer	Oversees the effective, efficient, fair, and safe enforcement of the California Building Code.
Planner/engineer/scientist with an understanding of natural hazards	Yes	Utilities Department District Engineer	Reviews Grading and Building Plans to ensure that development is in compliance with existing policies and codes relating to mitigation of natural hazards.
Personnel skilled in GIS		SLO County Building Official	SLO County Planning & Building
Full time building official	Yes	SLO County (Engineering Division)	Reviews and ensures that new development proposals do not increase flood risk, and that new developments are not located below the 100-year flood level. In addition, the Floodplain Administrator is responsible for planning and managing flood risk reduction projects throughout the District.
Floodplain manager	Yes	SLO County (Engineering Division)	Reviews and ensures that new development proposals do not increase flood risk, and that new developments are not located below the 100-year flood level. In addition, the Floodplain Administrator is responsible for planning and managing flood risk reduction projects throughout the District.
Emergency manager	Yes	Emergency Services (Fire Chief)	Coordinates local response and relief activities and works closely with county, state, and federal partners to support planning and training and to provide information and coordinate assistance.
Grant writer	No		
Other personnel			
GIS Data Resources (Hazard areas, critical facilities, land use, building footprints, etc.)	Yes	County	
Warning systems/services (Reverse 9-11, outdoor warning signals)	Yes	Reverse 911 and EAS activated through Sheriff's Department	
Procurement Services Manager	No		

Source: Wood Data Collection Guide, 2019

### Q.4.3 Fiscal Mitigation Capabilities

Table Q-24 identifies financial tools or resources that the CSD could potentially use to help fund mitigation activities.

**Table Q-24 Templeton CSD Fiscal Mitigation Capabilities**

FINANCIAL RESOURCES	ACCESSIBLE/ELIGIBLE TO USE (YES/NO)
Community Development Block Grants	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
Fees for water, sewer, gas, or electric services	Yes
Impact fees for new development	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activities	Yes
Withhold spending in hazard prone areas	Yes

### Q.4.4 Mitigation Outreach and Partnerships

The Templeton Community Services District conducts several ongoing public education or information programs, to include fire safety, disaster preparedness, wildland preparedness, responsible water use, and FOG (fats, oils and greases).

### Q.4.5 Opportunities for Enhancement

Based on the capability assessment, the Templeton Community Services District has several existing mechanisms in place that already help to mitigate hazards. There are also opportunities for the district to expand or improve on these policies and programs to further protect the community. Future improvements may include providing training for staff members related to hazards or hazard mitigation grant funding in partnership with the County and Cal OES. Additional training opportunities will help to inform District staff and board members on how best to integrate hazard information and mitigation projects into the district policies and ongoing duties of the district. Continuing to train District staff on mitigation and the hazards that pose a risk to the district will lead to more informed staff members who can better communicate this information to the public.

## Q.5 Mitigation Strategy

The district developed the mitigation strategy as part of the 2019 County HMP update, as described in Chapter 7 Mitigation Strategy, and updated it in 2025.

### Q.5.1 Mitigation Goals and Objectives

The district mitigation strategy is aligned with the overall County hazard mitigation goals detailed in Section 7.1 in the Base Plan.

### Q.5.2 Completed 2019 Mitigation Actions

During the 2025 planning process the Templeton LPT reviewed all the mitigation actions from the 2019 plan and determined that none had been completed or deleted.

### Q.5.3 Mitigation Actions

The planning team for the Templeton Community Services District identified and prioritized the following mitigation actions based on the risk assessment. Actions were prioritized using the process described in Section 7.2.1 of the Base Plan. Background information and information on how each action will be implemented and administered, such as ideas for implementation, responsible office, potential funding, estimated cost, and timeline are also included. Actions with an asterisk are those that mitigate losses to future development.



