NACIMIENTO WATER PROJECT

Addendum #3 to the Final Environmental Impact Report

Nacimiento Reserve Water Project

ED 00-603
(583R385602)
(300420.11.4)
(300420.11.1)

December 2015

Contents

1.0 Summary 1
2.0 Project Location 1
3.0 Project Description 2
4.0 Analysis of Environmental Issues 3
4.1 Hydrology and Water Quality 8
4.1.1 Environmental Setting 8
4.1.2 Regulatory Setting 10
4.1.3 Significance Criteria 12
4.1.4 Impacts and Mitigation Measures 13
4.1.5 Cumulative Impacts 14
4.2 Geology, Seismicity and Soils 14
4.2.1 Environmental Setting 14
4.1.2 Regulatory Setting 19
4.1.3 Significance Criteria 19
4.1.4 Impacts and Mitigation Measures 20
4.1.5 Cumulative Impacts 20
4.3 Drainage, Erosion and Sedimentation 20
4.3.1 Environmental Setting 21
4.3.2 Regulatory Setting 22
4.3.3 Significance Criteria 23
4.3.4 Impacts and Mitigation Measures 23
4.3.5 Cumulative Impacts 24
4.4 Air Quality 24
4.4.1 Environmental Setting 24
4.4.2 Regulatory Setting 28
4.4.3 Significance Criteria 32
4.4.4 Impacts and Mitigation Measures 35
4.4.5 Cumulative Impacts 35
4.5 Noise 35

4.5.1 Environmental Setting 35
4.5.2 Regulatory Setting 38
4.5.3 Significance Criteria 39
4.5.4 Impacts and Mitigation Measures 40
4.5.5 Cumulative Impacts 40
4.6 Hazards and Hazardous Materials 40
4.6.1 Environmental Setting 40
4.6.2 Regulatory Setting 42
4.6.3 Significance Criteria 45
4.6.4 Impacts and Mitigation Measures 46
4.6.5 Cumulative Impacts 46
4.7 Biological Resources 46
4.7.1 Environmental Setting 46
4.7.2 Regulatory Setting 48
4.7.3 Significance Criteria 49
4.7.4 Impacts and Mitigation Measures 50
4.7.5 Cumulative Impacts 50
4.8 Cultural and Paleontological Resources 50
4.8.1 Environmental Setting 50
4.8.2 Regulatory Setting 54
4.8.3 Significance Criteria 55
4.8.4 Impacts and Mitigation Measures 57
4.8.5 Cumulative Impacts 57
4.9 Land Use 57
4.9.1 Environmental Setting 57
4.9.2 Regulatory Setting 58
4.9.3 Significance Criteria 59
4.9.4 Impacts and Mitigation Measures 59
4.9.5 Cumulative Impacts 59
4.10 Utilities and Public Services 59
4.10.1 Environmental Setting 60

4.10.2 Regulatory Setting 63
4.10.3 Significance Criteria 65
4.10.4 Impacts and Mitigation Measures 65
4.10.5 Cumulative Impacts 66
4.11 Transportation/Circulation 67
4.11.1 Environmental Setting 67
4.11.2 Regulatory Setting 67
4.11.3 Significance Criteria 68
4.11.4 Impacts and Mitigation Measures 68
4.11.5 Cumulative Impacts 69
4.12 Aesthetics/Visual Resources 69
4.12.1 Environmental Setting 69
4.12.2 Regulatory Setting 70
4.12.3 Significance Criteria 70
4.12.4 Impacts and Mitigation Measures 71
4.12.5 Cumulative Impacts 71
4.13 Agricultural Resources 71
4.13.1 Environmental Setting 71
4.13.2 Regulatory Setting 72
4.13.3 Significance Criteria 73
4.13.4 Impacts and Mitigation Measures 73
4.13.5 Cumulative Impacts 73
4.14 Recreational Resources 74
4.14.1 Environmental Setting 74
4.14.2 Regulatory Setting 75
4.14.3 Significance Criteria 75
4.14.4 Impacts and Mitigation Measures 76
4.14.5 Cumulative Impacts 76
4.15 Socioeconomic Resources 76
4.15.1 Environmental Setting 76
4.15.2 Regulatory Setting 77

4.15.3 Impacts and Mitigation Measures 77
4.15.4 Cumulative Impacts 77
4.16 Environmental Justice 78
4.16.1 Regulatory Setting 78
4.16.2 Significance Criteria 78
4.16.3 Impacts and Mitigation Measures 79
5.0 Growth Inducing Impacts 79
6.0 Decision Not to Prepare Subsequent EIR 83
7.0 Conclusion 84
8.0 References 85

ADDENDUM #3

Nacimiento Water Project Final EIR

1.0 Summary

This Addendum to the 2003 Nacimiento Water Project Final Environmental Impact Report provides CEQA documentation for a project which will increase the entitlements of Nacimiento water for: County Service Area 10A in Cayucos, Bella Vista Mobile Home Park, also in Cayucos, and the SMR Mutual Water Company on the Santa Margarita Ranch (the Nacimiento Reserve Water Project or "Project"). The San Luis Obispo County Flood Control and Water Conservation District's (District) 2003 Nacimiento Water Project EIR (2003 NWP EIR) evaluated 15 agencies as potential subscribers to the Nacimiento Water Project (Attachment 1). The Cities of San Luis Obispo and Paso Robles, the Templeton Community Services District (TCSD), the Atascadero Mutual Water Company (AMWC) and County Service Area 10A (CSA10A) are the current participants in the Nacimiento Water Project. Of the 15,750 acre feet per year of water available to the five participants, 9,655 acre feet are subscribed, leaving 6,095 acre feet of unallocated water (termed "Reserve Water" in the Water Delivery Entitlement Contracts). The Project would fully allocate the Nacimiento water to the existing participants and, in addition, the Project would allocate water to two new participants included in the 2003 Nacimiento Water Project EIR: Bella Vista Mobile Home Park (BVMHP) and the SMR Mutual Water Company (SMRMWC). The two cities and TCSD are the CEQA Lead Agencies relative to their participation in the Project.

For each of these entities, the resulting higher allocation would not exceed the amount which was evaluated in the 2003 NWP EIR. The Project location, description and environmental impacts are discussed in this EIR Addendum. Because there would be only minor construction associated with the project, and because not enough details about that work are available at this time to conduct a meaningful environmental analysis, this Addendum focused on any changes in the environmental setting since 2003 that might result in any new significant environmental impacts or an increase in the severity of any previously identified environmental impacts.

This analysis concludes that the Project would not result in any new significant environmental impacts not already identified in the 2003 NWP EIR or the 2008 Final EIR for the Santa Margarita Ranch Agricultural Cluster Subdivision Project and Future Development Program, nor an increase in the severity of any already identified environmental impact that might result from implementation of the Project.

2.0 Project Location

The Nacimiento Water Project (NWP) extends from the Intake Pump Station at the east end of Lake Nacimiento in the northwestern portion of San Luis Obispo County approximately 45 miles south to the City of San Luis Obispo's Water Treatment Plant on Stenner Creek Road. There are two intermediate pump stations, three storage tanks, four turnouts and other appurtenances associated with this raw water distribution facility (Attachment 2). The locations of the five existing participants and the two new participants are indicated on Attachment 3, and the service areas of CSA10A, SMRMWC and BVMHP are shown graphically in Attachment 4.

County Service Area 10 is the Cayucos Water Treatment Plant, which produces potable water for all of the Cayucos urban area. CSA10A is the water distribution system for the southern part of the community of Cayucos. Two water retailers (Morro Rock Mutual Water Company and Paso Robles Beach Water Association) distribute water from the treatment plant to various parts of the community. Cayucos is located north of Morro Bay in the central coastal area of San Luis Obispo County.

Bella Vista Mobile Home Park (identified as *Lewis C. Pollard Family Trust* in the 2003 NWP EIR) is located on an 11.08 acre parcel at the northwest corner of Cayucos, southwest of Highway 1 and west of Cayucos Creek. Most of the property is used as a mobile home park, a portion is for recreational vehicle storage, and some is undeveloped. Three contiguous parcels under the same ownership are on the east side of Cayucos Creek fronting B Street. These undeveloped parcels total 2.2 acres.

The 14,000-acre Santa Margarita Ranch property is located immediately east of U.S. Highway 101, surrounding the unincorporated community of Santa Margarita. Approximately 3,778 of these acres was granted tentative approval for an Agricultural Residential Cluster Subdivision in December 2008. This site is located southeast of the community of Santa Margarita and west of Pozo Road.

3.0 Project Description

The Project would fully allocate Nacimiento water to the existing participants and to two new project participants included in the 2003 NWP EIR: BVMHP and SMRMWC. This Addendum is specific to the increased and new entitlements for CSA10A, BVMHP and SMRMWC. The two cities and TCSD are the CEQA Lead Agencies relative to their participation in the Project. AMWC is not a public agency and is therefore not subject to CEQA.

The 2004 Water Delivery Entitlement Contracts granted the participants the right to later purchase Reserve Water. As a result, while each public agencies' decision to exercise that right is a discretionary decision subject to CEQA, the District's agreement to such an action is not discretionary, and is therefore not subject to CEQA. Since AMWC is not a public agency, its decision to purchase reserve water is also not subject to CEQA. Therefore, this Addendum evaluates the potential environmental effects of the discretionary actions of the County (CSA10A) to purchase Reserve Water and the discretionary actions of the District to contract with two new participants (BVMHP and SMRMWC).

On October 6, 2015 the cities, TCSD and AMWC jointly notified the District that they intended to exercise their rights under the 2004 contracts and purchase all of the Reserve Water. After receipt of the participant's October 6 letter, the District formally notified all of the other entities that were considered for a water allocation in the 2003 Nacimiento Water Project EIR. Two of those entities, SMRMWC and BVHMP, have notified the District that they intend to participate in the purchase of reserve water.

Because CSA10A is an existing participant, it also holds the contractual right to purchase its proportional share of the reserve water, provided the initial decision to join the Project was made within 60 days of the October 15, 2015 initial notice from the District. On December 8, 2015 the County Board of Supervisors, on behalf of CSA10A, decided to join the Reserve Water Project, subject to consideration of the CEQA document(s), water management policies, and water entitlement contract changes. CSA10A joined the Nacimiento Water Project in 2006. At that time an analysis of long term water needs for CSA10A indicated that the addition of 25 acre feet of Nacimiento water to the existing Whale Rock allocation of 190 acre feet would serve the buildout needs of the water service area. Therefore, staff recommended the development of policies to guide the future use of CSA10A's Nacimiento water. The increase in CSA10A's Nacimiento allocation is consistent with the Supplemental Water Policies for CSA10A that were adopted by the Board of Supervisors in October 2004.

Table 1 below indicates the increases in allocation (numerical figures are in acre feet per year):

Table 1. Current and Proposed Nacimiento Water Entitlements			
Participant	**NWP EIR Amount**	**Current Entitlement**	**New Entitlement**
CSA10A	80	25	40
Bella Vista Mobile Home Park	50	0	10
Santa Margarita Ranch MWC	200	0	80

At the time the 2003 NWP EIR was completed, BVMHP was under different ownership and is identified in the EIR as "Lewis C. Pollard Family Trust." The EIR indicated the source of water for the mobile home park as shallow wells under a permit issued by the County Health Department. The EIR anticipated a wheeling agreement with an adjacent water retailer to provide the Nacimiento allocation. Since the EIR was certified, BVMHP has established an emergency connection to Paso Robles Beach Water Association's distribution system. Well water is blended with the municipal water for use at the mobile home park.

SMR Mutual Water Company was established to provide water service to the subdivision. Net consumptive use for the subdivision would be approximately 96 acre-feet per year (*County of San Luis Obispo 2008*). Tract Map condition #1.f. requires the developer to offset this groundwater usage by changing the source of irrigation on some of its agricultural production areas from wells to Nacimiento water. This is the text of Condition 1.f.:

> *Annexation to County Service Area 23 to accommodate the community water system that will be used for the proposed residences. Use of imported water (Nacimiento Water Project) at a 1:1 ratio for all residential development shall be provided through an annexation agreement secured through the Santa Margarita Ranch Mutual Water Company allowing land application for agriculture to offset the use of groundwater for residential units and an intertie with the existing CSA 23 system. If this option is not feasible (i.e. annexation to CSA 23), the land application of Nacimiento water will nevertheless be allowable and the requirement to construct an emergency intertie with the existing CSA 23 system must still be completed. Appropriate permits must be obtained.*

Other than constructing a new turnout to provide Nacimiento water to SMRMWC, the Project will not result in any direct physical changes to the environment. The NWP pipeline runs along and through approximately 2.3 miles of Santa Margarita Ranch property. As a result, the turnout could be sited at any number of locations. To date, specific details of the turnout and pipelines to serve the development are not known. Subsequent environmental review would be required prior to construction of the turnout.

4.0 Analysis of Environmental Issues

The provision of Nacimiento water to the participants above was evaluated in the 2003 NWP EIR.

The changes to the project since the 2003 NWP EIR was approved constitute a minor modification of the project description. That is, although the Project increases the contracted entitlement for CSA10A, and provides entitlements for BVMHP and the SMRMWC, the associated physical impacts are the same and the quantities of

water are less than the quantities evaluated in the 2003 NWP EIR. However, twelve years have passed since the 2003 NWP EIR was certified by the Board of Supervisors. There may have been changes in the environmental setting since 2004 which might have the potential to raise the level of impact within various issue areas. This Addendum addresses whether or not the Project, as described above, has the potential to result in a previously undisclosed significant effect on the environment.

The 2003 NWP EIR identified significant impacts, only one of which could not be mitigated to a level considered less than significant (Class II). The unavoidable significant (Class I) impact identified for the 2003 project was for air quality during construction. The Class II impacts identified in the 2003 NWP EIR related to:

- Hydrology and water quality, which could be mitigated with appropriate design, operation and maintenance measures
- Geology and soils, which could be mitigated with site specific geotechnical investigations during design, coupled with appropriate engineering and construction methods
- Drainage, erosion and sedimentation, mitigated by application of standard construction period erosion control measures, followed by the development of emergency response and repair procedures for an accidental rupture, a regular inspection and maintenance program to detect possible problems with pipeline integrity
- Air quality, mitigated by the application of standard construction period air quality protection measures
- Noise, also mitigated by construction period and operational noise mitigation measures
- Hazards and hazardous materials, mitigated by site specific study of the project corridor to determine presence of such materials, coupled with reporting to and consultation with appropriate agencies, followed by appropriate handling and removal, if required; measures for dealing with accidental release of hazardous materials are also included
- Biological resources, mitigated by minimizing the area of disturbance by clearly delineating the construction area on plans and in the field
- Cultural and paleontological resources, mitigated by observing standard measures to ensure that any unanticipated archaeological or paleontological discoveries are treated and assessed as required by State and Federal law
- Utilities and public services, mitigated by following standard wild land fire prevention measures
- Transportation and circulation, mitigated by standard measures to avoid disrupting normal traffic patterns and maintenance of emergency access
- Visual and aesthetic resources, mitigated by appropriate design of facilities and providing landscape screening, where appropriate
- Agricultural resources, mitigated by coordinating with agricultural landowners, and returning agricultural lands to pre-construction site conditions
- Recreational resources, mitigated by minimizing disruption to bicycle routes, and restoring bicycle lanes following construction

The following sections are included in each issue area discussion:

- Environmental Setting

- Regulatory Setting
- Significance Criteria
- Impacts and Mitigation Measures
- Cumulative Impacts (CSA10A and BVHMP are discussed together)

The impact analysis has been developed based on the information provided in Sections 1 through 4. All impacts in this document have been classified according to the following criteria:

> Class I - Significant adverse impacts that cannot be mitigated to insignificance: Significant impacts that cannot be effectively mitigated. Although some measures might reduce the level of impact, in the end no measures could be taken to avoid or reduce these adverse effects to insignificant or negligible levels.
>
> Class II - Significant impacts that can be mitigated to less than significant: These impacts are potentially similar in significance to those of Class I but can be reduced or avoided by the implementation of mitigation measures.
>
> Class III - Adverse but less than significant impacts: Generally, no mitigation measures are required for this Class of impacts.
>
> Class IV - Beneficial impacts: Effects beneficial to the environment.

The term "significant" is used throughout the Addendum to characterize the magnitude of the projected impact. For the purposes of this Addendum, a significant impact is a substantial or potentially substantial change to resources in the local proposed project area or the area adjacent to the proposed project.

In the discussion of each issue area, criteria used to distinguish between significant and insignificant impacts are provided. To the extent feasible, distinctions are also made between local and regional significance and short- versus long-term duration.

Because the CSA10A area and BVMHP are both in the community of Cayucos, the cumulative impacts discussion is combined into a single section rather than discussing each separately.

In December 2008 the Board of Supervisors granted approval of a Vesting Tentative Tract Map (Tract 2586) and Conditional Use Permit (S030115U) for a three phase Major Agricultural Cluster Subdivision to divide a 6,195 acre area of Santa Margarita Ranch consisting of three parcels into 111 residential parcels, five open space parcels, and one 2,417 acre remainder parcel. The map has not been finaled, and the new parcels therefore do not yet exist. A Final Environmental Impact Report was prepared for this project (*Final Environmental Impact Report for Santa Margarita Ranch Agricultural Cluster Subdivision Project and Future Development Program* – hereafter referred to as "Santa Margarita Ranch EIR"). This Addendum includes various discussions taken from that document, and identifies the section number of the EIR where the discussion is located.

In 2011 a Final Supplemental Environmental Impact Report for the Santa Margarita Drought Reliability Project was prepared. Because of its applicability to the Santa Margarita area, this document is referenced herein.

Cumulative Projects Description

In Section 15355 of the CEQA guidelines, a "cumulative impact" is defined as two or more individual effects that, when considered together, are either considerable or compound other environmental impacts. Cumulative impact information related to the proposed project is contained in four key documents:

- Final EIR, State Water Project Coastal Branch Phase II, CA Department of Water Resources, May 1991 [Chapter 8]
- Final EIR, State Water Project Coastal Branch Phase II Local Lines and Facilities, County of San Luis Obispo, March 1992 (State Water EIR) [Section 6]
- Final EIR, Nacimiento Water Project, County of San Luis Obispo, December 2003 [Section 4.0]
- Final EIR, Santa Margarita Ranch Agricultural Cluster Subdivision Project and Future Development Program, County of San Luis Obispo, June 2008

A typical "project specific" cumulative analysis looks at the changes in the environment that result from the incremental impact of development of a proposed project and other reasonably foreseeable projects that have not been included in the environmental setting. For example, the traffic impacts of two projects in close proximity may prove to be insignificant when analyzed separately, but could be significant when the impacts of the projects are analyzed together. While these projects may be unrelated, their combined (i.e., cumulative) impacts are significant. These projects could include:

1. Funded public works projects
2. Reasonably foreseeable public works projects
3. Approved or proposed private development projects
4. Substantial land use changes in the project area

This chapter provides only a description of the cumulative projects. The impacts associated with these projects are discussed within each issue area of section 4.0.

The potential impacts of the proposed project are generally limited to: 1) the region surrounding the community of Santa Margarita, which primarily coincides with the boundaries of the Santa Margarita Ranch, and 2) the community of Cayucos. Therefore, it is reasonable to limit the discussion of cumulative impacts to those activities that have, are, or are proposed to occur within or nearly adjacent to the area encompassed by Santa Margarita Ranch and Cayucos.

The proposed project consists of a turnout from the Nacimiento pipeline, together with supplying water to CSA10A, BVMHP and SMRMWC. The construction period is unknown at this time. A list (Table 2) of all approved and pending projects located in the study area for the Project was assembled using information from the San Luis Obispo County Department of Planning and Building and the San Luis Obispo County Department of Public Works. The goal was to identify projects which were to be constructed in the vicinity of the Project, and that have the potential to affect the same resources impacted by the Project.

Table 2. Cumulative Projects List

Project Name	Status	Schedule	Brief Description
Public Projects			
State Water Project, Coastal Branch	Complete	-------	Water supply pipeline from the State Water Project, through Santa Margarita to Santa Barbara County

Nacimiento Water Project	Complete	-------	Water supply pipeline from Nacimiento Reservoir, through Santa Margarita to San Luis Obispo
Santa Margarita Low Impact Development	Complete	-------	Bioswales, enhanced wetland, and bypass culvert in Santa Margarita
CSA23 Waterline Upgrade	Complete	-------	Upgrade waterlines in portions of Santa Margarita
CSA23 New Water Tank, Santa Margarita	Complete	-------	Replace one existing tank with a new tank
CSA23 – Atascadero MWC – Garden Farms CWD Emergency Intertie Project	Complete	-------	Emergency water system connections between CSA23, AMWC and GFCWD (along El Camino Real from south Atascadero to Santa Margarita)
CSA10A New Water Tank	Coastal permit issued, not constructed	2017	Replace one existing tank with a new tank and construct new water tank adjacent to existing tank (Cayucos)
Morro Bay to Cayucos Connector Path	Final EIR, 2010	-------	Completion of a Class I pathway between Morro Bay and Cayucos
Private Projects			
Santa Margarita Ranch Vineyard Developments	Ongoing	-------	Conversion of former grazing and farmlands to viticulture
Santa Margarita Ranch Lot Line Adjustment	Complete	-------	Adjust lot lines in north portion of Santa Margarita Ranch to cluster home sites adjacent to Garden Farms. Development of individual home sites is ongoing.
Santa Margarita Ranch Agricultural Cluster Subdivision	Tentative map approved, not constructed	-------	Agricultural cluster subdivision to create 111 residential parcels east of Santa Margarita on the Santa Margarita Ranch
Santa Margarita Ranch Future Development	Projected	-------	Further development of portions of Santa Margarita Ranch for possible wineries, resort, golf course and additional residential uses
Bella Vista Mobile Home Park Expansion	Pre-application discussion	-------	Addition of 40 mobile home spaces (Cayucos)

4.1 Hydrology and Water Quality

4.1.1 Environmental Setting

The NWP was conceived as a water resources project. The objective of the project was to provide a reliable water source for domestic use within the County by supplementing the local ground water supplies with surface water. As such, the project provided significant overall benefits to county water resources. The project had the potential, however, to adversely impact water resources as a result of construction and operation, local alteration of the hydrologic balance, water rights, proposed river discharge, and changes in water quality.