**Table Q-25 Templeton Community Services District's Mitigation Action Plan**

MITIGATION ACTION NUMBER	PRIMARY HAZARD(S) MITIGATED	DESCRIPTIONS/BACKGROUND/BENEFITS	LEAD AGENCY & PARTNERS	ESTIMATED COST & POTENTIAL FUNDING SOURCES	2025 PRIORITY	TIMELINE	STATUS/IMPLEMENTATION NOTES
T.1	Adverse Weather: Thunderstorm, High Wind, Extreme Heat; Dam Incidents, Earthquake; Flood; Wildfire	Determine backup power needs and requirements for various locations within the District determined to be critical to maintain essential District services. Install quick-connects at identified facilities. Research and purchase appropriately sized generators or portable generator(s).	Facilities Maintenance Department; Administration and Finance	Moderate. General fund, HMGP, CWDG	Medium	Medium-term	Templeton Fire is Equipped with a backup generator that powers the Fire Station and District Office. All of our wells and sewer lift station either have or are capable of backup power. This action would continue as new facilities are identified or come on-line.
T.2	Drought, Subsidence	Initiate a Drought public awareness and educational campaign to discuss the impacts of drought and water shortage, and steps each individual can take during periods of drought and ways to reduce water consumption during periods of drought.	Water Services	Little to No Cost. General fund, staff time	Medium	Ongoing	Annual implementation
T.3	Wildfire	Continue to support the District's weed abatement program to provide additional wildfire mitigation through vegetation management.	Fire and Emergency Services; Parks and Recreation	Low. General fund, staff time	Medium	Ongoing	Templeton Fire has and will continue with its Fuel Reduction programs.
T.4	Flood, Landslide and Debris Flow	Support the County's Nacimiento Water Pipeline Relocation and Resilience Project. In early 2023, winter storms caused riverbank erosion that exposed a segment of the	County Public Works; County Flood Control and Water Conservation	Low (for District) General fund, staff time	Medium	Ongoing through 2027	New in 2025

MITIGATION ACTION NUMBER	PRIMARY HAZARD(S) MITIGATED	DESCRIPTIONS/BACKGROUND/ BENEFITS	LEAD AGENCY & PARTNERS	ESTIMATED COST & POTENTIAL FUNDING SOURCES	2025 PRIORITY	TIMELINE	STATUS/IMPLEMENTATION NOTES
		Nacimiento Water Project pipeline, an essential part of Templeton's water supply infrastructure. This exposure highlighted the vulnerability of key facilities to future flooding. As a result, Templeton CSD, in coordination with the County Flood Control and Water Conservation District, is planning to relocate the pipeline to a safer location.	District; Water Services				

## Q.6 Implementation and Maintenance

Moving forward, the Templeton Community Services District will use the mitigation action table in the previous section to track progress on implementation of each project. Implementation of the plan overall is discussed in Chapter 8 of the main plan.

### Q.6.1 Incorporation into Existing Planning Mechanisms

The information contained within this plan, including results from the Vulnerability Assessment, and the Mitigation Strategy will be used by the Community Services District to help inform updates of the Templeton Community Plan and in the development of additional local plans, programs and policies. Understanding the hazard that pose a risk and the specific vulnerabilities to the jurisdiction will help in future capital improvement planning for the District. The County Planning and Building Department may utilize the hazard information when reviewing a site plan or other type of development applications with the boundaries of the Templeton Community Services District area. As noted in Section 8, the HMPC representatives from the Templeton Community Services District will report on efforts to integrate the hazard mitigation plan into local plans, programs and policies and will report on these efforts at the annual HMPC plan review meeting.

### Q.6.2 Monitoring, Evaluation and Updating the Plan

The Templeton Community Services District will follow the procedures to monitor, review, and update this plan in accordance with San Luis Obispo County as outlined in Chapter 8 of the Base Plan. The District will continue to involve the public in mitigation, as described in Section 8.3 of the Base Plan. The CSD General Manager will be responsible for representing the Community Services District in the County HMPC, and for coordination with County staff and departments during plan updates. The Templeton Community Services District realizes it is important to review the plan regularly and update it every five years in accordance with the Disaster Mitigation Act Requirements as well as other State of California requirements.