4.1.1.1 CSA10A

CSA10A is the water distribution system for the southern part of the community of Cayucos and has 753 service connections. The source of water for the system is Whale Rock Reservoir, east of Cayucos. Raw water from Whale Rock is treated at the Cayucos Water Treatment plant before being pumped into the CSA10A water system.

The area is generally characterized by a narrow coastal terrace on the west, rising abruptly into moderately to very steeply sloping terrain. Willow Creek courses southwestward through the northern portion of the area, and has created has created a gently sloping stream valley. Ephemeral streams drain the hillside, with storm water eventually being collected in ditches and small culverts. Larger culverts convey storm water under Highway 1 and to the Pacific Ocean.

The NWP has no direct effects on hydrology or water quality in the Cayucos area. Nacimiento water was not and is not planned to be directly distributed to the community. Rather, CSA10A has an allocation in the NWP via an exchange with the City of San Luis Obispo, a Whale Rock Commission member.

4.1.1.2 Bella Vista MHP

The property is a gently sloping area on the west side of Cayucos Creek just north of the creek mouth at the Pacific Ocean. The NWP has no direct effects on hydrology or water quality in the Cayucos area. Nacimiento water was not and is not planned to be directly distributed to the community. At the time the NWP EIR was prepared, shallow wells supplied water to BVMHP under a permit issued by the County Health Department. Concerns were raised regarding both water quality and reliability. More recently, BVMHP made an emergency connection to the Paso Robles Beach Water Association's distribution system. The water from Paso Robles Beach Water Association is provided on a month to month basis. BVMHP currently blends these two sources of water to achieve the desired product.

Nacimiento water was not and is not planned to be directly distributed to the community of Cayucos, including Bella Vista MHP. Rather, the MHP would have an allocation in the NWP via an exchange with a Whale Rock Commission member. The EIR anticipated a wheeling agreement with an adjacent water retailer to provide the Nacimiento allocation.

4.1.1.3 Santa Margarita Ranch

The following four paragraphs are from section 4.14.1 of the Santa Margarita Ranch EIR.

The Santa Margarita Ranch overlies portions of the Paso Robles Groundwater Basin (Paso Robles Basin), the Santa Margarita and Vaqueros bedrock aquifers, and shallow alluvial aquifers. The Paso Robles Basin is one of 53 basins in the Central Coast Hydrologic Region and comprises approximately 860 square miles of area drained by the Salinas River. Although the Paso Robles Basin is the primary source of groundwater in the region, the existing wells on the Ranch property do not extract from the Paso Robles Basin. Rather, the primary aquifer

units that supply existing wells on the Ranch consist of Paso Robles Formation sand and gravel deposits, an undefined or stratigraphic equivalent to the Paso Robles Formation, and the Santa Margarita Formation. The Paso Robles and Santa Margarita Formations are discussed below.

The Paso Robles Formation is a widely distributed, weak conglomerate comprising gravel, sand, silt and clay. This unit outcrops in the hills east of Garden Farms, at Chalk Hill and the hills to the south of Highway 58. The Paso Robles Formation ranges in thickness from 300 to 400 feet in the vicinity of Santa Margarita Ranch. The Paso Robles Formation is found at depths of 400 to 500 feet below ground surface along the eastern portion of the Ranch property. The Paso Robles Formation, where present, likely forms the primary aquifer zone from which the higher yielding wells on the Ranch produce.

The Santa Margarita Formation is primarily thick, poorly stratified marine sandstone with finer interbeds of mudstone, siltstone, conglomerate and diatomite. This formation outcrops extensively in the Santa Margarita are between the Rinconada and Nacimiento fault zones and conformably overlies the Monterey Formation and likely defines the effective base of fresh water under much of the Ranch property. The Santa Margarita Formation is believed to be up to 1,000 feet thick in some areas. The Santa Margarita sandstone forms a poor to moderate aquifer for groundwater production and likely contributes to the yield in a number of the existing Ranch wells.

The safe yield of the aquifer system has not been determined in the vicinity of the Santa Margarita Ranch. Approximately 34 wells are located in the Santa Margarita Ranch area. Three are located in the northern portion of the Ranch and serve the community of Garden Farms; four are located near the center of the Ranch and serve the community of Santa Margarita. Of the 27 remaining wells, the Ranch operates approximately 20 wells from which historical groundwater data have been collected since 1999. Data includes groundwater levels, well production, well performance and water quality test results. A summary report that includes this data through April 2006 (RHA, 2006) forms the basis for reviewing impacts of historical groundwater use and the availability of groundwater to supply the Agricultural Residential Cluster Subdivision and Future Development Program.

Santa Margarita is located in the upper watersheds of two small tributaries to the Salinas River. Santa Margarita Creek (the larger of the two streams) drains the extreme western portion of the town while Yerba Buena Creek drains the eastern portion. Both intermittent creeks flow from south to north. Yerba Buena Creek flows into Santa Margarita Creek near the southern boundary of Garden Farms. Another much larger nearby watershed, Trout Creek, is east of the Yerba Buena watershed and outside of the town limits. Santa Margarita and Trout creeks join near the confluence with the Salinas River about three miles north of town. Both Santa Margarita and Yerba Buena creeks have been gauged for stream flow near the town. Twenty-one years of record are available for each gauge station, but discharge records for the streams coincide only between 1979 and 1985.

The local topography in Santa Margarita is relatively flat with land surface elevations ranging from 1,000 to 1,020 feet above mean sea level (msl). Miller Flat, located upstream and southeast of town and drained by Yerba Buena Creek, has a relatively low and gentle topography, rising to 1,120 feet msl. The Yerba Buena Creek watershed attains an elevation of 2,228 feet msl near the headwaters of Sycamore Canyon, while the Santa Margarita Creek watershed reaches an elevation of 2,761 feet msl at Tassajara Peak. Average annual rainfall is between 25 and 30 inches.

Hydrogeology *The* town of Santa Margarita is located in the Nacimiento Fault Zone, which is a northwest trending thrust fault paralleling the San Andreas Fault. The northwest-trending strike-slip Rinconada Fault and

the axis of the Santa Margarita Syncline are located east of the town. The area has been divided into eight geologic units. The geologic units, from oldest to youngest, are:

Very Low Permeability:	Franciscan mélange Toro Formation/Vaqueros Sandstone
Low Permeability:	Atascadero Formation Monterey Formation Santa Margarita Formation Paso Robles Formation
High Permeability:	Older Alluvium Younger Alluvium

The relative permeability of the geologic units is based on hydraulic data summarized from consultant reports (Mann, 1987; Luhdorff and Scalmanini, 1992; McRae, 1994) and Department of Water Resources (DWR) Water Well Drillers Reports for the area.

The alluvial aquifer is characterized by substantially higher permeability than bedrock formations, including the Santa Margarita Formation that is tapped by CSA 23's well # 3. Because of the low permeability of bedrock formations, well yields are relatively low and achieved only with substantial drawdown. As a result, well #3 can provide only partial back-up and cannot replace the primary alluvial sources of water to CSA 23. The alluvial aquifer is shallow (about 50 feet in depth) and relatively thin (13 feet thick). During an average rainfall year the water levels fluctuate by about 20 feet. The lower water level results in reduced well yields, particularly in late summer and early fall. However, fall/winter rains typically recharge the aquifer fully by early January, producing artesian conditions. In other words, water levels rise above the top of the aquifer in the overlying clay.

4.1.2 Regulatory Setting

The laws and regulations governing hydrology and water quality can be separated into two general categories: water rights and water quality.

The California Water Resources Control Board summarizes the various laws and regulations governing water rights as follows:

A water right is a legal entitlement authorizing water to be diverted from a specified source and put to beneficial, nonwasteful use. Water rights are property rights, but their holders do not own the water itself. They possess the right to use it. The exercise of some water rights requires a permit or license from the State Water Resources Control Board (State Water Board), whose objective is to ensure that the State's waters are put to the best possible use, and that the public interest is served.

In making decisions, the State Water Board must keep three major goals in mind:

1. *Developing water resources in an orderly manner*
2. *Preventing waste and unreasonable use of water*
3. *Protecting the environment*

Water right law in California and the rest of the West is markedly different from the laws governing water use in the eastern United States.

Water Right Law. *Seasonal, geographic, and quantitative differences in precipitation caused California's water rights system to develop into a unique blend of two very different kinds of rights: riparian and appropriative. Other types of rights exist in California as well, among them reserved rights (water set aside by the federal government when it reserves land for the public domain) and pueblo rights (a municipal right based on Spanish and Mexican law).*

Riparian rights usually come with owning a parcel of land that is adjacent to a source of water. A riparian right entitles the landowner to use a correlative share of the water flowing past his or her property. Riparian rights do not require permits, licenses, or government approval, but they apply only to the water which would naturally flow in the stream. Riparian rights do not entitle a water user to divert water to storage in a reservoir for use in the dry season or to use water on land outside of the watershed. Riparian rights remain with the property when it changes hands, although parcels severed from the adjacent water source generally lose their right to the water.

In 1850, California entered the Union as the thirty-first state. One of the first actions taken by its lawmakers was to adopt the common law of riparian rights. One year later, the Legislature recognized the appropriative right system as having the force of law. The appropriative right system continued to increase in use as agriculture and population centers blossomed and ownership of land was transferred into private hands.

The conflicting nature of California's dual water right system prompted numerous legal disputes. Unlike appropriative users, riparian right holders were not required to put water to reasonable and beneficial use. This clash of rights eventually resulted in a constitutional amendment (Article X, Section 2 of the California Constitution) that requires all use of water to be "reasonable and beneficial." These "beneficial uses" have commonly included municipal and industrial uses, irrigation, hydroelectric generation, and livestock watering. More recently, the concept has been broadened to include recreational use, fish and wildlife protection, and enhancement and aesthetic enjoyment.

Up to the early 1900's appropriators--most of them miners and non-riparian farmers--had simply taken control of and used what water they wanted. Sometimes notice was filed with the county recorder, but no formal permission was required from any administrative or judicial body.

The Water Commission Act of 1914 established today's permit process. The Act created the agency that later evolved into the State Water Resources Control Board and granted it the authority to administer permits and licenses for California's surface water. The act was the predecessor to today's water Code provisions governing appropriation.

These post-1914 appropriative rights are governed by a hierarchy of priorities developed by the forty-niners. In times of shortage the most recent ("junior") right holder must be the first to discontinue such use; each right's priority dates to the time the permit application was filed with the State Board. Although pre- and post-1914 appropriative rights are similar, post-1914 rights are subject to a much greater degree of scrutiny and regulation by the Board.

Riparian rights still have a higher priority than appropriative rights. The priorities of riparian right holders generally carry equal weight; during a drought all share the shortage among themselves.

Ground Water Rights. *In most areas of California, overlying land owners may extract percolating ground water and put it to beneficial use without approval from the State Board or a court. California does not have a permit process for regulation of ground water use. In several basins, however, groundwater use is subject to regulation in accordance with court decrees adjudicating the ground water rights within the basins.*

The California Supreme Court decided in the 1903 case Katz v. Walkinshaw that the "reasonable use" provision that governs other types of water rights also applies to ground water. Prior to this time, the English system of unregulated ground water pumping had dominated but proved to be inappropriate to California's semiarid climate. The Supreme Court case established the concept of overlying rights, in which the rights of others with land overlying the aquifer must be taken into account. Later court decisions established that ground water may be appropriated for use outside the basin, although appropriator's rights are subordinate to those with overlying rights.

Water Quality. The two key laws governing water quality in California are the federal Clean Water Act, as amended by the Water Quality Act of 1987, and the California Porter-Cologne Water Quality Control Act (California Water Code).

The federal Environmental Protection Agency is the federal agency responsible for water quality management nationwide, through the Clean Water Act. The State Water Resources Control Board administers water rights, water pollution control, and water quality functions under Porter-Cologne, while the Regional Water Quality Control Board conducts water planning, permitting, and enforcement activities. The California Department of Health Services (DHS) is responsible for establishing and enforcing uniform statewide drinking water criteria to ensure public health.

Natural Resource Impacts. As noted above, the concept of beneficial use has more recently been broadened to include recreational use, fish and wildlife protection, and enhancement and aesthetic enjoyment. In their September 23, 2010 response to the Notice of Preparation, the National Marine Fisheries Service expresses concerns about any alternative that relies on local groundwater aquifers to provide water during drought conditions. The basis of this concern is the connection between surface and groundwater, the reliance of sensitive species on surface flow in area streams, and the potential for violations of the federal Endangered Species Act to result from the withdrawal of groundwater from streamside aquifers.

Under the federal Endangered Species Act, it is unlawful for any person subject to the jurisdiction of the United States to "take" any species of fish or wildlife listed as endangered within the United States. 16 U.S.C. § 1538(a)(1)(B). The term "take" is defined by the Endangered Species Act to mean harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such activity. 16 U.S.C. § 1532(19). "Harm" has been defined by the National Marine Fisheries Service to mean:

... an act which actually kills or injures fish or wildlife. Such an act may include significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding or sheltering. 50 C.F.R. § 222.102.

4.1.3 Significance Criteria

According to Appendix G of the State CEQA Guidelines, the threshold of significance for impacts related to hydrology and water quality that which could:

- *Violate any water quality standards or waste discharge requirements*
- *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)*
- *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site*

- *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site*
- *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff*
- *Otherwise substantially degrade water quality*
- *Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map*
- *Place within a 100-year flood hazard area structures which would impede or redirect flood flows*
- *Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam*
- *Result in inundation by seiche tsunami or mudflow*

4.1.4 Impacts and Mitigation Measures

4.1.4.1 CSA10A

The Project would have no significant impacts on hydrology and water quality. Because construction is not necessary, there would be no construction-related impacts (2003 NWP EIR impacts WQ-1 and WQ-2). Operationally, the 2003 NWP EIR identified a potentially significant impact from reduction of water deliveries during drought and resulting water shortages to participants.

This potentially significant impact is reduced to less than significant by the following EIR mitigation measure:

WQ-2 SLO County or the designated NWP engineer shall: 1) monitor reservoir storage and precipitation patterns, 2) notify MNWRA when conditions are such that releases down to a minimum pool on September 30th could result in a shortage for the NWP if drought persisted along historical patterns, and 3) recommend an alternative minimum level of September 30th storage for maintaining NWP deliveries through drought and ensuring SLO County's first right to water.

The allocation of an additional 15 afy of water would have no direct physical effects on the service area or on Cayucos in general. No mitigation measures are needed.

4.1.4.2 Bella Vista MHP

The Project would have no significant impacts on hydrology and water quality. Because construction is not necessary, there would be no construction-related impacts (2003 NWP EIR impacts WQ-1 and WQ-2). Operationally, however, the 2003 NWP EIR identified a potentially significant impact from reduction of water deliveries during drought and resulting water shortages to participants.

This potentially significant impact is reduced to less than significant by the following NWP FEIR mitigation measure:

WQ-2 SLO County or the designated NWP engineer shall: 1) monitor reservoir storage and precipitation patterns, 2) notify MNWRA when conditions are such that releases down to a minimum pool on September 30th could result in a shortage for the NWP if drought persisted along historical patterns, and 3) recommend an alternative minimum level of September 30th storage for maintaining NWP deliveries through drought and ensuring SLO County's first right to water.

The effects on water quality for BVMHP users by substituting municipal water for shallow well water will be positive. In addition, reduction or elimination in use of well water may have positive effects on Cayucos Creek

and its estuary by reducing groundwater pumping. Other than these positive effects, the allocation of 10 afy of water would have no direct physical effects on the BVMHP property or on Cayucos in general. No mitigation measures are needed.

4.1.4.3 Santa Margarita Ranch

The Project would facilitate satisfaction of condition #1.f. of Tract 2586. This condition requires that groundwater usage be offset by changing the source of irrigation on some of its agricultural production areas from wells to Nacimiento water. Condition #1.f. is presented in section 3, above. The impacts of the subdivision development were analyzed in the Environmental Impact Report for this agricultural cluster subdivision.

4.1.5 Cumulative Impacts

4.1.5.1 CSA10A and Bella Vista MHP

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to hydrologic and water quality resources were also evaluated. The Project's potential hydrologic and water quality impacts would be the result of construction activities, and not on-going operational activities. Because there would be no construction activities associated with the Project in Cayucos, cumulative hydrologic and water quality impacts would not be considered significant.

4.1.5.2 Santa Margarita Ranch

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to hydrologic and water quality resources were also evaluated. The Project's potential hydrologic and water quality impacts are the result of construction activities, and not on-going operational activities. Because of the short duration and limited scope of the construction, cumulative hydrologic and water quality impacts would not be considered significant.

4.2 Geology, Seismicity and Soils

The direct physical impact of the Nacimiento Water Project was primarily the result of the construction of the pipeline and related appurtenances. The 2003 NWP EIR recognizes the substantial impacts that could result from erosion and sedimentation, as well as from changes in drainage patterns if ground surfaces were altered in the pipeline corridor. More information on overall geology, seismicity and soils impacts of the NWP can be obtained by reviewing section 5.2 of the 2003 NWP EIR.

4.2.1 Environmental Setting

4.2.1.1 CSA10A

Local Geology and Topography. The service area lies on gentle to steep slopes of the Franciscan Formation. The geologic deposits are comprised primarily of sandstone and shale overlain by colluvium. Colluvium is the soil and weathered rock material on hill slopes that is not transported by water. Sandstone outcrops are present in some locations. At the south end, there is a large landslide deposit.

Potential hazards listed in the Estero Area plan for the bedrock characteristics found within much of the area include ground shaking, landslides and erosion. Other site specific hazards include expansive or collapsible soils. Tsunami and bluff retreat are hazards specific to the southwestern-most properties within the service area.

4.2.1.2 Bella Vista MHP

Local Geology and Topography. The western two-thirds of the site is mapped as Franciscan mélange, a chaotic mixture of fragmented rock masses embedded in a penetratively sheared matrix of argillite and crushed metasandstone. An outcrop of serpentine rock occurs in the northeastern portion of the site, and the eastern,

undeveloped portion along Cayucos Creek is mapped as alluvial flood-plain deposits (late Holocene), active and recently active flood-plain deposits consisting of unconsolidated sandy, silty and clay-bearing alluvium. The site lies within the County's Geologic Study Area combining designation. There are no active faults mapped in the immediate area.

Elevation ranges from approximately 110 to 65 feet above mean sea level. Maximum slope through the site (east to west) is approximately six percent. Most of the site was graded to create gentle slopes which facilitate its current use. A prominent hill approximately 80 feet in elevation occurs in the northern portion of the property.

4.2.1.3 Santa Margarita Ranch

This section is from section 4.6.1 of the Santa Margarita Ranch EIR.

Geologic Conditions and Topography. San Luis Obispo County occupies an area of complex geology extending from the Pacific Coast on the west to the San Andreas Rift Zone on the east. The Santa Margarita Ranch property lies within the southern Coast Ranges of San Luis Obispo County, in the Coast Range Geomorphic Province. The Ranch comprises a central alluvial valley complex with low lying hills, bordered on the west by the Santa Lucia Range of higher bedrock mountains, and on the east by the Salinas River. Geologic structure, formed by millions of years of folding and faulting, is oriented predominantly in a northwesterly direction; the northwest draining Yerba Buena, Santa Margarita and Trout Creeks follow this trend.

Thirty-four active and potentially active earthquake producing faults lie within 100 miles of the center of the Santa Margarita Ranch property. Individual earthquakes as large as Magnitude 7.9 have occurred within this distance. Fault rupture of the ground surface is possible on any of these faults with a large enough earthquake and secondary effects such as ground settlement, liquefaction and landsliding can occur.

The Santa Margarita Ranch property consists of varied terrain with the mountainous area on the west side of the Ranch containing the Santa Lucia Mountain ridge and slopes of 50 percent and greater. The predominant interior valleys of the Ranch are sloped at 1 to 9 percent while the Santa Margarita Creek lowlands typically contain slopes less than 5 percent. Elevations across the site range from a high of 1,276 feet along the Santa Lucia ridgeline to 1,020 feet at the north end of the property. At that location, the primary on-site tributary (Trout Creek) drains to the Salinas River, located approximately 1.25 miles north of the Ranch property.

Local Geology. The 14,000-acre Ranch property includes ten geologic units, ranging in age from the Jurassic Franciscan Formation (mélange) through Pliocene Paso Robles Formation (Hart, 1976). On-site units include the Franciscan mélange, granitic rocks, Toro and Atascadero Formations, Simmler and Vaqueros Formations, Monterey and Santa Margarita Formations, Paso Robles Formation, and older and younger alluvium. These units have a wide range of physical properties with older basement rocks found in the higher elevations being generally more resistant to weathering and degradation; they are also more highly fractured, and structurally more complex. The intermediate-aged bedrock units flank the ranges and border the alluvial valleys. These units are softer and weather into smoother low lying hills with fewer fractures and exhibit a gentler folding.

Alluvium occupies the lower portions of the valleys and ranges from older uplifted, dissected river terraces and alluvial fans to the most recent stream deposits in the lower elevation flood plains and active river channels. Structurally simple and relatively undisturbed by faulting, these units are semi-consolidated to loose, and generally comprise mixtures of gravel and sand.

Soils. As mapped by the Natural Resource Conservation Service (NRCS), 54 soil types are located on the Santa Margarita Ranch property. Of these 54 soil types, development under the Agricultural Residential Cluster Subdivision and Future Development Program could occur on 40 soil types (refer to Figures 4.6-1 and 4.6-2; specific soils hazards are shown on Figure 4.6-3 in the EIR). These 40 soil types and selected properties are summarized in Table 4.6-1 in the EIR.

Geologic and Seismic Hazards. Similar to much of California, the Santa Margarita Ranch property is located within a seismically active region. The geologic and seismic hazards relevant to the Agricultural Residential Cluster Subdivision and Future Development Program are described in the impact assessment below.

Faulting. The U.S. Geological Survey (USGS) defines active faults as those that have had surface displacement within Holocene time (about the last 11,000 years). Surface displacement can be recognized by the existence of cliffs in alluvium, terraces, offset stream courses, fault troughs and saddles, the alignment of depressions, sag ponds, and the existence of steep mountain fronts. Potentially active faults are faults that have had surface displacement during the last 1.6 million years. Inactive faults have not had surface displacement within the last 1.6 million years. Several faults are located in the vicinity of the Santa Margarita Ranch (refer to Figure 4.6-4 in the EIR), and are described in the paragraphs below:

Nacimiento Fault Zone. Trending northwest to southeast, the Nacimiento Fault is located in the center of the Ranch property, bisecting the community of Santa Margarita (refer to Figure 4.6-4 in the EIR). The Nacimiento Fault Zone separates the soft rocks of the Coastal Franciscan domain on the west from the primary granitic rocks of the Salinian domain on the east. Although the California Geological Survey (CGS) and the County of San Luis Obispo Safety Element consider the Nacimiento Fault inactive, landforms in the Santa Margarita Ranch vicinity suggest geologically young faulting (Lew Rosenberg, County Geologist, Personal Communication, June 16, 2006). In addition, its proximity to the active Oceanic Fault Zone, the source of the 2003 San Simeon earthquake (refer to *West Huasna/Oceanic Fault Zone* discussion below) suggests that the Nacimiento Fault Zone is possibly active (Lew Rosenberg, County Geologist, Personal Communication, June 20, 2006). Therefore, for the purposes of this analysis, the Nacimiento Fault is considered active.

Rinconada Fault Zone. Trending northwest to southeast, the Rinconada Fault is located on the eastern edge of the Ranch property, following West Pozo Road south of SR 58 (refer to Figure 4.6-4 of the EIR). The Rinconada Fault is zoned as potentially active under the California Alquist-Priolo Earthquake Fault Zoning Act. However, according to the San Luis Obispo County Geologist, studies for the Santa Ysabel Ranch (Paso Robles) and the Chicago Grade landfill (Templeton) show features that suggest Holocene (last 11,000 years) movement on the Rinconada Fault (Lew Rosenberg, County Geologist, Personal Communication, June 20, 2006). In addition, the fault is a seismic source in the U.S. Geological Survey/California Geological Survey Probabilistic Seismic Hazard Model and is estimated to be capable of generating a maximum credible earthquake (MCE) of approximately 7.5. Therefore, for the purposes of this analysis, the Rinconada Fault is considered active.

San Andreas Fault. The San Andreas Fault, which is the most likely source of a major earthquake in California, is located 29 miles east of the Santa Margarita Ranch, along the eastern border of San Luis Obispo County. The San Andreas Fault is the primary surface boundary between the Pacific and the North American plates. There have been numerous historic earthquakes along the San Andreas Fault, and it generally poses the greatest earthquake risk to California. The San Andreas Fault is likely capable of producing a Maximum Credible Earthquake (MCE) of magnitude Mw 8.25.

West Huasna/Oceanic Fault Zone. The West Huasna/Oceanic Fault Zone trends north-northwest for approximately 100 kilometers along coastal central California. The fault extends from approximately the Santa Maria River on the south to San Simeon on the north. Seismologists have agreed that this fault zone was the source of the earthquake that shook the area on December 22, 2003.

The December 2003 earthquake, commonly known as the San Simeon earthquake, measured 6.5 on the Richter scale. The event was located 11 kilometers northeast of San Simeon, and 39 kilometers west-northwest of Paso Robles, where the brunt of the damage occurred. The strong shaking during the main-shock reached 47% of the force of gravity at the Templeton Hospital grounds. The shallow but powerful earthquake uplifted the Santa Lucia Mountains and triggered a vigorous aftershock sequence.

Los Osos Fault. The Los Osos Fault is located approximately 10 miles southwest of the Ranch property. The Los Osos Fault is generally northwest trending and exhibits a complex history of both strike-slip and reverse displacement. The Los Osos Fault Zone is divided into four distinct segments based upon differences in behavioral characteristics (recency of activity and slip rate), spatial coincidence with topographic sub-blocks of the San Luis Range, separation of fault traces, intersection with structures, and geomorphic expression. The segments are, from the northwest to the southeast, the Estero Bay, Irish Hills, Lopez Reservoir, and Newsom Ridge segments. The Irish Hills segment is active and is included in the Alquist-Priolo zoning by the State of California.

Hosgri Fault. The Hosgri Fault extends from San Simeon to an ocean shelf two miles west of Point Buchon, and then trends toward the Point Sal area. The Hosgri Fault is located approximately 22 miles southwest of the site. The fault is active. A Maximum Credible Earthquake of magnitude 7.5 and a Maximum Probable Earthquake of magnitude 6.4 are associated with the fault.

Ground Shaking and Surface Rupture. Faults generally produce damage in two ways: ground shaking and surface rupture. Seismically induced ground shaking covers a wide area and is greatly influenced by the distance of the site to the seismic source, soil conditions, and depth to groundwater. Surface rupture is limited to very near the fault. The Rinconada Fault and the southern extension of the Nacimiento Fault are located on the Ranch property (refer to Figure 4.6-4 in the EIR). The Future Development Program envisions several land uses on or adjacent to these mapped fault traces. Both faults are considered active for the purpose of this analysis, and therefore pose a high fault rupture hazard to potential future land uses. Other hazards associated with seismically induced ground shaking include earthquake-triggered landslides and tsunamis. Tsunamis and seiches are associated with ocean surges and inland water bodies, respectively. Neither of these hazards would affect the Agricultural Residential Cluster Subdivision or Future Development Program.

Expansive Soils. Agricultural Residential Cluster Subdivision and Future Development Program soils generally have high clay content (refer to Table 4.6-1 in the EIR). During periods of water saturation, these soils tend to expand. During dry periods, the soils tend to shrink. These volume changes with moisture content can cause cracking of structures built on expansive soils. As described by the NRCS (1983), the expansion potential (shrink-swell potential) of on-site soils ranges from low to high. Therefore, areas characterized by high shrink-swell potential would be a geologic hazard on the Ranch property. As shown in Figure 4.6-3 of the EIR, these areas occur throughout the Ranch, particularly along the eastern and western edges of the property.

Erosive Soils. Soil erosion is the removal of soil by water and wind. The rate of erosion is estimated from four soil properties: texture, organic matter content, soil structure, and permeability. Other factors that influence erosion potential include the amount of rainfall and wind, the length and steepness of the slope, and the

amount and type of vegetative cover. The soil types mapped for the Santa Margarita Ranch range from low to very high erosiveness.

Areas with high or very high erosion hazards are generally located in steeper areas of the Ranch, including the eastern and western edges of the property (refer to Figure 4.6-3 in the EIR).

Subsidence and Settlement. Subsidence involves deep seated settlement due to the withdrawal of fluid (oil, natural gas, or water). Settlement is the downward movement of the land surface resulting from the compression of void space in underlying soils. Seismically induced settlement occurs in loose to medium dense unconsolidated soil above groundwater. These soils compress (settle) when subject to seismic shaking. The settlement can be exacerbated by increased loading, such as from the construction of buildings. Settlement can also result solely from human activities including improperly placed artificial fill, and structures built on soils or bedrock materials with differential settlement rates.

Slope Stability and Landslides. Landslides result when the driving forces that act on a slope (i.e., the weight of the slope material, and the weight of objects placed on it) are greater than the slope's natural resisting forces (i.e., the shear strength of the slope material). Slope instability may result from natural processes, such as the erosion of the toe of a slope by a stream, or by ground shaking caused by an earthquake. Slopes can also be modified artificially by grading, or by the addition of water or structures to a slope. Development that occurs on a slope can substantially increase the frequency and extent of potential slope stability hazards. Areas susceptible to landslides are typically characterized by steep, unstable slopes in weak soil/bedrock units which have a record of previous slope failure. There are numerous factors that affect the stability of the slope, including: slope height and steepness, type of materials, material strength, structural geologic relationships, ground water level, and level of seismic shaking. According to the San Luis Obispo County Safety Element, landslide risk ranges from low to high throughout the Santa Margarita Ranch. Due to gentler slopes that occur north of SR 58/El Camino Real, landslide potential is generally low throughout the northern portions of the Future Development Program. Low landslide risk also occurs east of the community of Santa Margarita and west of West Pozo Road. Within the portion of the Ranch property west of the Agricultural Residential Cluster Subdivision area and southwest of the community of Santa Margarita, the landslide hazard is generally high (refer to Figure 4.6-5 in the EIR).

Due to the presence of unstable formations and relatively steep topography in portions of the Agricultural Residential Cluster Subdivision and Future Development Program sites, landslides are a potential hazard for both the Agricultural Residential Cluster Subdivision and Future Development Program.

Liquefaction. Liquefaction is defined as the sudden loss of soil strength due to a rapid increase in soil pore water pressure resulting from seismic ground shaking. Liquefaction potential is dependent on such factors as soil type, depth to ground water, degree of seismic shaking, and the relative density of the soil. When liquefaction of the soil occurs, buildings and other objects on the ground surface may tilt or sink, and lightweight buried structures (such as pipelines) may float toward the ground surface. Liquefied soil may be unable to support its own weight or that of structures, which could result in loss of foundation bearing or differential settlement. Liquefaction may also result in cracks in the ground surface followed by the emergence of a sand-water mixture.

According to the San Luis Obispo County Safety Element, the majority of the Santa Margarita Ranch property maintains a low potential for liquefaction. However, portions of the Agricultural Residential Cluster Subdivision and Future Development Program sites are underlain by sediments with a moderate to high liquefaction

potential (refer to Figure 4.6-6 in the EIR). Due to the presence of unconsolidated alluvial material and shallow groundwater, liquefaction is a geologic hazard throughout the Ranch property.

Geologic Study Area. Portions of the Ranch property are designated as a Geologic Study Area (GSA) under the Salinas River Area Plan. The Geologic Study Area (GSA) combining designation is applied to areas where geologic and soil conditions could present new developments and their users with potential hazards to life and property (San Luis Obispo County Code, Section 22.14.070). The designation applies to a northwesterly trending band that extends from the southern boundary of the Future Development Program to approximately ½ mile south of the community of Santa Margarita (refer to Figure 4.6-5 in the EIR). The designation does not apply to any portion of the Agricultural Residential Cluster Subdivision site. Development located within the GSA combining designation would require compliance with Section 22.14.070 of the San Luis Obispo County Code (Geologic Study Area Standards), including the preparation of a Geology and Soils Report and recommended building techniques, site preparation measures, or setbacks necessary to reduce risks to life and property from seismic damage, landslide, groundwater and liquefaction to insignificant levels.

4.1.2 Regulatory Setting

Three regulatory processes relate directly to geologic, seismic and soils issues: the Alquist-Priolo Special Studies Zone Act of 1972; the San Luis Obispo County Land Use Ordinance; and the Uniform Building Code/County Building and Construction Ordinance.

The Alquist-Priolo Special Studies Zone Act of 1972 (California Public Resources Code, Section 2621, et seq.) establishes criteria and policies to assist cities, counties, and state agencies in the exercise of their responsibility to prohibit the location of development and structures for human occupancy across the trace of active faults as defined by the State Mining and Geology Board.

Title 22 of the San Luis Obispo County Code (Land Use Ordinance, Section 22.07.080) sets forth the Combining Designation Standards for Geologic Study Areas. These are areas where "geologic and soil conditions could present new developments and their users with potential hazards to life and property." The standards require preparation of a report on geologic hazards and appropriate mitigation measures. Structures must be designed to overcome these hazards.

Title 19 of the San Luis Obispo County Code (Incorporating the Uniform Building Code) sets forth construction standards for structures to ensure that buildings are designed and built to withstand movement resulting from seismic events, soil expansion and other geologic conditions.

4.1.3 Significance Criteria

In accordance with Appendix H of the State CEQA Guidelines, impacts would be significant if development would result in any of the following:

- *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides*
- *Result in substantial soil erosion or the loss of topsoil*
- *Be located on a geologic unit or soil that is unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse*
- *Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code, creating substantial risks to life or property or*

- *Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater*

In applying this definition, potentially adverse effects on a water supply system are considered adverse effects on the environment because: 1) failure of pipelines or other associated facilities may result in substantial secondary effects such as local flooding, erosion and sedimentation, etc., that would be impacts on the CEQA environment; and 2) failure of a major public water-supply facility could result in substantial adverse effects on the public.

4.1.4 Impacts and Mitigation Measures

4.1.4.1 CSA10A

The Project would not result in any significant impacts with regard to geology and soils because no construction would occur to provide the additional water allocation. Because the additional allocation does not raise the CSA10A amount beyond what was requested in the 2003 NWP EIR, the geologic and soils impacts from future development which may use the additional water were already considered. No mitigation measures are needed.

4.1.4.2 Bella Vista MHP

The Project would not result in any significant impacts with regard to geology and soils because no construction would occur to provide the additional water allocation. Because the additional allocation does not raise the BVMHP amount beyond what was requested in the 2003 NWP EIR, the geologic and soils impacts from future development which may use the additional water were already considered. No mitigation measures are needed.

4.1.4.3 Santa Margarita Ranch

The Project would require the installation of a turnout on the Nacimiento pipeline. A permit process and associated environmental review would be required to construct the turnout. Turnout construction would be a fairly simple project with a limited scope and duration. No mitigation measures are needed.

4.1.5 Cumulative Impacts

4.1.5.1 CSA10A and Bella Vista MHP

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to geology and soils were also evaluated. The Project's potential geologic and soils impacts would be the result of construction activities, and not on-going operational activities. Because there would be no construction activities associated with the Project in Cayucos, cumulative geologic and soils impacts would not be considered significant.

4.1.5.2 Santa Margarita Ranch

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to geology and soils were also evaluated. The Project's potential geologic and soils impacts are the result of construction activities, and not on-going operational activities. Because of the short duration and limited scope of the construction, cumulative geologic and soils impacts would not be considered significant.

4.3 Drainage, Erosion and Sedimentation

The direct physical impact of the Nacimiento Water Project was primarily the result of the construction of the pipeline and related appurtenances. The 2003 NWP EIR recognizes the substantial impacts that could result from erosion and sedimentation, as well as from changes in drainage patterns if ground surfaces were altered in

the pipeline corridor. The 2003 NWP EIR also recognized the close correlation of drainage, erosion and sedimentation impacts to biological resource impacts, as waterways are typically highly sensitive from a biological standpoint. More information on overall drainage, erosion and sedimentation impacts of the NWP can be obtained by reviewing section 5.2 (for soils) and section 5.7 (for biological impacts) of the 2003 NWP EIR.

4.3.1 Environmental Setting

4.3.1.1 CSA10A

The western portion is on a narrow marine terrace, and east of Highway 1 the terrain is moderate to steeply sloping. Ephemeral drainages run northeast to southwest, and Willow Creek runs parallel to, and just south of Old Creek Road. An informal storm water drainage system is in place. Runoff from east of the developed parcels is directed around existing residences, then to a drainage system which directs storm waters through the neighborhood, under Highway 1, then through the neighborhood west of Highway 1 to the beach.

Erosion as a result of rainfall and storm flows occurs primarily upslope of the service area on the undeveloped lands. In addition, coastal bluff erosion is a sporadic process impacting the properties on the west side of Studio Drive. Sedimentation is an occasional issue for the uppermost tier of residences.

4.3.1.2 Bella Vista MHP

The topography of the site is highly modified. The drainage pattern is generally from the northwest corner adjacent to Highway 1 to the southeast toward Cayucos Creek. The site is higher to the north, sloping toward Ocean Avenue and the Pacific Ocean. The developed area is composed of mostly impervious surfaces. Runoff flows into Cayucos Creek near the Ocean Avenue bridge. Substantial erosion is not evident.

4.3.1.3 Santa Margarita Ranch

This section is from section 4.5.1 of the Santa Margarita Ranch EIR.

Topography. The Santa Margarita Ranch property consists of varied terrain with the mountainous area on the west side of the Ranch containing the Santa Lucia Mountain ridge and slopes of 50 percent and greater. The predominant interior valleys of the Ranch are sloped at 1 to 9 percent while the Santa Margarita Creek lowlands typically contain slopes less than 5 percent. Elevations across the site range from a high of 1,276 feet along the Santa Lucia ridgeline to 1,020 feet at the north end of the site. At that location, the primary on-site tributary (Trout Creek) drains to the Salinas River, located approximately 1.25 miles north of the subject property.

Site Drainage Pattern. The Santa Margarita Ranch is located in the Salinas River watershed which empties into the Pacific Ocean at Monterey Bay. Specifically, the Ranch contains a number of smaller internal drainage basins which are west bank tributaries to the Salinas River. Drainage generally flows from south to north via four main drainages: Trout Creek; an unnamed tributary to Trout Creek; Yerba Buena Creek; and Rinconada Creek. All of these drainages are categorized as Waters of the U.S. and each eventually flow to the Salinas River. From a hydrologic perspective, the water movement potential of the Ranch is quite variable because the Ranch's terrain varies from rugged mountains to rolling hills and flat land. A number of soil types on the Ranch are characterized by medium to very rapid runoff and high to very high erosion potential.

Existing Flood Hazards. Portions of the Santa Margarita Ranch are subject to potential flooding from Trout Creek, the unnamed tributary to Trout Creek, Yerba Buena Creek, and Rinconada Creek. The National Flood Insurance Program's Flood Insurance Rate Map (FIRM) for the Ranch property shows the central and northern portion of the property within the 100-year flood plain boundary adjacent to these creeks. The 100-year flood, or "base flood," refers to the flood resulting from a storm event that has a probability of occurring once every 100 years, or a one percent chance of occurring in any given year. Areas mapped in the 100-year floodplain are

subject to inundation during a 100-year storm event. The 100-year floodplain was used to designate Santa Margarita Creek and Yerba Buena Creek in the Flood Hazard combining designation within the Salinas River Area Plan.

4.3.2 Regulatory Setting

Federal Policies and Regulations

Discharges to public waterways are under the purview of the U.S. Army Corps of Engineers pursuant to federal Clean Water Act regulations, while the Federal Emergency Management Agency (FEMA) is responsible for identifying flood hazards, coordinating flood plain management and regulating the placement of structures in flood plains. At locations of pipeline stream crossings, regulations of the Army Corps of Engineers would apply. In areas where a proposed project would not impact streams (but could impact floodplains), FEMA would be the federal agency with the primary responsibility to regulate the project. The minimum flood plain management requirements for participation in the National Flood Insurance Program are set forth in the Code of Federal Regulations (44 CFR 60.3).

Regulations of the Federal Railroad Administration would apply where a proposed project is located within railroad right-of-way, and an encroachment permit would be obtained from the railroad.

Water quality protection is regulated by the Federal National Pollutant Discharge Elimination System (NPDES) Program (established by the Clean Water Act). The U.S. Environmental Protection Agency established storm water permit requirements based on compliance with a NPDES permit. Discharges of storm water associated with construction activity that results in a disturbance of one acre or more of total land area require an NPDES Construction Stormwater General Permit. This permit requires projects to implement Best Management Practices to prevent the discharge of sediment-laden water offsite. The site-specific plan to implement BMPs is called the Storm Water Pollution Prevention Plan. The plan must include a description of soil stabilization and sediment load control methods that would be implemented to minimize erosion and sediment loading during construction of the project. The Storm Water Pollution Prevention Plan also includes descriptions of post-construction best management practices. The State of California administers the storm water permits through the State Water Resources Control Board and its local Regional Water Quality Control Boards. The project area is within the jurisdiction of the Central Coast Regional Water Quality Control Board.

State Policies and Regulations

The State of California administers Storm Water Regulations according to the California Water Code Section 13399. The State Water Resources Control Board issues the NPDES General Construction Activity Storm Water Permit. The Regional Water Quality Control Board monitors the provisions of this general permit.

At all stream and wetland crossings, permits would be issued by the California Department of Fish and Game.

Regulations of the California Department of Transportation (Caltrans) apply where a pipeline alignment is located within Caltrans right-of-way.

Local Policies and Regulations

The County of San Luis Obispo Safety Element contains Policy S-7, Flood Hazards: "Strictly enforce flood hazard regulations both current and revised. FEMA regulations and other requirements for the placement of structures in flood plains will be followed. Maintain standards for development in flood-prone and poorly drained areas."

4.3.3 Significance Criteria

Criteria for Construction

Short-term surface water resources impacts due to construction would be significant if:

- Temporary changes in stream flow patterns to accommodate construction activities resulted in downstream erosion and/or backwater effects/flooding
- Damage to construction sites occurs during flood flows while a pipeline is being installed in a streambed
- An increase in turbidity and sedimentation occurs in streams crossed and/or paralleled due to clearing, grading, trenching, and backfilling operations

Short-term groundwater impacts due to construction would be significant if:

- Impairment of groundwater recharge occurs from sedimentation in streams caused by clearing, grading, trenching, and backfilling operations

Criteria for Operation

Adverse impacts due to operation of the proposed project would be significant if:

- Erosion and downstream sedimentation occurred due to a water supply pipeline rupture

4.3.4 Impacts and Mitigation Measures

The severity of flooding and erosion impacts for a particular location is dependent on the need for stream diversions during construction, the amount of activity planned to occur within a stream channel or flood plain, and the construction schedule. Based on the planned alignment of the proposed pipeline, construction activities are possible near the seasonal drainage channel along the southern boundary of the site.

Hydrologic information on county streams indicates runoff generally occurs only during and immediately after precipitation, but stream flow can rise rapidly and carry large amounts of debris during storms. Based on historical floods in the Salinas River system, the greatest possibility of flooding within the county occurs from December to March. Therefore, if all construction is limited to summer months, the probability of severe flooding impacts would be low. If work is not limited to the dry season, potential impacts from construction near the drainage channel could be significant. If excavated soils or stockpiled soils and backfill material were not protected from erosive factors such as wind and rain, construction of the pipeline could contribute to sedimentation problems downstream. Potential adverse impacts to surface water, stream channel, and soil resources during construction are significant due to flooding, erosion, and downstream sedimentation.

Potential drainage, erosion and sedimentation impacts resulting from the Nacimiento Water Project are fully addressed in Section 5.3 of the 2003 NWP EIR.

4.3.4.1 CSA10A and Bella Vista MHP

Because there would be no construction associated with the Project in Cayucos, there would be no physical effects and therefore no impacts on drainage, erosion and sedimentation.

4.3.4.2 Santa Margarita Ranch

Because there would be only minor construction associated with the Project in Santa Margarita to construct a turnout, there would be only minor physical effects and therefore no significant impacts on drainage, erosion and sedimentation. Nevertheless, a permit and associated environmental review would be required to construct the turnout.

4.3.5 Cumulative Impacts

4.3.5.1 CSA10A and Bella Vista MHP

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to drainage, erosion and sedimentation were also evaluated. The Project's drainage, erosion and sedimentation impacts would be the result of construction activities, and not on-going operational activities. Because there would be no construction activities associated with the Project in Cayucos, cumulative drainage, erosion and sedimentation impacts would not be considered significant.

4.3.5.2 Santa Margarita Ranch

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to drainage, erosion and sedimentation were also evaluated. The Project's potential drainage, erosion and sedimentation impacts are the result of construction activities, and not on-going operational activities. Because of the short duration and limited scope of the construction, cumulative drainage, erosion and sedimentation impacts would not be considered significant.

4.4 Air Quality

4.4.1 Environmental Setting

The Project area is part of the South Central Coast Air Basin (SCCAB) which includes all of San Luis Obispo, Santa Barbara, and Ventura counties. The climate of San Luis Obispo County and all of the SCCAB is strongly influenced by its proximity to the Pacific Ocean and the location of the semi-permanent high pressure cell in the northeastern Pacific. With a Mediterranean-type climate, the Santa Margarita area is characterized by warm, dry summers and cool winters with occasional rainy periods. Maximum summer temperatures in the County average about 70 degrees Fahrenheit near the coast, while inland valleys are often in the high 90's. Average minimum winter temperatures range from the low 30's along the coast to the low 20's inland.

Airflow around the County plays an important role in the movement and dispersion of pollutants. The speed and direction of local winds are controlled by the location and strength of the Pacific high pressure system and other global patterns, topographical factors, and circulation patterns resulting from temperature differences between the land and the sea. The region is also subject to seasonal "Santa Ana" winds. These are typically hot, dry northerly winds which blow offshore at 15-20 mph, but can reach speeds over 60 mph. Two types of temperature inversions (warmer air on top of cooler air) are created in the area: subsidence and radiational. The subsidence inversion is a regional effect created by the Pacific high in which air is heated as it is compressed when it flows from the high pressure area to the low pressure areas inland. This type of inversion generally forms at about 1,000 to 2,000 feet and can occur throughout the year, but it is most evident during the summer months. Surface inversions are formed by the more rapid cooling of air near the ground during the night, especially during winter. Both types of inversions limit the dispersal of air pollutants within the regional airshed, with the more stable the air (low wind speeds, uniform temperatures), the lower the amount of pollutant dispersion.

Air Quality

Air quality is determined by measuring ambient concentrations of air pollutants that are known to have adverse health effects. For regulatory purposes, there are several air pollutants for which standards have been set. These pollutants are generally recognized as "criteria pollutants." For most criteria pollutants, regulations and standards have been in effect, in varying degrees, for more than 25 years, and control strategies are designed to ensure that the ambient concentrations do not exceed certain thresholds. Another class of air pollutants that are subject to regulatory requirements is called hazardous air pollutants (HAPs) or air toxics. Substances that

are especially harmful to health, such as those considered under U.S. EPA's hazardous air pollutant program or California's air toxics programs are considered to be air toxics. Regulatory air quality standards are based on scientific and medical research. These standards establish minimum concentrations of an air pollutant in the ambient air that could start to cause adverse health effects.

For air toxics emissions, however, the regulatory process usually assesses the potential impacts to public health in terms of "risk" (such as the Air Toxics "Hot Spots" Program in California), or the emissions may be controlled by prescribed technologies (as in the Federal approach for controlling hazardous air pollutants).

Inert Pollutants

Criteria pollutants that are considered to be inert include carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), PM_{10}, lead, sulfates and hydrogen sulfide (H_2S).

Carbon monoxide is formed primarily by the incomplete combustion of organic fuels. San Luis Obispo County is in attainment of the California and National 1-hour and 8-hour CO standards.

Nitric oxide (NO) is a colorless gas formed during combustion processes which rapidly oxidizes to form NO_2, a brownish gas. The highest nitrogen dioxide values are generally measured in urbanized areas with heavy traffic. San Luis Obispo County is in attainment for all the California and National nitrogen dioxide standards.

Sulfur dioxide is a gas produced primarily from the combustion of sulfurous fuels by stationary sources and by mobile sources. San Luis Obispo County has been in attainment of the California and national sulfur dioxide standards over the past ten years.

The two classes of particulate matter (PM) are PM_{10} (coarse particulate matter less than 10 microns in aerodynamic diameter), and $PM_{2.5}$ (fine particulate matter 2.5 microns or less in aerodynamic diameter). Both consist of many different types of particles that vary in their chemical activity and toxicity. $PM_{2.5}$ tends to be a greater health risk because it cannot be removed from the lungs once it is deeply inhaled. The largest PM emissions appear to originate from soils (via roads, construction, agriculture, and natural windblown dust). Other sources of PM include sea salt, particulate matter released during combustion processes, such as those in gasoline and diesel vehicles, and wood burning. Also, nitrogen oxides (NO_x) and sulfur oxides (SO_x) are precursors in the formation of secondary PM. San Luis Obispo County is designated as non-attainment of the California PM_{10} standard.

Lead is a heavy metal that in ambient air occurs as a lead oxide aerosol or dust. Because lead is no longer added to gasoline or paint products, lead emissions have reduced substantially in recent years. San Luis Obispo County is in attainment with the NAAQS and the CAAQS for lead.

Sulfates are aerosols (i.e., wet particulate) that are formed by sulfur oxides in moist environments. They exist in the atmosphere as sulfuric acid and sulfate salts. The primary source of sulfate is from the combustion of sulfurous fuels. San Luis Obispo County is in attainment for the California sulfate standard.

Hydrogen sulfide is an odorous, toxic, gaseous compound that can be detected by humans at very low concentrations. The gas is produced during the decay of organic material and is also found naturally in petroleum. San Luis Obispo County is in attainment of the H_2S standard.

Photochemical Pollutants

Ozone is a secondary pollutant that is not produced directly by a source, but rather is formed by a reaction between nitrogen oxides (NOx) and reactive organic gases (ROG) in the presence of sunlight. Reductions in

ozone concentrations are dependent on reducing the amount of these precursors. In San Luis Obispo County, the major sources of ROG are motor vehicles, organic solvents, the petroleum industry, and pesticides; and the major sources of NOx are motor vehicles, public utility power generation, and fuel combustion by various industrial sources.

On April 28, 2005, the California Air Resources Board (CARB) approved the nation's most health protective ozone standard with special consideration for children's health. The new 8-hour-average standard at 0.070 parts per million (ppm) will further protect California's most vulnerable population from the adverse health effects associated with ground-level ozone. Based on monitoring data, San Luis Obispo County has been deemed in non-attainment for the new ozone standard.

Toxic Air Contaminants

Toxic Air Contaminants (TACs) are hazardous air pollutants that are known or suspected to cause cancer, genetic mutations, birth defects, or other serious illnesses to people. TACs may be emitted from three main source categories: (1) industrial facilities; (2) internal combustion engines (stationary and mobile); and (3) small "area sources" (such as solvent use). CARB publishes lists of Volatile Organic Compound species profiles for many industrial applications and substances.

Generally, TACs behave in the atmosphere in the same general way as inert pollutants (those that do not react chemically but preserve the same chemical composition from point of emission to point of impact). The concentrations of toxic pollutants are therefore determined by the quantity and concentration emitted at the source and the meteorological conditions encountered as the pollutants are transported away from the source. Thus, impacts from toxic pollutant emissions tend to be site-specific and their intensity is subject to constantly changing meteorological conditions.

Asbestos has been identified by the State Air Resources Board as a toxic air contaminant. Serpentine is a very common rock type in the state and was identified by the Board as having the potential to contain naturally occurring asbestos. Under the State Air Resources Board Air Toxics Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations, prior to any grading activities at the site, a geologic analysis will be necessary to determine if serpentine rock is present. If naturally occurring asbestos is found at the site an Asbestos Health and Safety Program and an Asbestos Dust Mitigation Plan is required to be approved by the District before construction begins.

Serpentine-rich rock (serpentinite) and soil units constitute a significant impact where they contain a magnesium-silicate mineral called Chrysotile. Chrysotile typically occurs in veins of silky fibers and is an important source of commercial asbestos. Airborne asbestos fibers are known to cause risk to human health, and the potential exists for human exposure during excavation of serpentine-rich rock and soil units.

Review of the geologic map of the Santa Margarita area shows a band of "serpentinized" Franciscan melange, with occasional genuine serpentine rocks occurring within the Nacimiento Fault Zone. The surface exposures are from approximately 500 to 1,500 feet wide, beginning in the Miller Flat area and running south-eastward along the flank of the Santa Lucia Range and beyond the southern boundary of the Santa Margarita Ranch. Several minor outcrops occur along the west side of Miller Flat and near the cemetery east of the town of Santa Margarita, and one outcrop within the town itself. The band of Franciscan melange reappears as a narrow strip to the northwest which is intersected by Santa Margarita Creek, just south of the Asistencia, and again as a narrow strip running northwest from the Asistencia through some low hills to U.S. 101.

Greenhouse Gas

Constituent gases of the Earth's atmosphere called atmospheric greenhouse gases (GHG) play a critical role in the Earth's radiation budget by trapping infrared radiation emitted from the Earth's surface, which would otherwise have escaped into space. Prominent GHGs contributing to this process include carbon dioxide, methane, nitrous oxide, chlorofluorocarbons, and sulfur hexafluoride. This phenomenon, known as the Greenhouse Effect is responsible for maintaining a habitable climate. Anthropogenic emissions of these GHGs that are in excess of natural ambient concentrations are responsible for the enhancement of the greenhouse effect and have led to a trend of unnatural warming of the Earth's natural climate, known as global warming or climate change. Emissions of these gases that induce global warming are attributable to human activities associated with industrial/manufacturing, utilities, transportation, residential, and agricultural sectors. Transportation is responsible for 41 percent of the State's GHG emissions, followed by electricity generation. Pumping, treating, and distributing water and wastewater, including the State Water project, accounts for 20% of the electricity used in California. GHGs are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. Worldwide, California is the 12th to 16th largest emitter of CO2 and is responsible for approximately 2 percent of the world's CO2 emissions. In 2004, California produced 497 million gross metric tons of carbon dioxide-equivalent.

4.4.1.1 CSA10A

The nearest air monitoring station to Cayucos is located on Morro Bay Boulevard in the City of Morro Bay, approximately seven miles south of the CSA10A area. This station measures ozone and oxides of nitrogen (NOx). For the years 2010 through 2013, this station reported no exceedances of State or Federal standards for these pollutants.

4.4.1.2 Bella Vista MHP

The nearest air monitoring station to Cayucos is located on Morro Bay Boulevard in the City of Morro Bay, approximately seven miles south of the CSA10A area. This station measures ozone and oxides of nitrogen (NOx). For the years 2010 through 2013, this station reported no exceedances of State or Federal standards for these pollutants.

4.4.1.3 Santa Margarita Ranch

This section is from section 4.2.1 of the Santa Margarita Ranch EIR.

The nearest air monitoring station to Santa Margarita is located on Lewis Avenue in the City of Atascadero, approximately eight miles north of the community of Santa Margarita. This station measures ozone, PM_{10}, CO, and oxides of nitrogen (NOx). This monitoring station has recorded one exceedance of State standards for ozone in 2005 and one exceedance of State standards for PM_{10} in 2003. However, this monitoring station has not recorded exceedances of State or federal standards for NOx over the years 2003-2005, inclusive, or for CO between 2003 and 2004 (CO monitoring ceased in June 2004).

As noted above, San Luis Obispo County is in nonattainment for State ozone and PM_{10} levels. In 2005 the Atascadero Monitoring Station had one violation of the State 1-hour ozone standard and would have had at least three violations of the current 8-hour standard. The station also had one exceedance of the State PM_{10} standard between 2003 and 2005.

Ambient PM_{10} concentrations have been primarily a localized issue of concern in the southern portion of San Luis Obispo County, providing the major impetus for the County's non-attainment designation for the State PM_{10} standard. The major sources for PM_{10} are mineral quarries, grading, demolition, agricultural tilling, road dust, and vehicle exhaust. PM_{10} levels in the Santa Margarita area are primarily due to agricultural tilling, road dust, motor vehicle emissions, and the sand and gravel quarry located northeast of the community.

4.4.2 Regulatory Setting

Both the federal and state governments have established ambient air quality standards for the protection of public health. The U.S. Environmental Protection Agency (EPA) is the federal agency designated to administer air quality regulation, while the California Air Resources Board (CARB) is the state equivalent in the California Environmental Protection Agency. Local control in air quality management is provided by the CARB through regional-level Air Pollution Control Districts (APCDs). The CARB has established air quality standards and is responsible for the control of mobile emission sources, while the local APCDs are responsible for enforcing standards and regulating stationary sources. The CARB has established 14 air basins statewide.

The U.S. EPA has set primary and secondary ambient air quality standards for ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, suspended particulates (PM_{10}) and lead. In addition, the State of California has established health-based ambient air quality standards for these and other pollutants, which are more stringent than the federal standards. Table 3 shows the federal and state primary standards for the major pollutants.

Table 3. Federal and State Primary Standards for Major Air Pollutants

Pollutant	Averaging Time	Federal Primary Standards	California Standard
Ozone	1-Hour	---	0.09 PPM
	8-Hour	0.08 PPM	0.070 PPM
Carbon Monoxide	8-Hour	9.0 PPM	9.0 PPM
	1-Hour	35.0 PPM	20.0 PPM
Nitrogen Dioxide	Annual	0.053 PPM	0.030 PPM
	1-Hour	---	0.18 PPM
Sulfur Dioxide	Annual	0.030 PPM	---
	24-Hour	0.14 PPM	0.04 PPM
	1-Hour	---	0.25 PPM
PM_{10}	Annual	---	20 $\mu g/m^3$
	24-Hour	150 $\mu g/m^3$	50 $\mu g/m^3$
$PM_{2.5}$	Annual	15 $\mu g/m^3$	12 $\mu g/m^3$
	24-Hour	35 $\mu g/m^3$	*
Lead	30-Day Average	---	1.5 $\mu g/m^3$
	3-Month Average	1.5 $\mu g/m^3$	---

* No separate State standard
ppm = parts per million
$\mu g/m^3$ = micrograms per cubic meter
Source: ARB, February 22, 2007

Federal, State, and local agencies have established standards and regulations that may affect the proposed project. A summary of the regulatory setting for air quality is provided below.

Federal Regulations

The Federal Clean Air Act of 1970 directs the attainment and maintenance of the National Ambient Air Quality Standards (NAAQS). The 1990 Amendments to this Act included new provisions that address air emissions that affect local, regional and global air quality. The main elements of the 1990 Clean Air Act Amendments are summarized below:

- Title I Attainment and maintenance of NAAQS
- Title II Motor vehicles and fuel reformulation
- Title Ill Hazardous air pollutants

- Title IV Acid deposition
- Title V Facility operating permits
- Title VI Stratospheric ozone protection
- Title VII Enforcement

The EPA is responsible for implementing the Federal Clean Air Act and establishing the NAAQS for criteria pollutants. In 1997, the EPA adopted revisions to the Ozone and Particulate Matter Standards contained in the Clean Air Act. These revisions included a new 8-hour ozone standard and a new particulate matter standard for particles below 2.5 microns in diameter. These standards were suspended, however, when in May 1999 the U.S. Court of Appeals for District of Columbia remanded the new ozone standard. In January 2001, the EPA issued a Proposed Response to Remand, where it stated that the revised ozone standard should remain at 0.08 ppm. In February 2001, the U.S. Supreme Court upheld the constitutionality of the Clean Air Act as the EPA had interpreted it in setting health-protective air quality standards for ground-level ozone and particulate matter.

Recent Air Quality Standards Actions

In 2006, EPA tightened the 24-hour PM2.5 standard from 65 $\mu g/m^3$ to 35 $\mu g/m^3$ and retained the existing annual standard of 15 $\mu g/m^3$. The EPA promulgated a new 8-hour standard for ozone on March 12, 2008, effective March 27, 2008. In addition, the EPA is proposing to revise the lead standard to within the range of 0.10 µg/m3 to 0.30 $\mu g/m^3$, and is currently holding public hearings and accepting comments.

State Regulations

The California Air Resources Board (CARB) establishes the California Ambient Air Quality Standards (CAAQS). Comparison of the criteria pollutant concentrations in ambient air to the CAAQS determines State attainment status for criteria pollutants. CARB has jurisdiction over all air pollutant sources in the State; it has delegated to local air districts the responsibility for stationary sources and has retained authority for emissions from mobile sources. CARB, in partnership with the local air quality management districts within California has developed a pollutant monitoring network to aid attainment of CAAQS. The network consists of numerous monitoring stations located throughout the State, which monitor and report various pollutant concentrations in ambient air.

CARB revised the PM standard in 2002, pursuant to the Children's Environmental Health Protection Act. The revised PM_{10} standard is 20 $\mu g/m^3$ for an annual average. In addition, CARB adopted a fine PM ($PM_{2.5}$) standard (particles with a mean aerodynamic diameter of 2.5 microns or less), set at 12 $\mu g/m^3$ for an annual average.

California Clean Air Act (CCAA) (California Health and Safety Code, Division 26).

This act went into effect on January 1, 1989, and was amended in 1992. CCAA mandates achieving the health-based CAAQS at the earliest practical date.

Air Toxics "Hot Spots" Information and Assessment Act of 1987 (California Health & Safety Code, Division 26, Part 6).

The Hot Spots Act requires an inventory of air toxics emissions from individual facilities, an assessment of health risk, and notification of potential significant health risk.

The Calderon Bill (SB 1889), (California Health & Safety Code Sections 25531-25543).

This bill, signed by Governor Pete Wilson in September 1996, sets forth changes in the following four areas:

1. Provides guidelines to identify a more realistic health risk

2. Requires high risk facilities to submit an air toxic emission reduction plan
3. Holds air pollution control districts accountable for ensuring that the plans will achieve their objectives
4. Requires high risk facilities to achieve their planned emissions reduction

Naturally Occurring Asbestos Regulation

The California Air Resources Board's approved Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying and Surface Mining Operations requires application of best management practices to control fugitive dust in areas known to have Naturally Occurring Asbestos, and also requires notification to the local air district prior to commencement of ground-disturbing activities. In addition, the San Luis Obispo Air Pollution Control District requires submittal of a Naturally Occurring Asbestos Construction and Grading Project Form for all grading projects in serpentine rock larger than 1 acre to prior to construction and assesses review fees for all work that has the potential to disturb soil containing Naturally Occurring Asbestos. All project construction occurs in areas designated by the San Luis Obispo Air Pollution Control District as "Geologic Analysis Required." Work in asbestos serpentine areas may require an Asbestos Dust Mitigation Plan and may include air monitoring.

Climate Change Policies and Regulation

There has been important legislative activity regarding global climate change and greenhouse gases in California. Although it was not originally intended to reduce greenhouse gases, California Code of Regulations Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The latest amendments were made in October 2005 and currently require new homes to use half the energy they used only a decade ago. Energy efficient buildings require less electricity, and electricity production by fossil fuels results in greenhouse gas emissions. Therefore, increased energy efficiency results in decreased greenhouse gases emissions.

<u>Assembly Bill (AB) 1493</u> California Assembly Bill 1493 (Pavley), enacted on July 22, 2002, required the California Air Resources Board to develop and adopt regulations that reduce greenhouse gases emitted by passenger vehicles and light duty trucks. Regulations adopted by the Board will apply to 2009 and later model year vehicles. The Board estimates that the regulation will reduce climate change emissions from the light duty passenger vehicle fleet by an estimated 18 percent in 2020 and by 27 percent in 2030.

<u>Executive Order S-3-05</u> California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, the following GHG emission reduction targets:

- By 2010, reduce GHG emissions to 2000 levels
- By 2020, reduce GHG emissions to 1990 levels
- By 2050, reduce GHG emissions to 80 percent below 1990 levels

<u>Climate Action Team</u> To meet these targets, the Governor directed the Secretary of the California Environmental Protection Agency to lead a Climate Action Team made up of representatives from the Business, Transportation and Housing Agency; the Department of Food and Agriculture; the Resources Agency; the Air Resources Board; the Energy Commission; and the Public Utilities Commission. The Climate Action Team's Report to the Governor in 2006 contains recommendations and strategies to help ensure the targets in Executive Order S-3-05 are met. The Climate Action Team report contains baseline emissions as estimated by the California Air Resources Board and the California Energy Commission. The Climate Action Team Report also

contains strategies that many other California agencies can employ. The Climate Action Team published a public review draft of Proposed Early Actions to Mitigate Climate Change in California in 2007. Most of the strategies were in the 2006 Climate Action Team Report or are similar to the 2007 Climate Action Team strategies.

Assembly Bill (AB) 32 In 2006, the California State Legislature adopted Assembly Bill AB 32, the California Global Warming Solutions Act of 2006. AB 32 focuses on reducing greenhouse gas emissions in California. AB 32 requires the California Air Resources Board to adopt rules and regulations that would achieve greenhouse gas emissions equivalent to statewide levels in 1990, by 2020. The California Air Resources Board is the State agency charged with monitoring and regulating sources of emissions of greenhouse gas that cause global warming. AB 32 requires that by January 1, 2008, the California Air Resources Board determine what the statewide GHG emissions level was in 1990, and it must approve a statewide greenhouse gas emissions limit so it may be applied to the 2020 benchmark. The Board approved the 1990 greenhouse gas emissions level of 427 million metric tons of carbon dioxide equivalent (MMTCO2e) on December 6, 2007. Therefore, in 2020, emissions in California are required to be at or below 427 MMTCO2e. Under the current "business as usual" scenario, statewide emissions are increasing at a rate of approximately 1 percent per year as noted below. Also shown are the average reductions needed from all statewide sources (including all existing sources) to reduce greenhouse gas emissions back to 1990 levels.

- 1990: 427 MMTCO2e
- 2004: 480 MMTCO2e (11 percent reduction needed to achieve 1990 AB 32 baseline)
- 2008: 495 MMTCO2e (14 percent reduction needed to achieve 1990 AB 32 baseline)
- 2020: 600 MMTCO2e Business As Usual (29 percent reduction needed to achieve 1990 level)

Early Action Measures Under AB 32, the California Air Resources Board published its Final Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California. Discrete early action measures are currently underway or are enforceable by January 1, 2010. Early action measures are regulatory or non-regulatory and are currently underway or to be initiated by the Board in the 2007 to 2012 timeframe. The Board has 44 early action measures that apply to the transportation, commercial, forestry, agriculture, cement, oil and gas, fire suppression, fuels, education, energy efficiency, electricity, and waste sectors. Of those early action measures, nine are considered discrete early action measures, as they are regulatory and enforceable by January 1, 2010. The Board estimates that the 44 recommendations are expected to result in reductions of at least 42 MMTCO2e by 2020, representing approximately 25 percent of the 2020 target.

Local Rules and Regulations

Local Air Pollution Control Districts (APCD's) in California have jurisdiction over stationary sources in their respective areas and must adopt plans and regulations necessary to demonstrate attainment of Federal and State air quality standards. As directed by the Federal and State Clean Air Acts, local air districts are required to prepare plans with strategies for attaining and maintaining State and Federal ozone standards. In the project area, air quality rules and regulations are promulgated by the San Luis Obispo APCD. In order to ultimately achieve the air quality standards, the rules and regulations limit emissions and permissible impacts from proposed projects. Some rules also specify emission controls and control technologies for each type of emitting source.

The San Luis Obispo APCD has jurisdiction over air quality attainment in the San Luis Obispo County portion of the South Central Coast Air Basin in accordance with the San Luis Obispo County Clean Air Plan. All aspects of the proposed project and alternatives occurring in San Luis Obispo County must obtain an APCD permit, if applicable.

4.4.3 Significance Criteria

The San Luis Obispo APCD has developed guidelines for evaluating the significance of air quality impacts for proposed projects undergoing CEQA review, which are outlined in the San Luis Obispo APCD CEQA Air Quality Handbook. Any project would be considered to have a potentially significant air quality impact if the emission levels from the proposed project were to equal or exceed any of the significance criteria set forth in this handbook.

Table 2-1 of the Handbook provides general thresholds for determining the significance of impacts for total emissions expected from a project's construction activities. The discussion following the table provides a more detailed explanation of the thresholds. The Air District has discretion to require mitigation for projects that will not exceed the mitigation thresholds if those projects will result in special impacts, such as the release of diesel PM emissions or asbestos near sensitive receptors.

Table 4. Thresholds of Significance for Construction Operations

Pollutant	Threshold[1]		
	Daily	Quarterly Tier 1	Quarterly Tier 2
ROG + NOx (combined)	137 lbs	2.5 tons	6.3 tons
Diesel Particulate Matter (DPM)	7 lbs	0.13 tons	0.32 tons
Fugitive Particulate Matter (PM10), Dust[2]		2.5 tons	
Greenhouse Gases (CO_2, CH_4, N20, HRF, CFC, F6S)	Authorized and Combined with Operational Emissions		

1. Daily and quarterly emission thresholds are based on the California Health & Safety Code and the CARB Carl Moyer Guidelines.
2. Any project with a grading area greater than 4.0 acres of worked area can exceed the 2.5 ton PM_{10} quarterly threshold.

Mitigation of construction activities is required when the emission thresholds are equaled or exceeded by fugitive and/or combustion emissions:

<u>ROG and NOx Emissions</u>

• Daily: For construction projects expected to be completed in less than one quarter (90 days), exceedance of the 137 lbs/day threshold requires Standard Mitigation Measures;

• Quarterly – Tier 1: For construction projects lasting more than one quarter, exceedance of the 2.5 ton/qtr threshold requires Standard Mitigation Measures and Best Available Control Technology (BACT) for construction equipment. If implementation of the Standard Mitigation and BACT measures cannot bring the project below the threshold, off-site mitigation may be necessary; and,

• Quarterly – Tier 2: For construction projects lasting more than one quarter, exceedance of the 6.3 ton/qtr threshold requires Standard Mitigation Measures, BACT, implementation of a Construction Activity Management Plan (CAMP), and off-site mitigation.

<u>Diesel Particulate Matter (DPM) Emissions</u>

• Daily: For construction projects expected to be completed in less than one quarter, exceedance of the 7 lbs/day threshold requires Standard Mitigation Measures;

• Quarterly - Tier 1: For construction projects lasting more than one quarter, exceedance of the 0.13 tons/quarter threshold requires Standard Mitigation Measures, BACT for construction equipment; and,

• Quarterly - Tier 2: For construction projects lasting more than one quarter, exceedance of the 0.32 ton/qtr threshold requires Standard Mitigation Measures, BACT, implementation of a CAMP, and off-site mitigation.

Fugitive Particulate Matter (PM10), Dust Emissions

• Quarterly: Exceedance of the 2.5 ton/qtr threshold requires Fugitive PM10 Mitigation Measures and may require the implementation of a CAMP.

Greenhouse Gas Emissions

• GHGs from construction projects must be quantified and amortized over the life of the project. The amortized construction emissions must be added to the annual average operational emissions and then compared to the operational thresholds in Section 3.5.1—Significance Thresholds for Project-Level Operational Emissions. To amortize the emissions over the life of the project, calculate the total greenhouse gas emissions for the construction activities, divide it by the project life (i.e., 50 years for residential projects and 25 years for commercial projects) then add that number to the annual operational phase GHG emissions.

In addition to the construction air quality thresholds defined above, there are a number of special conditions, local regulations or state / federal rules that apply to construction activities. These conditions must be addressed in proposed construction activity.

Sensitive Receptors

The proximity of sensitive individuals (receptors) to a construction site constitutes a special condition and may require a more comprehensive evaluation of toxic diesel PM impacts and if deemed necessary by the SLO County APCD, more aggressive implementation of mitigation measures than described below in the diesel idling section. Areas were sensitive receptors are most likely to spend time include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling unit(s). Sensitive receptor locations for a project need to be identified during the CEQA review process and mitigation to minimize toxic diesel PM impacts need to be defined. The types of construction projects that typically require a more comprehensive evaluation include large-scale, long-term projects that occur within 1,000 feet of a sensitive receptor location(s).

Diesel Idling Restrictions for Construction Phases

The APCD recognizes the public health risk reductions that can be realized by idle limitations for both on and off-road equipment. The following idle restricting measures are required for the construction phase of projects:

a. Idling Restrictions Near Sensitive Receptors for Both On and off-Road Equipment

1. Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors;

2. Diesel idling within 1,000 feet of sensitive receptors is not permitted;

3. Use of alternative fueled equipment is recommended whenever possible; and,

4. Signs that specify the no idling requirements must be posted and enforced at the construction site.

b. Idling Restrictions for On-road Vehicles

Section 2485 of Title 13, the California Code of Regulations limits diesel-fueled commercial motor vehicles that operate in the State of California with gross vehicular weight ratings of greater than 10,000 pounds and licensed for operation on highways. It applies to California and non-California based vehicles. In general, the regulation specifies that drivers of said vehicles:

1. Shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location, except as noted in Subsection (d) of the regulation; and,

2. Shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5.0 minutes at any location when within 100 feet of a restricted area, except as noted in Subsection (d) of the regulation.

Signs must be posted in the designated queuing areas and job sites to remind drivers of the 5 minute idling limit. The specific requirements and exceptions in the regulation can be reviewed at the following web site: www.arb.ca.gov/msprog/truck-idling/2485.pdf.

c. Idling Restrictions for off-Road Equipment

Off-road diesel equipment shall comply with the 5 minute idling restriction identified in Section 2449(d)(3) of the California Air Resources Board's In-Use off-Road Diesel regulation: www.arb.ca.gov/regact/2007/ordiesl07/frooal.pdf.

Signs shall be posted in the designated queuing areas and job sites to remind off-road equipment operators of the 5 minute idling limit.

Naturally Occurring Asbestos

Naturally Occurring Asbestos (NOA) has been identified as a toxic air contaminant by the California Air Resources Board (ARB). Under the ARB Air Toxics Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations, prior to any grading activities a geologic evaluation should be conducted to determine if NOA is present within the area that will be disturbed. If NOA is not present, an exemption request must be filed with the District. If NOA is found at the site, the applicant must comply with all requirements outlined in the Asbestos ATCM. This may include development of an Asbestos Dust Mitigation Plan and an Asbestos Health and Safety Program for approval by the APCD. Technical Appendix 4.4 of this Handbook includes a map of zones throughout SLO County where NOA has been found and geological evaluation is required prior to any grading. More information on NOA can be found at http://www.slocleanair.org/business/asbestos.asp.

Asbestos Material in Demolition

Demolition activities can have potential negative air quality impacts, including issues surrounding proper handling, demolition, and disposal of asbestos containing material (ACM). Asbestos containing materials could be encountered during demolition or remodeling of existing buildings. Asbestos can also be found in utility pipes/pipelines (transite pipes or insulation on pipes). If utility pipelines are scheduled for removal or relocation or a building(s) is proposed to be removed or renovated, various regulatory requirements may apply, including the requirements stipulated in the National Emission Standard for Hazardous Air Pollutants (40CFR61, Subpart M - asbestos NESHAP). These requirements include but are not limited to: 1) notification to the APCD, 2) an asbestos survey conducted by a Certified Asbestos Inspector, and, 3) applicable removal and disposal requirements of identified ACM. More information on Asbestos can be found at http://www.slocleanair.org/business/asbestos.php.

Developmental Burning

APCD regulations prohibit developmental burning of vegetative material within SLO County.

Permits

Portable equipment and engines 50 horsepower (hp) or greater, used during construction activities will require California statewide portable equipment registration (issued by the ARB) or an Air District permit. The following

list is provided as a guide to equipment and operations that may have permitting requirements, but should not be viewed as exclusive:

- Power screens, conveyors, diesel engines, and/or crushers;
- Portable generators and equipment with engines that are 50 hp or greater;
- Internal combustion engines;
- Unconfined abrasive blasting operations;
- Concrete batch plants;
- Rock and pavement crushing;
- Tub grinders; and,
- Trommel screens.

4.4.4 Impacts and Mitigation Measures

4.4.4.1 CSA10A and Bella Vista MHP

The Project will not result in any direct impacts to air quality. Construction of the NWP generated air emissions that were mitigated by measures required of that project. Operation of the NWP generates limited air emissions which impact air quality in the area, and emissions from generating electricity, the main use of which is to power pumps at the intake and the intermediate pump stations. These NWP-related air impacts were mitigated by a suite of measures.

4.4.4.3 Santa Margarita Ranch

Because there would be only minor construction associated with the Project in Santa Margarita to build a turnout, there would be only minor physical effects and therefore no significant impacts on air quality. Nevertheless, a permit process and associated environmental review would be required to construct the turnout.

4.4.5 Cumulative Impacts

4.4.5.1 CSA10A and Bella Vista MHP

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to air quality were also evaluated. The Project's air quality impacts would be the result of construction activities, and not on-going operational activities. Because there would be no construction activities associated with the Project in Cayucos, cumulative air quality impacts would not be considered significant.

4.4.5.2 Santa Margarita Ranch

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to air quality were also evaluated. The Project's potential air quality impacts are the result of construction activities, and not on-going operational activities. Because of the short duration and limited scope of the construction, cumulative air quality impacts would not be considered significant.

4.5 Noise

4.5.1 Environmental Setting

Noise is defined as unwanted sound that is heard by people or wildlife and that interferes with normal activities or otherwise diminishes the quality of the environment. Sources of noise may be transient (e.g., the passing of a

train or aircraft through the area) or continuous (e.g., the hum of distant traffic or the operation of air conditioning equipment). Sources of noise may have a broad range of sounds and be generally nondescript or have a specific, readily identifiable sound, such as a car horn. The sources of noise may also be steady or impulsive. These characteristics all bear on the perception of the acoustic environment.

Noise is usually measured as sound level on a logarithmic decibel (dB) scale, with the frequency spectrum adjusted by the A-weighting network. The dB is a unit division on a logarithmic scale that represents the intensity of sound relative to the reference intensity near the threshold of normal human hearing. The A-weighting network is a filter that approximates the response of the human ear at moderate sound levels. The resulting unit of measure is the A-weighted decibel (dBA).

To analyze the overall noisiness of an area, noise events are combined for an instantaneous value or averaged over a specific time period (e.g., one hour, multiple hours, and 24 hours). The time-weighted measure is referred to as Equivalent Sound Level (L_{eq}). The equivalent sound level is defined as the same amount of sound energy averaged over a given time period. The percentage of time that a given sound level is exceeded can also be represented. For example, L_{10} is a sound level that is exceeded 10% of the time over a specified period.

Wildlife response to noise is dependent not only on the magnitude but also the characteristic of the sound, or the sound frequency distribution. Wildlife is affected by a broader range of sound frequencies than humans. Noise is known to affect an animal's physiology and behavior, and chronic noise-induced stress is deleterious to an animal's energy budget, reproductive success, and long-term survival.

Human response to noise is dependent not only on the magnitude but also on the characteristic of the sound, or the sound frequency distribution. Generally, the human ear is more susceptible to higher frequency sounds than lower frequency sounds. This is reflected in the A-weighting which essentially assigns a weighting of zero to sounds with a frequency below 10 cycles per second and has a maximum weighting for sounds with a frequency in the 2,000 to 5,000 cycles per-second range.

Human response to noise is also dependent on the time of day and expectations based on location and other factors. For example, a person sleeping at home might react differently to the sound of a car horn than to the same sound while driving during the day. The regulatory process has attempted to account for these factors by developing overall noise ratings such as Community Noise Equivalent Level (CNEL) and the Day-Night Average Noise Level (L_{dn}) which incorporate penalties for noise occurring at night. The L_{dn} rating is an average of noise over a 24-hour period in which noises occurring between 10:00 p.m. and 7:00 a.m. are increased by 10 dBA. The CNEL is similar but also adds a weighting of 3 dBA to noises that occur between 7:00 p.m. and 10:00 p.m. Average noise levels over daytime hours (7:00 a.m. to 7:00 p.m.) are represented as L_d and nighttime noises as L_n.

The effects of noise are considered in two ways: how a proposed project may increase existing noise levels and affect surrounding land uses; and how a proposed land use may be affected by existing surrounding land uses. The Noise Element of the San Luis Obispo County General Plan focuses on particular types of land uses when measuring the effects of noise. These "sensitive receptors" include residences, transient lodging (e.g., hotels, motels), hospitals, nursing homes, convalescent hospitals, schools, libraries, offices, churches, public assembly places, and outdoor sports and recreation facilities.

4.5.1.1 CSA10A

Highway 1 is the primary traffic corridor near the CSA10A area, and is consequently the major noise contributor. Portions of the CSA10A area are within the 60 and 65 L_{dn} noise contours (Noise Element, County of San Luis Obispo General Plan, 1992).

4.5.1.2 Bella Vista MHP

Highway 1 and North Ocean Avenue are the primary traffic corridors near the BVMHP, and are consequently the major noise contributors. Only the very northern fringe of the mobile home park parcel is within the 60 L_{dn} noise contour.

4.5.1.3 Santa Margarita Ranch

This section is from section 4.8.1 of the Santa Margarita Ranch EIR.

Highway 101 and State Route (SR) 58 are the primary traffic corridors near the Santa Margarita Ranch, and are consequently the major noise contributors. Highway 101 traverses the western edge of the Ranch property, while SR 58 extends eastbound from Highway 101 through the community of Santa Margarita. The existing 60 dBA CNEL contour from Highway 101 ranges from 736 to 1,624 feet from the centerline. The existing 60 dBA CNEL contour from SR 58 ranges from 103 to 151 feet from the centerline. Areas adjacent to these roads are exposed to lower noise levels than modeled where there are intervening structures, vegetation and/or topography.

The other area roadways that currently carry sufficient traffic to produce audible noise at a substantial distance include El Camino Real, Estrada Avenue, and West Pozo Road. El Camino Real is a north-south roadway connecting Santa Margarita with Atascadero. Within Santa Margarita, El Camino Real becomes SR 58 and is oriented in an east-west direction, connecting Santa Margarita with Highway 101. Estrada Avenue is a north-south, two-lane local street in Santa Margarita that extends from El Camino Real and turns into West Pozo Road to the south. West Pozo Road is a two-lane local street connecting Santa Margarita and the town of Pozo. It extends from Estrada Avenue in the northwest to Pozo in the southeast, bisecting the eastern portion of the Ranch property. The existing 60 dBA CNEL contour for El Camino Real ranges from 145 to 155 feet from centerline (see Table 4.8-2). The existing 60 dBA CNEL contour from Estrada Avenue is approximately 123 feet from centerline, and from West Pozo Road is approximately 59 feet from centerline.

Wilhelmina Avenue is a north-south, two-lane local street in the western portion of the community of Santa Margarita. It extends from El Camino Real in the north to I Street in the south. Wilhelmina Avenue currently carries a relatively small amount of vehicle traffic, and therefore does not produce audible noise at a substantial distance.

Air Strip Operations. One private air strip is located on the Ranch property, trending north-south approximately 750 feet west of the existing Ranch headquarter facilities. The air strip consists of one 3,400 foot long runway and is used approximately three times per week.

Railroad Operations. The Union Pacific Railroad (UPRR) runs parallel to Highway 101, south of State Route 58, where it curves eastward to follow El Camino Real through the community of Santa Margarita. Noise Measurement Site 9 recorded noise from a passing train. The noise measurement was taken approximately 50 feet from the railroad centerline, and registered a maximum noise level (Lmax) of 110.5 dBA and an average noise level (Leq) of 85.5 dBA. According to the San Luis Obispo County Noise Element, the 60 dB CNEL (24-hour, time weighted average) contour extends 383 to 572 feet from the centerline, depending on the distance from grade crossing.

Agricultural Operations. Agricultural operations produce noise associated with wind machines, diesel engines, aerial application aircrafts (crop dusters), bird frightening devices, tractors, and water pumps. Many of these noise sources are related to seasonal operations. Agricultural operations currently on the Ranch property include vineyards and grazing land, which are scattered throughout the Ranch property. Grazing operations are not expected to generate substantial noise levels. Noise generated from equipment and water pumps associated with the vineyards on the Ranch property can occasionally be heard at off-site receptors.

Mining Operations. Hanson Aggregates operates a sand and gravel quarry just outside of the Ranch property boundary, at the northeastern corner of the Santa Margarita Ranch, approximately two miles northeast of Santa Margarita. Noises associated with mining operations include explosive rock blasting and truck hauling. Because noises associated with rock blasting are temporary in nature, and because the mining operation is relatively remote relative to sensitive land uses in the vicinity, this is not considered a substantial source of noise in the area. However, noises associated with truck hauling affect the overall noise levels on area roadways.

4.5.2 Regulatory Setting

Noise is regulated at the Federal, State, and local levels through regulations, policies, and/or local ordinances. Local policies are commonly adaptations of Federal and State guidelines, based on prevailing local conditions or special requirements. These guidelines have been developed at the federal level by the EPA, the Federal Highway Administration and Department of Transportation; and at the State level by the now defunct California Office of Noise Control and by Caltrans.

San Luis Obispo County

The applicable noise standards for the project are those established by San Luis Obispo County in the Noise Element of the County General Plan. County ordinances do not define acceptable sound level limits for construction. However, County Land Use Ordinance section 22.10.120A4 exempts construction activities from noise standards between 7:00 a.m. and 9:00 p.m. on weekdays and between 8:00 a.m. and 5:00 p.m. on Saturdays and Sundays.

The Noise Element of the General Plan establishes the following guideline:

> *"The existing or projected future noise exposure at the exterior of buildings which will contain noise-sensitive uses or within proposed outdoor activity areas (other than outdoor sports and recreation uses) does not exceed* 65 *dB Ldn (or CNEL) prior to mitigation. For outdoor sports and recreation uses, the existing or projected future noise exposure may not exceed* 75 *dB Ldn (or CNEL) prior to mitigation.* "

Policy No. 3.3.3 of the Noise Element states:

> *"Noise created by new transportation noise sources, including roadway improvement projects, shall be mitigated so as not to exceed the levels specified . . . within outdoor activity areas and interior spaces of existing noise- sensitive uses.* "

Policy No. 3.3.5 of the Noise Element states:

> *"Noise created by new proposed stationary noise sources or existing stationary noise sources which undergo modifications that may increase noise levels shall be made as follows and shall be the responsibility of the developer or the stationary noise source:*

"...b) Noise levels shall be reduced to or below the noise level standards . . . where the stationary noise source will expose an existing noise-sensitive use... to noise levels which exceed the standards. When the affected noise-sensitive land use is Outdoor Sports and Recreation, the noise level standards shall be increased by 10 dB."

Vibration

San Luis Obispo County Land Use Ordinance 22.10.170 establishes vibration standards. It states that any land use conducted in or within one-half mile of an urban or village reserve line is to be operated to not produce detrimental earth-borne vibrations perceptible at the lot line for a residential or office source or the boundary of the industrial category for an industrial source. However, these standards do not apply to vibrations from construction, the demolition of structures, surface mining activities or geological exploration between 7.00 A.M. and 9.00 P.M., or vibrations from moving sources such as trucks and railroads. These vibration sources are not regulated.

4.5.3 Significance Criteria

There are two criteria for judging noise impacts. First, noise levels for the proposed project must comply with relevant Federal, State, or local standards or regulations. Noise impacts to the surrounding community are enforced through the local noise ordinance and supported by nuisance complaints and subsequent investigation. They provide a basis for defining potential significant impacts, which would be caused by one of the following:

- *Construction*. If construction occurs outside the hours of 7:00 a.m. to 9:00 p.m. on weekdays and 8:00 a.m. to 5:00 p.m. on Saturdays and Sundays and, presumably, construction noise can be heard at the property line of any receiving location.
- *Operations*. If noise levels from stationary sources produced by a project and experienced by sensitive receptors exceed the levels in County ordinances. For residential areas, the hourly thresholds are 65 dBA during the day and 50/55 dBA (Office and Professional/Suburban and Recreation) during the night. For commercial retail areas, the hourly threshold is 75 dBA during both day and night. For commercial service and industrial areas, the hourly threshold is 80 dBA for both day and night.
- Adopted noise element policies, standards, or ordinances would be exceeded in magnitude, timing, or duration.

The second criterion for measuring project impact is the increase in noise level above the existing ambient level as a result of a new noise source. The degree of impact is hard to assess because of the highly subjective character of individuals' reactions to changes in noise. Most people begin to notice changes in environmental noise levels at approximately 5 dBA. Typically, changes in noise level less than 5 dBA cannot be definitely considered an adverse impact. For noise changes greater than 5 dBA, it is difficult to quantify the impact beyond recognizing that greater noise changes would result in greater impacts.

In community noise impact analysis, long-term noise increases of 5 to 10 dBA are considered to have "some impact." Noise level increases of more than 10 dBA are generally considered severe. In the case of short term noise increase, such as those from construction activities, the 10 dBA threshold between "some" and "severe" is replaced with a criterion of 15 dBA. These noise-averaged thresholds should be lowered when the noise level fluctuates, when the noise has an irritating character such as considerable high frequency energy, or if it is accompanied by subsonic vibration. In these cases, the impact must be individually estimated.

4.5.4 Impacts and Mitigation Measures

Other than future construction of a turnout to Santa Margarita Ranch, the project involves no construction or changes in operation of the Nacimiento Water Project. More water would be delivered to the current participants and there would be no noise impacts resulting from the project.

4.5.4.1 CSA10A and Bella Vista MHP

The Project's noise impacts would be the result of construction activities, and not on-going operational activities. Because there would be no construction activities associated with the Project in Cayucos, cumulative noise impacts would not be considered significant.

4.5.4.2 Santa Margarita Ranch

The Project's potential noise impacts are the result of construction activities, and not on-going operational activities. Because of the short duration and limited scope of the construction, noise impacts would not be considered significant.

4.5.5 Cumulative Impacts

4.5.5.1 CSA10A and Bella Vista MHP

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to noise were also evaluated. The Project's noise impacts would be the result of construction activities, and not on-going operational activities. Because there would be no construction activities associated with the Project in Cayucos, cumulative noise impacts would not be considered significant.

4.5.5.2 Santa Margarita Ranch

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to noise were also evaluated. The Project's potential noise impacts are the result of construction activities, and not on-going operational activities. Because of the short duration and limited scope of the turnout construction, cumulative noise impacts would not be considered significant.

4.6 Hazards and Hazardous Materials

This section describes existing and potential sources of environmental hazards associated with the delivery of water to Cayucos and Santa Margarita Ranch, assesses potential impacts from these hazards, and recommends mitigation measures to reduce impacts below a level of significance. Environmental hazards are those factors that could lead to damage to natural and/or human resources.

The NWP provides raw water to users via an approximately 45 mile-long pipeline. This section considers the environmental implications of the delivery of that raw water only to Santa Margarita Ranch, as well as the potential water pollution threats already existing in the project area. The implications of delivering Nacimiento water to Cayucos is not considered because Cayucos does not and will not directly receive Nacimiento water.

4.6.1 Environmental Setting

4.6.1.1 CSA10A

The hillside areas are within the Estero Area Plan's Geologic Study Area combining designation. There are no known hazardous materials issues within the area.

4.6.1.2 Bella Vista MHP

The entire site is within the Geologic Study Area combining designation. The western portion of the site along Cayucos Creek is mapped as a Flood Hazard area in the Estero Area Plan. There are no known hazardous materials issues associated with the property.

4.6.1.3 Santa Margarita Ranch

The following discussion is from the Final Supplemental Environmental Impact Report for the Santa Margarita Drought Reliability Project.

Wells in the lower Trout Creek area have exhibited somewhat elevated concentrations of sodium, sulfate, pH, and total dissolved solids, and two wells were found to have water with high iron content. There have also been reports of hydrogen sulfide gas. The iron concentration in two wells exceeded the secondary drinking water standard but is below the Central Coast Basin objective of 5.0 ppm for agricultural water use. Three wells exhibited sodium concentrations that exceed the median groundwater objective with one of these wells also exceeding the objective for pH. One well exhibited sulfate and total dissolved solids above the median groundwater objective but below the secondary drinking water standard.

Santa Margarita's water supply is pumped from the alluvial aquifer of Santa Margarita Creek/Yerba Buena Creek as well as from the deeper Santa Margarita formation. The alluvial aquifer averages about 50 feet deep within the boundaries of CSA-23. Historically, two wells (wells #1 and #2) developed in the late 1940s and early 1950s pumped the water from the alluvial aquifer. In 1991, the County drilled well #3 to augment Santa Margarita's municipal water supply. The well facilities also include an iron and manganese filter. In 1996, the County constructed well #4. Well #4 is located in the alluvial aquifer and replaced wells #1 and #2 for reasons including bacteria contamination of wells #1 and #2, construction that did not satisfy current regulatory requirements, and the State Department of Health Services' determination that they were subject to the influence of surface water.

There are no data concerning the absence or presence of other regulated constituents in the majority of the alluvial aquifer and, there is little reason to consider their presence to be likely. Current land uses on the Santa Margarita Ranch are limited to cattle grazing, viticulture, dry farming and two residences. Past land uses have included cattle grazing, residential, and agriculture. Beyond the Ranch, in the Santa Margarita and Garden Farms area, residential and agricultural use is predominant. Consequently, the rural nature of the land use and the historic land use practices do not suggest that pollution of the water has been, or is, a concern. The few constituents that have been found are all naturally occurring in groundwater and their presence is likely due to natural processes (e.g., the dissolution of gypsum from rock by groundwater).

Possible Water Contamination Sources

There are no data that suggest that the surface water or groundwater resources of the Santa Margarita area have been polluted. Past and current land practices in the Santa Margarita area have, however, resulted in water pollution in other areas. The definition of potential point sources in this section does not imply that there is indeed any pollution as a result of this activity. Site-specific data are lacking and evaluations are necessary before it can be unequivocally established that pollution is or is not present.

Waste disposal sites can be sources of pollution because of the generation of leachate in municipal wastes or because of the improper disposal of hazardous materials. There are several locations of known and suspected waste disposal sites on the Santa Margarita Ranch. An open trench near the Ranch headquarters served as the active waste disposal site for the Ranch. In addition, there are reports of two historic waste disposal sites: one

on the south side of Highway 58 just southeast of the community of Santa Margarita, and the other located behind the cemetery. The largest volume of the wastes at these sites is probably paper; however food and yard wastes, glass, metals, plastics, rubber, and liquid wastes are probably also present. The leachate that is generated in these wastes is typically high in calcium, copper, chloride, iron, lead, magnesium, manganese, nitrogen, potassium, sodium, sulfate, phosphate, and zinc. Septic systems are also potential sources of contamination. The main pollutants associated with septic systems are nitrate, phosphorus, chloride, biochemical oxygen demand, and metals. Other constituents may be present. Numerous septic systems are present in the town of Santa Margarita and the Garden Farms area.

The Atascadero Unified School District sewer ponds located above the elementary school are unlined and have the potential for contributing the same classes of pollutants as the septic systems.

ConocoPhillips Company operates a petroleum pump station which is located along EI Camino Real, just north of Chalk Hill. This facility includes four open top floating tanks and two fixed roof tanks for heavier crude. Serving the Santa Margarita petroleum pump station is a set of parallel, 8-inch pipelines. One line can carry 28,000 barrels per day and the other line can carry between 18,000 and 25,000 barrels of oil per day. These pipelines traverse east-west across the northern end of the Ranch, roughly 500 feet north of the Ranch headquarters. It should also be noted that a 6 to 10-inch natural gas trunk line runs along U.S. Highway 101 and Highway 58 generally within the road right-of-way.

The railroad, Highway 101, Highway 58, EI Camino Real and to a lesser extent Pozo Road can all be considered transportation corridors upon which hazardous materials are likely to be carried. While the nature and the frequency of such hazards passing through the area has not been estimated, it can be asserted that such mobile hazards do exist periodically in the area, and thus the potential for accidental upsets affecting adjacent properties.

Spills and leaks associated with above ground and underground storage tanks and pipelines as well as transportation corridors can be sources of pollution. Benzene, xylenes, toluene, lead, oil, and grease are common contaminants found in spill or leak areas. Again it is stressed that there is the potential for pollution from such sources but that no published information concerning actual groundwater pollution is available.

4.6.2 Regulatory Setting

The handling, use, storage, treatment, transport, and disposal of hazardous materials, including management of contaminated soils and groundwater, are regulated by local, State, and Federal laws. The agencies responsible for enforcing applicable laws and regulations develop and enforce standards for the handling and cleanup of specific materials determined to pose a risk to human health or the environment. The enforcing agency at the local level for the proposed project area is the San Luis Obispo County Health Agency, Division of Environmental Health. Enforcement agencies at the State level include two branches of the California Environmental Protection Agency (CalEPA), the Department of Toxic Substances Control (DTSC), and the Regional Water Quality Control Board (RWQCB). The Federal enforcement agency is the US Environmental Protection Agency. A description of agency involvement in management of hazardous materials is provided below.

U.S. Environmental Protection Agency (EPA)

The EPA is the Federal agency responsible for enforcement and implementation of Federal laws and regulations pertaining to hazardous materials; in addition, the EPA provides oversight and supervision for some site investigation/ remediation projects. For disposal of certain hazardous wastes, the EPA has developed land disposal restrictions and treatment standards. Legislation includes the Resources Conservation and Recovery Act

of 1986 (RCRA), the Superfund Amendments and Reauthorization Act of 1986 (SARA), and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). The Federal regulations are primarily codified in Title 40 of the Code of Federal Regulations (40 CFR). These laws and regulations include specific requirements for facilities that handle, generate, use, store, treat, transport, and/or dispose of hazardous materials, as well as for investigation and cleanup of contaminated property.

RCRA provides Federal regulation over facilities which generate, store, transport, treat, or dispose of hazardous waste. Federal, State, and local governmental agencies identify and track hazardous waste from the point of generation to the point of disposal. Facilities that are under permit from the EPA to treat, store, and/or dispose of hazardous waste are tracked in the Resource Conservation and Recovery Information System (RCRIS) database. The California Solid Waste Information System (SWIS) database consists of open as well as closed and inactive solid waste disposal facilities and transfer stations (including surface impounds) pursuant to the Hazardous Waste Control Law (HWCL) of 1972.

SARA specifically addresses the management of hazardous materials by requiring public disclosure of information relating to the types and quantities of hazardous materials used at various types of facilities. Facilities must immediately report any discharge (leaks or spills) above the reportable quantity of extremely hazardous substances to local agencies in addition to State agencies.

CERCLA addresses procedures to identify and clean-up sites contaminated by unauthorized releases of hazardous materials. Superfund sets priorities for cleanup in the National Oil and Hazardous Substances Pollution Contingency Plan (National Contingency Plan). The National Contingency Plan includes lists of abandoned and uncontrolled hazardous waste sites in CERCLIS, which the EPA updates annually. Sites which receive the highest ranking under the hazardous ranking system are placed on the National Priorities List (NPL). State Superfund legislation of 1981 provides for funds available to finance cleanup *of* sites that do not qualify for Federal Superfund.

The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of the Clean Air Act Amendments of 1990. The Amendments required the EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The rule, which built on existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program (known as a "Risk Management Plan" or "RMP"), which includes:

- Hazard assessment that details the potential effects of an accidental release, an accident history of the last 5 years, and an evaluation of worst-case and alternative accidental releases
- Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures
- Emergency response program that spells out emergency health care, employee training measures, and procedures for informing the public and response agencies (e.g., the fire department) should an accident occur

According to the RMP Rule every facility that handles hazardous substances exceeding the threshold quantities has to submit a summary of the facility's RMP to the EPA. The RMP must be revised and resubmitted every 5 years. The RMP is about reducing chemical risk at the local level. This information helps local fire, police, and emergency response personnel (who must prepare for and respond to chemical accidents), and is useful to citizens in understanding the chemical hazards in communities. The EPA anticipates that making the RMPs available to the public stimulates communication between industry and the public to improve accident

prevention and emergency response practices at the local level. Drinking Water Treatment Plants that handle hazardous water treatment chemicals are regulated under the RMP Rule.

Federal Occupational Safety and Health Administration (OSHA)
OSHA promulgated a Process Safety Management (PSM) Standard (29 CFR 1910.119) with requirements for preventing or minimizing the consequences of catastrophic releases of toxic, reactive, flammable, or explosive chemicals. Some of the requirements of this standard include: all information pertaining to the hazardous chemicals shall be available to the employees and the employees shall be given training on the operation *of* equipment with hazardous materials; the employer is required to perform a process hazard analysis.

Central Coast Regional Water Quality Control Board (RWQCB)
The project is located within the jurisdiction of the Central Coast RWQCB. The RWQCB is authorized by the California Porter-Cologne Water Quality Act of 1969 ("the Porter- Cologne Act"), to implement water quality protection laws. For example, under the Porter- Cologne Act, the discharge of waste to any area that could affect waters of the State (which includes both groundwater and surface waters) would require a permit or a waiver of the permit from the RWQCB or its umbrella agency, the State Water Resources Control Board. The RWQCB also implements some Federal water protection laws on behalf of the EPA, including issuing National Pollution Discharge Elimination System (NPDES) permits for discharges to Waters of the U.S. When the quality of the groundwater or the surface waters of the State is threatened, the RWQCB has the authority to require investigations and remedial actions. In addition, the Central Coast RWQCB is the State regulatory agency that oversees the local Leaking Underground Fuel Tank (LUFT) program, which was established to regulate underground fuel tanks (UFTs). Under the LUFT program, local implementing agencies are required to permit, inspect, and oversee monitoring programs to detect leakage of hazardous materials. The RWQCB contracts locally to the San Luis Obispo County Division of Environmental Health to administer the UFT program outside the City of San Luis Obispo and LUFT program for the entire county.

CalEPA, Department of Toxic Substances Control (DTSC)
In California, the DTSC, a branch of CalEPA, works in conjunction with or in lieu of the EPA to enforce and implement specific hazardous materials laws and regulations. California has enacted its own legislation pertaining to the management of hazardous materials. The California legislation for which the DTSC has primary enforcement authority are the Hazardous Waste Control Act, a statute that primarily regulates the management of hazardous waste, and the Hazardous Substance Account Act, a statute that governs the cleanup of contaminated property and is modeled after CERCLA. Title 22 of the CCR, enacted pursuant to the Hazardous Waste Control Act, establishes criteria for identifying hazardous wastes and presents hazardous waste management requirements. These regulations are reprinted in Title 26, Toxics, of the CCR. The DTSC acts as the Lead Agency for some soil and groundwater cleanup projects. For sites where water quality is potentially endangered, the DTSC consults with the RWQCB on technical and regulatory issues.

California Occupational Safety and Health Agency
Worker health and safety in California is regulated by the Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA). Cal/OSHA standards and practices for workers dealing with hazardous materials are contained in Title 8 of the CCR, and include Division 1, Chapter 4, Subchapter 7 (General Industry Safety Orders) and Section 5192 (Hazardous Waste Operations and Emergency Response). General construction regulations are found in Division 1, Chapter 4, Subchapter 4 (Construction Safety Orders). Cal/OSHA offers onsite evaluations and issues notices of violation to enforce necessary improvements to onsite health and safety practices to achieve compliance with regulations. Cal/OSHA has a more stringent PSM requirement (Title

8 CCR, §5189) than Federal OSHA. Cal/OSHA specifies lower quantities of hazardous materials handled that would trigger the PSM requirements at a facility.

San Luis Obispo County Health Agency
Pursuant to State law and local ordinance, the Division of Environmental Health of the San Luis Obispo County Health Agency conducts inspections to ensure proper handling, storage, and disposal of hazardous materials and proper remediation of contaminated sites. In addition, the Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act, [i.e., Chapter 6.95 of Division 20 of the California Health and Safety Code]) requires that any business that handles or stores hazardous materials prepare a Hazardous Materials Business Plan (HMBP). Under this law, businesses are required to submit inventories of onsite hazardous materials and wastes and the locations where these materials are stored and handled. This information is collected and certified by San Luis Obispo County Environmental Health Department for emergency response purposes. No cities in San Luis Obispo County have adopted and implemented their own hazardous materials programs in lieu of the County program; however, the City of San Luis Obispo Fire Department is a participating agency with San Luis Obispo County. The City of San Luis Obispo Fire Department is responsible as a participating agency with the county for administrating the UFT program within the city.

These environmental programs are collectively responsible for identification and management of facilities or sites that are known or suspected to be contaminated and/or have the potential for unauthorized releases of hazardous materials into the environment. Notwithstanding, there is the potential risk for unknown sites to exist where unauthorized releases of hazardous materials have occurred (i.e., illegal dumping). The severity and locations of these activities generally remains unknown until effects are detected through public health or environmental emergencies. There is also a potential risk for naturally occurring sources of hazardous substances (i.e., radon, lead, asbestos, and methane and hydrogen sulfide gases) in certain geologic formations. These occurrences are not required to be reported or managed under CERCLA or SARA unless there is a known or suspected threat on public health or the environment. In recent years, Federal, State, and local governmental agencies have responded to such threats through initiating environmental programs including geologic mapping of potential sources of naturally occurring hazardous substances for property development planning and zoning, improved construction standards protective of public health, and air toxic monitoring at known source areas.

4.6.3 Significance Criteria

As defined in CEQA Appendix H (the Environmental Information Form), a significant Hazards and Hazardous Materials effect is one in which the project would:

a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

b) *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

c) *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?*

d) *Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

e) *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?*

f) *For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?*

g) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

h) *Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

4.6.4 Impacts and Mitigation Measures

4.6.4.1 CSA10A and Bella Vista MHP

The Project's hazards or hazardous materials impacts would be the result of construction activities, and not on-going operational activities. Because there would be no construction activities associated with the Project in Cayucos, there would be no hazards or hazardous materials impacts.

4.6.4.2 Santa Margarita Ranch

The Project's hazards or hazardous materials impacts would be the result of construction activities, and not on-going operational activities. Because there would be only limited construction activities associated with the Project, the hazards or hazardous materials impacts would be less than significant.

4.6.5 Cumulative Impacts

4.6.5.1 CSA10A and Bella Vista MHP

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to hazards and hazardous materials were also evaluated. The Project's hazards and hazardous materials impacts would be the result of construction activities, and not on-going operational activities. Because there would be no construction activities associated with the Project in Cayucos, cumulative hazards and hazardous materials impacts would not be considered significant.

4.6.5.2 Santa Margarita Ranch

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to hazards and hazardous materials were also evaluated. The Project's potential hazards and hazardous materials impacts are the result of construction activities, and not on-going operational activities. Because of the short duration and limited scope of the construction, cumulative hazards and hazardous materials impacts would not be considered significant.

4.7 Biological Resources

4.7.1 Environmental Setting

4.7.1.1 CSA10A

Nearly all of the service area is developed and therefore lacks important biological resource values. The easternmost edge of the hillside supports annual grassland. A small population of Blochman's dudleya grows just east of the service area boundary. Blochman's dudleya is considered "rare and endangered" (List 1B.1) by the California Native Plant Society.

The northwestern portion of the service area supports a riparian corridor associated with Willow Creek. The riparian habitat is bordered on the northwest side by Old Creek Road and on the southeast side by Hacienda Drive. Residences have been built on small lots which front onto both roadways.

4.7.1.2 Bella Vista MHP

The site has been highly modified by grading, clearing and development. Most of the eastern edge of the property extends to the approximate centerline of Cayucos Creek. A small hill is on the northern portion of the site. This hill supports annual grassland, scattered native shrubs and Monterey cypress trees (which provide visual screening for two water tanks). With the exception of the riparian habitat and the small hilltop, the site is essentially devoid of biological value.

4.7.1.3 Santa Margarita Ranch

This section is from the Santa Margarita Ranch EIR.

Agricultural Residential Cluster Subdivision site is located approximately 9.5 miles northeast of the City of San Luis Obispo on the approximately 14,000 acre Santa Margarita Ranch (Ranch) within the County of San Luis Obispo. The Ranch is situated within the southern portion of the San Lucia Mountains of the greater South Coast Range. Locally, these mountains consists of flat valleys to steeply sloping hills ranging in elevation from approximately 900 feet above mean sea level (msl) within Santa Margarita Valley to about 2,858 feet msl at Lopez Mountain approximately 2.75 miles southwest of the Ranch. The plant communities surrounding the Ranch are diverse and range from grasslands, chaparral, oak woodland, and riparian to knobcone pine forest and Sargent's cypress forest.

The Agricultural Residential Cluster Subdivision site is located in the southern portion of the Santa Margarita Ranch, southeast of the community of Santa Margarita and west of West Pozo Road. Los Padres National Forest is to the southwest, and Taco Creek and the remainder of the Santa Margarita Valley is to the southeast. The habitats in the vicinity if the property are composed of grasslands, coastal scrub, chaparral, oak woodlands, riparian, and emergent wetlands/seasonal pools that occur in a mosaic pattern across the landscape. Perennial and intermittent streams, which support riparian habitat for resident and migratory wildlife species, occur throughout the region. Vineyards comprise a substantial portion of the agricultural landscape within the southern portion of the Agricultural Residential Cluster Subdivision site, while dry farmed grains are found in the northern portion of the Ranch property. Cattle ranching occurs within on-site habitats with the exception of dry-farmed and vineyard areas.

Thirteen habitat types were identified within the Agricultural Residential Cluster Subdivision site, and include: 1) California annual grassland, 2) native perennial grassland, 3) central (Lucian) scrub, 4) chamise riparian/riverine, 9) emergent wetland, and, 10) seasonal pools, 11) mixed oak woodland, 12) ruderal, and 13) agriculture (vineyard). Classification of the on-site habitat types or plant communities was based generally on Holland's *Preliminary Description of the Terrestrial Natural Communities of California* (1986), and was compared to more recent habitat classification systems (Sawyer and Keeler-Wolf, 1995, and Holland and Keil, 1995). Cowardin's *Classification of Wetlands and Deepwater Habitats of the United States* (1979) was used to classify the wetland habitat. In addition, two creeks and several ephemeral drainage features are located within the Agricultural Residential Cluster Subdivision boundaries that are "waters" of the United States under the jurisdiction of the ACOE, and streambeds and associated riparian habitat potentially under CDFG jurisdiction under Fish and Game Code Section 1600 *et. seq*. The discussion of habitat types includes a brief description of common plant and wildlife species that were observed or that can be expected to occur within each on-site habitat type. A detailed discussion of special-status species is provided in EIR Section 4.3.1(e): *Special-Status Species*.

Natural Drainages. The following creek descriptions include the location of the creeks, associated riparian and wetland vegetation, creek characteristics, and in-stream pool measurements.

Trout Creek. Trout Creek is located within a flat area along the eastern portion of the Agricultural Residential Cluster Subdivision site between West Pozo Road and the hills to the west. Trout Creek is a perennial creek that originates south of the Agricultural Residential Cluster Subdivision site in the Santa Lucian Mountains near Cuesta Ridge. From its origins it heads northeast/north through the site and eventually converges with the Salinas River east of the Santa Margarita Ranch property. The Agricultural Residential Cluster Subdivision site segment of Trout Creek is approximately 1.50 miles long and contains mature riparian forest habitat with riparian scrub and emergent perennial wetland habitats lining and submerged within its diverse channel. Average bankfull of Trout Creek is approximately 50 feet and the channel is often 4.0 feet wide. Substrate found in riffles is small sized gravel to cobbles, while coarse sand to medium gravel is common in most runs. Twelve in-stream pools have been identified within the on-site creek segment that occurs within the development area. On average, these pools are 5-6 feet wide, 5-7 feet long, and 2-4 feet deep. They typically consist of coarse sand, but in many cases contain gravel and cobble substrate.

Tostada Creek. Trout Creek is located along an unnamed ranch road between two hills in the mid-eastern portion of the Agricultural Residential Cluster Subdivision site. Tostada Creek is a seasonal creek that originates within the Agricultural Residential Cluster Subdivision site near Moore Ridge and extends east until it converges with Trout Creek at the one mile bridge of Highway 58. Tostada Creek receives runoff from ephemeral drainages from Moore Ridge and in the hills that surround the lower portion of the creek. On-site, Tostada Creek is approximately 1.25 miles long and contains two very different segments. To the west, the upper 0.75 mile long segment supports sparse riparian scrub and deer grass habitats over an open channel and to the east, the lower 0.50 mile long segment supports riparian forest habitat consisting of red willow, foothill pine, and coast live oak. Average bankfull of Tostada Creek is approximately 40 feet and the channel is often 3.0-4.0 feet wide. Substrate found in riffles is small to large sized gravel, while coarse sand to medium gravel is common in most runs. Ten in-stream pools have been identified within the on-site creek segment. On average, these pools are 4.0-5.0 feet wide, 4.0-6.0 feet long and 1.0-3.0 foot deep. They typically have fine to coarse sand, but in some cases contain small to medium sized gravel substrate.

Seasonal Pools. Seven seasonal pools are located within the Agricultural Residential Cluster Subdivision. All seasonal pools have a moderately impervious clay, loamy clay, or sandy loam soil substrate (USDA 1994) that supports seasonal pooling (Althouse and Meade, 2003, J. Davis, personal observation).

Special-Status Species. Special-status species are those plants and animals listed, proposed for listing, or candidates for listing as threatened or endangered by the USFWS under the Federal Endangered Species Act (FESA); those listed or proposed for listing as rare, fully protected, threatened, or endangered by the CDFG under the California Endangered Species Act (CESA); animals designated by the CDFG as "California Special Concern (CSC) species" that occur on the Special Animal list (CDFG 2006); plants occurring on the CDFG's *Special Vascular Plants, Bryophytes, and Lichens List* (CDFG 2006); and plants occurring on Lists 1 and 2 of the CNPS's *Inventory of Rare and Endangered Vascular Plants of California* (CNPS 2001) and CNPS Inventory On-line (2006). Additionally, a number of special-status wildlife species are considered to be of "local concern." Animals in this category are of interest because they have limited distributions, are experiencing local or regional population declines, are vulnerable to current or future threats to their preferred habitat, and/or are of unusual scientific, recreational, or educational value.

4.7.2 Regulatory Setting

Regulatory authority over biological resources is shared by Federal, State, and local authorities under a variety of statutes and guidelines. Primary authority for general biological resources lies within the land use control and planning authority of local jurisdictions, in this instance, the County of San Luis Obispo. The CDFW is a trustee agency for biological resources throughout the state under CEQA and also has direct jurisdiction under the Fish

and Game Code of California. Under the State and Federal Endangered Species Acts, the CDFW and the USFWS also have direct regulatory authority over species formally listed as Threatened or Endangered. The ACOE has regulatory authority over specific biological resources, namely wetlands and waters of the United States, under Section 404 of the federal Clean Water Act. Protection for wetlands and riparian habitat is also afforded through the California Fish and Game Code, and local and regional water quality control boards. Additionally, Section 3503.5 of the Fish and Game Code of California protects birds of prey, their nests and eggs against take, possession, or destruction.

Pursuant to the Federal Endangered Species Act (FESA), a permit from USFWS is required for "take" of a Federally listed species through either the Section 7 or Section 10 consultation process. Species "take" can be authorized under Section 7 of the FESA if a Federal agency is involved in the project (e.g., ACOE Section 404 permitting and/or Federal funding) and agrees to be the lead agency requesting Section 7 consultation. This consultation process includes a Biological Assessment of the predicted impacts of a project on the species with measures to minimize and mitigate for such impacts. The result is a Biological Opinion rendered by USFWS that includes a specified allowable incidental take as well as terms and conditions to minimize and offset such take. Take may or may not be issued for operation of a project. The Section 10 consultation process is used to authorize incidental take when no Federal agency is involved. This process includes development of a Habitat Conservation Plan for protecting and enhancing the Federally listed species at a specific location in perpetuity. If "take" were only issued for construction activities, or limited only to those specific areas where an ACOE Section 404 permit is required, a Section 10 permit may be needed for the long-term life of a project. If no Federal nexus can be invoked through the Section 404 permitting process, a Section 10 permit must be obtained for construction and operation of a project.

4.7.3 Significance Criteria

Project impacts to plant and wildlife and their habitats may be determined to be significant even if they do not directly affect rare, threatened, or endangered species. CEQA, Chapter 1, Section 21001 (c) states that it is the policy of the state of California to "Prevent the elimination of fish and wildlife species due to man's activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities." Environmental impacts relative to biological resources may be assessed using impact significance criteria encompassing CEQA guidelines, federal, state and local plans, and ordinances.

In accordance with Appendix G of the State CEQA Guidelines, impacts would be significant if development would result in any of the following:

- *Have a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;*

- *Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;*

- *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;*

- *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites;*

- *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or*

- *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan.*

The County of San Luis Obispo General Plan, Salinas River Planning Area, and the County of San Luis Obispo Land Use Ordinance contain specific policies for the protection of biological resources. Project consistency with these policies is evaluated in Appendix C, Policy Consistency, of the Santa Margarita Ranch EIR.

4.7.4 Impacts and Mitigation Measures

4.7.4.1 CSA10A and Bella Vista MHP

The Project's biological resources impacts would be the result of construction activities, and not on-going operational activities. Because there would be no construction activities associated with the Project in Cayucos, biological resources impacts would not be considered significant. Therefore no mitigation measures are needed.

4.7.4.2 Santa Margarita Ranch

The Project's potential biological resources impacts are the result of construction activities, and not on-going operational activities. Because of the short duration and limited scope of the construction, biological resources impacts would not be considered significant. Nevertheless, a permit process including environmental review would be required for construction of the turnout.

4.7.5 Cumulative Impacts

4.7.5.1 CSA10A and Bella Vista MHP

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to biological resources were also evaluated. The Project's biological resources impacts would be the result of construction activities, and not on-going operational activities. Because there would be no construction activities associated with the Project in Cayucos, cumulative biological resources impacts would not be considered significant.

4.7.5.2 Santa Margarita Ranch

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to biological resources were also evaluated. The Project's potential biological resources impacts are the result of construction activities, and not on-going operational activities. Because of the short duration and limited scope of the construction, cumulative biological resources impacts would not be considered significant.

4.8 Cultural and Paleontological Resources

4.8.1 Environmental Setting

4.8.1.1 CSA10A and Bella Vista MHP

Cayucos is an area historically occupied by the Obispeno Chumash. Previous development has most likely disturbed or destroyed most of the cultural resources within the urban area. Most of the area is underlain by metavolcanic bedrock, a geologic formation which does not yield paleontological resources.

4.8.1.2 Santa Margarita Ranch

This section is from section 4.4.2 of the Santa Margarita Ranch EIR.

Prior Research and Identification Efforts. The historical and archaeological values of the Santa Margarita Ranch were recognized even in the late 19th century. In 1872 Edward Vischer's drawings of mission buildings were published in *Missions of Upper California*, and from 1881-1882 Henry Chapman Ford painted all 21 missions and five asistencias, including Santa Margarita.

In 1941, the Santa Margarita Asistencia was designated California Historic Landmark #364, and in 1953, Arnold Pilling recorded two Mission Period archaeological sites in the headquarters area: CA-SLO-127 and -128. Avocationalists began examining the local archaeology in the 1960s, when members of the San Luis Obispo County Archaeological Society performed the first systematic archaeological survey of ranch lands (Hunter 1971). They identified 14 prehistoric sites and collected numerous surface artifacts.

The next important body of research from the Santa Margarita area can be attributed to several water and oil pipeline projects in the mid-1990s. The State of California Department of Water Resources (DWR) built a 102-mile underground water pipeline (the Coastal Branch Aqueduct) that crossed the ranch at Miller Flat, continued along the south side of Santa Margarita, and followed Highway 58 and El Camino Real north toward the Salinas River. As a result of various cultural resources studies required during the project (e.g., survey, excavation, monitoring), several archaeological sites were identified at the ranch within the right-of-way. Studies on some of these sites included extended survey excavations at CA-SLO-1763, test excavations at CA-SLO-586 (originally recorded by Hunter), and data recovery excavations at CA-SLO-1644 and CA-SLO-1756 (Fitzgerald 1997a, 1997b; Johnson 1998; Painted Cave Archaeological Associates 1989; Wickstrom et al. 1996). Diagnostic artifacts, dateable carbon samples, and other important materials recovered during these excavations have broadened the database on prehistoric occupation in the Santa Margarita Valley.

UNOCAL replaced an existing oil pipeline that extends southwest from the oil tank farm adjacent to El Camino Real across the ranch to Highway 101. Gibson (1992) identified several sites along the pipeline route. Two of these are within or adjacent to the current project area. CA-SLO-1430, a lithic scatter, is located at ranch headquarters, and CA-SLO-1429, also a lithic scatter, is located along El Camino Real near the tank farm. A rare fluted point base recovered during construction monitoring at CA-SLO-1429 (Gibson 1995) provides invaluable evidence of the earliest human occupation of the area.

In 1999–2000, Applied Earth Works, Inc. (Æ) surveyed approximately 4,000 discontiguous acres of the Santa Margarita Ranch for vineyards and possible residential use (Flint et al. 2000). Fifty-two previously unidentified sites and 67 isolated artifacts were encountered during the survey, which revealed a large and diverse array of prehistoric and historical sites including structures associated with Mission San Luis Obispo de Tolosa as well as sites associated with ranching, farming, and mining. Prehistoric sites ranged from small, isolated task-specific sites dating as far back as circa 6500–3500 B.C. (Milling Stone Period) to large villages, temporary camps, and special use areas that were occupied during the Late Period (circa A.D. 1250–1500) and possibly into the Mission Period (circa A.D. 1500–1834).

Investigations for the Current Proposal. To supplement these prior surveys of ranch lands, in May and June 2006 Æ performed additional archaeological surveys of approximately 526 acres focused on the portions of the currently proposed Agricultural Residential Cluster area in May and June 2006 that had been surveyed previously (Lloyd 2006). In addition to the field inventory, Æ conducted a literature review and records search at the Central Coastal Information Center of the California Historical Resources Information System, performed historical background research, and consulted with the Native American Heritage Commission (NAHC) and local

Native American representatives from the Chumash and Salinan tribes. Æ recorded six previously unknown archaeological sites and two isolates during this investigation.

In addition to its archaeological study, Æ conducted a cultural landscape study that focused on the impacts of development on the historical integrity of the ranch. This analysis examined the existing ranch property within the context of the original land grant rancho and its historical development. The product of that study is a Cultural Landscape Report (CLR) that is appended to this EIR (Appendix E; Beedle and Price 2006). It describes the historical landscape of the Santa Margarita Ranch, identifies its important features and character-defining elements, and assesses the potential effects of the proposed development on the important qualities of the historical landscape. It provides a detailed historical context within which these evaluations are made, and offers recommendations to mitigate potentially significant impacts.

Inventory of Cultural Resources. The archaeological and historical surveys described above have covered approximately 60% of Tract 2586 and an equivalent amount of lands encompassed by the Future Development Program. All lands within or immediately adjacent to the proposed Agricultural Residential Cluster Subdivision have been inventoried. Archaeological survey coverage is shown on Figure 4.4-1 in the EIR. Within or immediately adjacent to the studied areas, 62 prehistoric and historic archaeological sites and 33 isolated artifacts have been identified. Complete descriptions of these sites can be found in the inventory reports (Flint et al. 2000; Gibson 1992; Hunter 1971; Lloyd 2006; Painted Cave Archaeological Associates 1989; Pilling 1953a, 1953b) and associated cultural resource records kept on file at the Central Coastal Information Center.

Cultural resources in the vicinity span all of local prehistory and history, and provide evidence for continuous occupation and use of the landscape over the past 10,000 years. Prehistoric archaeological sites range from large, dense midden deposits containing a broad range of artifact classes and types, dietary refuse, residential debris, structural remains, and human interments to small, diffuse scatters of stone tool manufacturing debris. Historic period sites include stone and adobe buildings associated with the asistencia of Santa Margarita de Cortona, other mission-era features, wood framed structures erected between the mid-nineteenth and mid-twentieth centuries, and the archaeological remains of homesteads, mines, trash dumps, and various agricultural and ranching activities. Historical sites reflect all of the major themes that have operated in the study area during mission times, the rancho period, and subsequent American era. Human remains and prehistoric graves have not been regularly encountered on the Ranch.

Currently available information indicates that two prehistoric sites within the study area have been formally evaluated for significance and found eligible for the National Register of Historic Places. During construction of Reach 4 of the Coastal Branch Aqueduct, test excavations were conducted along the pipeline right-of-way through CA-SLO-586. Wickstrom et al. (1996) concluded that the site was eligible under Criterion D for its potential to provide important information about local and regional prehistory. For the same project, Fitzgerald (1997) performed data recovery excavations at CA-SLO-1644.

The archaeological sites, historical buildings, and other cultural remains on the ranch have combined with the unique natural environment of the Santa Margarita Valley to produce a distinctive cultural landscape shaped by American Indian, Spanish, Mexican, and Euro-American cultural traditions. As Beedle and Price (2006) describe in detail in their Cultural Landscape Report (refer to EIR Appendix E), the Santa Margarita Ranch possesses a unique and unusual concentration of buildings, structures, and sites that have been connected through their shared history and by the continuation of historical traditions and patterns of land use into modern times. The landscape is considered sacred by local Native Americans, and qualifies as a historic district eligible for the California Register of Historic Resources.

Sixty-two archaeological and historical sites are currently recorded within or adjacent to the study area. Thirty-two archaeological sites are within or adjacent to the boundaries of Tract 2586. Thirty archaeological sites are within or adjacent to Future Development Program areas proposed for residential development, guest ranches, golf courses, wineries, ranch headquarters, an interpretive center, and other uses. Of the 32 sites within Tract 2586, 22 are within or surrounding the Agricultural Residential Cluster Subdivision area.

In addition to the archaeological sites, 33 isolated artifacts have been recorded within the areas surveyed for cultural resources. Six isolates are within or immediately adjacent to the Agricultural Residential Cluster area. These isolates may represent broadly dispersed artifacts unassociated with a particular site but evidence that people have lived in the area and intensively utilized the landscape over many thousands of years. However, such isolates might also be considered evidence of cultural deposits that have become buried over time, so that only the slightest indication is visible on the surface. Which scenario is accurate for any particular isolate can only be determined by subsurface examination of the area.

Existing Paleontological Resources. Paleontological resources are organic remains or their traces, usually older than 11,000 years, which are naturally preserved and imbedded in rocks or rock-like material such as amber. Organisms that possess hard parts (e.g., bone or shell) are most typically preserved, but fossils can represent soft parts, hard parts, tracks, trails, molds, casts, and trace indications such as burrows. Fossils occur primarily in sedimentary rocks, but some fossils have been excavated from other rock types, especially volcanic rocks.

There is a temporal threshold for an entity to become a fossil. If the organic material is 5,000 years old, it is not considered a fossil by most paleontologists. If it is 10,000 years old, it may be deemed a fossil. If it dates to 100,000 B.P., there is no question about its classification as a fossil if the organic material is found in situ in rocks preserved by natural processes.

The published record identifies numerous invertebrate fossil localities in the Santa Margarita region, especially in marine rocks. These fossils are usually well preserved in the rock, and are commonplace throughout the area, although some sites are more productive than others. Invertebrate fossils generally are regarded as less significant than other types of paleontological remains. Elevated areas within the Santa Margarita Valley have extensive exposures of the Late Cretaceous Atascadero and Late Miocene Santa Margarita and Monterey formations; these are marine deposits that may contain extensive invertebrate faunas. One such exposure of fossilized shell strata is found within the Agricultural Residential Cluster Subdivision site. Because of the richness of invertebrate fossils in marine rocks and their widespread distribution, they are not discussed individually in the summary of fossil resources below.

Neither the UCMP nor the LACM have recorded vertebrate fossil localities within the project area. However, both the LACM and UCMP identify vertebrate sites from elsewhere in the region in some of the same sedimentary rock units that are exposed in the study area.

Paleontological Potential of Rock Units in the Project Area. Although no specific vertebrate fossil sites have been identified within the Agricultural Residential Subdivision site, the project area contains several rock units that have produced fossils. The paleontological sensitivity of these rock units has been evaluated based on the density of recorded fossils and sites in exposures of the unit in or near the area under observation. Sedimentary rocks, especially detrital or nonmarine deposits, contain by far the most vertebrate fossil material. A rock unit is most likely to yield fossils in number and kind similar to those previously recorded from that unit in the same vicinity.

The paleontological sensitivity of the rock units in the study area is classified as high, low, unknown, or none. Each sensitivity class and its associated rock units are described below.

- **High Sensitivity:** High-sensitivity rock units include the older Quaternary Alluvium, Paso Robles Formation, Monterey Formation, Santa Margarita Formation, and Vaqueros Formation. These rock units have yielded important marine and nonmarine vertebrate fossils in the past, including marine mammals and fish, sharks, western horse, American mastodon, ground sloth, camel, and others.
- **Low Sensitivity:** The Simmler and Franciscan formations are classified as low sensitivity. The coarse clastic nature of the Simmler Formation, and the lack of fossils generated from the unit to date, suggest that it is unlikely to yield important fossil remains. While the Franciscan assemblage has produced vertebrate remains in the past, including plesiosaur and ichthyosaur, these fossils are rare and it is unlikely that significant fossils will be recovered from this assemblage in the project area.
- **Unknown Sensitivity:** It is undetermined whether the Atascadero Formation and Toro Formation will yield important vertebrate remains, although any vertebrate remains from these units would be significant.
- **No Sensitivity:** The Obispo Formation and Cretaceous granitic rocks are not sensitive because they contain little or no fossil material or contain fossils that are so common or widespread that a sensitivity designation is not warranted. Some rock units are of an igneous origin, and thus have no potential to contain fossils. Others are known to contain marine fossils, but better and more abundant localities are present in the region.

4.8.2 Regulatory Setting

California Register of Historical Resources (CRHR). "The California Register is an authoritative guide in California to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate which properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (Public Resources Code Section 5024.1(a)). The CRHR is overseen and administered by the State Historical Resources Commission. The criteria for listing resources on the CRHR are based on those developed by the National Park Service for listing on the National Register of Historic Places with modifications in order to include a broader range of resources which better reflect the history of California. A resource is considered historically significant if it:

> *A. Is associated with events or patterns of events that have made a significant contribution to the broad patterns of the history and cultural heritage of California and the United States.*
>
> *B. Is associated with the lives of persons important to the nation or to California's past.*
>
> *C. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.*
>
> *D. It has yielded, or may be likely to yield, information important to the prehistory or history of the State and the Nation.*

California Public Resources Code. Section 5097.9 of the California Public Resources Code stipulates that it is contrary to the free expression and exercise of Native American religion to interfere with or cause severe irreparable damage to any Native American cemetery, place of worship, religious or ceremonial site, or sacred shrine.

Section 5097.5 of the California Public Resources Code (PRC) prohibits excavation or removal of any "vertebrate paleontological site or historical feature, situated on public lands, except with the express permission of the

public agency having jurisdiction over such lands." PRC 30244 requires reasonable mitigation of adverse impacts to paleontological resources from development on public land. Penal Code Section 623 spells out regulations for the protection of caves, including their natural, cultural, and paleontological contents. It specifies that no "material" (including all or any part of any paleontological item) will be removed from any natural geologically formed cavity or cave.

State Health and Safety Code. If human remains are discovered or exposed during construction, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC will then contact the most likely descendent of the deceased Native American, who will serve as a consultant on how to proceed with the remains (i.e., avoid, rebury).

San Luis Obispo County Standards. The County has a vital interest in preserving its many older buildings, and prehistoric and historic sites, which not only represent the heritage of San Luis Obispo County, but also help define the character of the region today.

In the event archaeological resources are unearthed or discovered during any construction activities, the following standards apply:

- Construction activities shall cease, and the County Environmental Coordinator shall be notified so that the extent and location of discovered materials may be recorded by a qualified archaeologist, and disposition of artifacts may be accomplished in accordance with state and federal law.
- In the event archaeological resources are found to include human remains, or in any other case when human remains are discovered during construction, the County Coroner is to be notified in addition to the Environmental Coordinator so proper disposition may be accomplished. If the remains are determined to be Native American, then the County Coroner must notify the Native American Heritage Commission within 24 hours.

4.8.3 Significance Criteria

Appendix H of the State CEQA Guidelines states that a project would result in a potentially significant impact if it would:

- *Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5;*
- *Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5;*
- *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or*
- *Disturb any human remains, including those interred outside of formal cemeteries.*

Historical and Archaeological Resources. According to the State CEQA Guidelines, a resource shall generally be considered "historically significant" if the resource meets the criteria for listing on the California Register of Historic Resources (supra). The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to section 5020.1(k) of the Public Resources Code), or identified in a historical resources survey (meeting the criteria in section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be a historical resource as defined in Public Resources Code sections 5020.1(j) or 5024.1.

Under CEQA, an impact on a historical resource is considered significant if the impact lessens the integrity of the qualities of the property that qualify it for the California Register. If the proposed project may cause damage to a significant historical resource, the project may have a significant effect on the environment. Section 15064.5 of the CEQA Guidelines pertains to the determination of the significance of impacts to archaeological and historic resources. Direct impacts may occur by:

(1) Physically damaging, destroying, or altering all or part of the resource;

(2) Altering characteristics of the surrounding environment that contribute to the resource's significance;

(3) Neglecting the resource to the extent that it deteriorates or is destroyed. Indirect impacts primarily result from the effects of project-induced population growth. Such growth can result in increased construction as well as increased recreational activities that can disturb or destroy cultural resources; or

(4) The incidental discovery of cultural resources without proper notification.

Indirect impacts result primarily from the effects of project-induced population growth. Such growth can result in increased construction as well as increased recreational activities that can disturb or destroy cultural resources.

CEQA provides guidelines for mitigating impacts to historical or archaeological resources in Section 15126.4. Preservation in place is the preferred manner of mitigating impacts (14 CCR 15126.4(b)(3)). Preservation in place may be accomplished by planning construction to avoid the resource, incorporating sites within parks or open space, covering sites with chemically stable and culturally sterile fill, or deeding the site into a permanent conservation easement. For buildings and structures, maintenance, repair, restoration, preservation, conservation, or reconstruction consistent with the *Secretary of Interior's Standards and Guidelines for the Treatment of Historic Properties* is considered mitigation of impacts to a less than significant level (14 CCR 15126.4(b)(1)). Documentation of an historical resource, however, will not mitigate the effects of demolition to a less than significant level (14 CCR 15126.4(b)(2)). When data recovery excavation of an archaeological site is the only feasible mitigation, a detailed data recovery plan must be prepared and adopted prior to any excavation.

Paleontological Resources. Significant paleontological resources are fossils or assemblages of fossils that are unique, unusual, rare, uncommon, diagnostically or stratigraphically important, and/or add to an existing body of knowledge in specific areas stratigraphically, taxonomically, or regionally. Significant resources include fossil remains of large to very small aquatic and terrestrial vertebrates, remains of plants and animals not previously represented in certain portions of the stratigraphic sequence, and assemblages of fossils that might aid stratigraphic correlations, particularly those offering data for the interpretation of tectonic events, geomorphologic evolution, paleoclimatology, and the relationships of aquatic and terrestrial species. Vertebrate fossils, some invertebrate fossils, and some suites of plant fossils may be classified as significant paleontological resources.

The discovery of a vertebrate fossil locality is of greater significance than that of an invertebrate fossil locality, especially if it contains a microvertebrate assemblage. The recognition of new vertebrate fossil locations could provide important information on the geographical range of the vertebrates, their age, evolutionary characteristics, the type of environment, and other important scientific research questions. Vertebrate fossils are almost always significant because they occur so rarely. Each additional vertebrate fossil provides considerable scientific information. Invertebrate fossils and plant fossils tend to be more abundant than vertebrate fossils. These fossils generally are ranked lower in significance than vertebrates unless they are in

short supply, are age-diagnostic, or their paleoenvironmental framework is unique. Thus, geological rock units having the potential to contain vertebrate fossils are considered the most sensitive.

4.8.4 Impacts and Mitigation Measures

4.8.4.1 CSA10A and Bella Vista MHP

The Project's cultural and paleontological resources impacts would be the result of construction activities, and not on-going operational activities. Because there would be no construction activities associated with the Project in Cayucos, cultural and paleontological resources impacts would not be considered significant. Therefore no mitigation measures are needed.

4.8.4.2 Santa Margarita Ranch

The Project's potential cultural and paleontological resources impacts are the result of construction activities, and not on-going operational activities. Because of the short duration and limited scope of the construction, cultural and paleontological resources impacts would not be considered significant. Nevertheless, a permit process including environmental review would be required for construction of the turnout. Because the location of the turnout is not known at this time, it is impossible to predict whether construction would be in a culturally sensitive area, however, the aforementioned environmental review will address any potential impacts.

4.8.5 Cumulative Impacts

4.8.5.1 CSA10A and Bella Vista MHP

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to cultural and paleontological resources were also evaluated. The Project's cultural and paleontological resources impacts would be the result of construction activities, and not on-going operational activities. Because there would be no construction activities associated with the Project in Cayucos, cumulative cultural and paleontological resources impacts would not be considered significant.

4.8.5.2 Santa Margarita Ranch

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to cultural and paleontological resources were also evaluated. The Project's potential cultural and paleontological resources impacts are the result of construction activities, and not on-going operational activities. Because of the short duration and limited scope of the construction, cumulative cultural and paleontological resources impacts would not be considered significant.

4.9 Land Use

4.9.1 Environmental Setting

4.9.1.1 CSA10A

The area is almost completely built-out with single family residences and commercial uses. There are approximately 890 parcels, about 90 of which are undeveloped.

4.9.1.2 Bella Vista MHP

The property was developed as a mobile home park many decades ago and continues in this use. The following paragraph is from page 4-26 of the Estero Area Plan (2009), and applies to a limited area including Bella Vista MHP:

> ***Specific Plan or Development Plan West of Cayucos Creek.*** *The county should encourage owners of properties west of Cayucos Creek shown in Figure 4-5 to participate in preparation of a specific plan or Development Plan for that area. The specific plan or Development Plan should integrate land uses on the*

north side of North Ocean Avenue and provide for connections between those uses. It should provide for recreation opportunities, and provide for convenient bicycle and pedestrian connections to the central business district, including improved access across Cayucos Creek.

4.9.1.3 Santa Margarita Ranch

This section is from section 4.7.1 of the Santa Margarita Ranch EIR.

The Santa Margarita Ranch property is located in the County of San Luis Obispo, which occupies approximately 3,300 square miles of both urban and rural land uses. Specifically, the Ranch property lies in an unincorporated rural area surrounding the community of Santa Margarita. Recent urban development has been limited in the community of Santa Margarita and vicinity. The community of Santa Margarita had an estimated population of 1,279 residents in 1995 (Salinas River Area Plan). In contrast, the 2005 population was estimated at approximately 1,325 residents. This represents an annual growth rate of 0.35%. The proposed Agricultural Residential Cluster Subdivision includes 3,778 acres near the middle of the Ranch, southeast of the community of Santa Margarita, while the Future Development Program occurs in various locations throughout the balance of the 14,000-acre property. Existing ranch facilities (+/- 50,000 square feet of building coverage), activities and land uses include an equestrian center, private narrow gauge railroad, vineyard(s), private 3,400 foot airstrip, farmland, eight-acre cattle feedlot, agricultural roads, trails, several homes along with agricultural accessory structures, historic structures, water wells, numerous ponds and reservoirs, and various above and underground utilities. The Santa Margarita Ranch has been historically utilized for grazing and crop production since the late 1700's.

The entire 14,000-acre Santa Margarita Ranch property is bordered to the north by agriculture, rural lands, residential suburban uses, including those within the Garden Farms community, and commercial retail development. Agriculture, rural lands, single-family residences, agricultural accessory structures, quarries, and portions of the Salinas River border the site to the east. To the south, agriculture, recreational, and open space uses exist, as well as trails and the Los Padres National Forest. To the west are agricultural uses, rural lands and residences. The proposed Agricultural Residential Cluster Subdivision area is located near the center of the Ranch, southeast of the community of Santa Margarita, and is bordered by Pozo Road/Highway 58 to the north, Pozo Road to the east, and agricultural uses, vineyards and/or livestock grazing, and dry farming to the south and west.

4.9.2 Regulatory Setting

4.9.2.1 CSA10A and Bella Vista MHP

The Local Coastal Program regulates land use planning in the coastal portion of the County, including Cayucos. The requirements and restrictions of each of the regulatory documents that apply to the proposed Agricultural Residential Cluster Subdivision are contained in the applicable documents. The CSA10A area and the MVMHP site primarily designated and zoned Residential Single Family and Residential Multi Family, respectively) with Flood Hazard and Geologic Study Area combining designations. Relatively small portions of the CSA10A area are designated and zoned Commercial Retail and Public Facility. Areas east and north of the CSA10A area are designated in the General Plan as Rural Lands, Agriculture, and Recreation. Areas around BVMHP are designated in the general Plan as Residential Multi Family, Recreation and Agriculture (north of Highway 1 only).

4.9.2.2 Santa Margarita Ranch

The County Land Use Ordinance and County General Plan Land Use Element regulate land use planning in the County of San Luis Obispo. The requirements and restrictions of each of these regulatory documents that apply to the proposed Agricultural Residential Cluster Subdivision are described in Appendix C (*Policy Consistency*).

The Agricultural Residential Cluster Subdivision area is designated and zoned Agricultural) with Flood Hazard and Geologic Study Area combining designations. The remainder of the Ranch Property is designated and zoned Agricultural and Rural Residential with Flood Hazard, Geologic Study Area, Historic Site, and Sensitive Resource Area combining designations. Areas north of the Ranch are designated in the General Plan as Agriculture, Rural Lands, Residential Suburban, and Commercial Retail. Areas south of the Ranch are designated in the general Plan as Agriculture, Recreation, and Open Space. Areas east and west of the Ranch are designated in the General Plan as Agriculture and Rural Lands.

4.9.3 Significance Criteria

In accordance with Appendix G of the State CEQA Guidelines, impacts would be significant if development would result in the any of the following:

- *Physically divide an established community;*
- *Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; and/or*
- *Conflict with any applicable habitat conservation plan or natural community conservation plan.*

4.9.4 Impacts and Mitigation Measures

4.9.4.1 CSA10A and Bella Vista MHP

The Project's land use impacts would be the result of construction activities, and not on-going operational activities. Because there would be no construction activities associated with the Project in Cayucos, land use impacts would not be considered significant.

4.9.4.2 Santa Margarita Ranch

Construction activity associated with constructing a turnout would create temporary noise, air quality and possibly visual impacts due to the use of construction equipment and generation of fugitive dust and debris. These effects could cause nuisances at adjacent properties and disrupt agricultural activity. However, these impacts would be temporary in nature and may be Class II, *significant but mitigable*. Construction of the turnout would require a permitting process, including environmental review. This process would analyze the specific impacts at the location of the turnout, which is not known at this time.

4.9.5 Cumulative Impacts

4.9.5.1 CSA10A and Bella Vista MHP

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to land use were also evaluated. The Project's land use impacts would be the result of construction activities, and not on-going operational activities. Because there would be no construction activities associated with the Project in Cayucos, cumulative land use impacts would not be considered significant.

4.9.5.2 Santa Margarita Ranch

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to land use were also evaluated. The Project's potential land use impacts are the result of construction activities, and not on-going operational activities. Because of the short duration and limited scope of the construction, cumulative land use impacts would not be considered significant.

4.10 Utilities and Public Services

4.10.1 Environmental Setting

4.10.1 CSA10A and Bella Vista MHP

Law Enforcement. Police services in Cayucos are provided by the San Luis Obispo County Sheriff's Department. The sheriff station that would be the first responder to the area is the Coast Station, located at 2099 10th Street, in the community of Los Osos, approximately 13 miles south of Cayucos.

Fire Protection. Fire services in Cayucos are provided by the California Department of Forestry and Fire Protection (CDF)/San Luis Obispo County Fire Department and the Cayucos Fire Department. The Cal Fire station that would provide first response to the community is Station 11 located at 108 Chaney, at the south end of the community. The Cayucos Fire Department station is located at 201 Cayucos Drive. Due to fiscal and staffing issues, the Cayucos Fire Department commissioners sent a proposal to the Local Agency Formation Commission to dissolve the department.

Schools. The Cayucos Elementary School District provides elementary and junior high school services to the Cayucos area. Cayucos Elementary School is located at 301 Cayucos Drive. High school services are provided by the San Luis Coastal Unified School District. Morro Bay High School is located at 235 Atascadero Road in Morro Bay.

Solid Waste. Through a franchise agreement with the County, a private Company (Mission Country Disposal) is responsible for solid waste collection service in the Cayucos area. Solid waste is collected and disposed of at the Cold Canyon Landfill, located approximately 27 miles southeast of the community of Cayucos, on Carpenter Canyon Road north of Arroyo Grande.

Libraries. The community of Cayucos is served by the Cayucos Library, a branch of the San Luis Obispo City-County Library. The library is located at 310 B Street in Cayucos and is open on Monday, Wednesday and Friday afternoons.

4.10.1.3 Santa Margarita Ranch

The following section is from section 4.10 of the Santa Margarita Ranch EIR.

Law Enforcement. Police services in the Santa Margarita Ranch area are provided by the San Luis Obispo County Sheriff's Department. The sheriff station that would be the first responder to the area is the North Station, located at 356 North Main Street, in the City of Templeton, approximately 17 miles north of the Santa Margarita Ranch. The station's area of responsibility consists of 1,400 square miles and provides service to the unincorporated communities of Shandon, San Miguel, Santa Margarita, California Valley, and Heritage Ranch. Calls for service, crime trends, and population figures are used to measure the adequacy of the Department's response in the area. The station is staffed with a commander, two sergeants, four senior deputies, approximately 18 patrol deputies, one rural crime deputy, and two legal clerks (Randy Johnson, Crime Prevention, Oral Communication, February 28, 2006). The Department is currently understaffed. Emergency response times for the Templeton North Station are dependent on where the patrol vehicles are in relation to a call, as well as the nature of the call. The estimated average response time to the Agricultural Residential Cluster Subdivision and Future Development Program is 20-30 minutes (Patrick Hedges, Sheriff-Coroner, Written Communications, February 21, 2006).

Fire Protection. Fire services in the Santa Margarita Ranch area are provided by the California Department of Forestry and Fire Protection (CDF)/San Luis Obispo County Fire Department. The fire station that would provide first response to the Agricultural Residential Cluster Subdivision and Future Development Program is the Parkhill Fire Station (Station #40) located at 6140 Parkhill Road, approximately 3.2 miles northeast of the Agricultural

Residential Cluster Subdivision site. Currently there is a 10 to 15 minute response time from this fire station to the Santa Margarita area (Robert Lewin, Fire Marshall, San Luis Obispo County Fire Department, Personal Communication, June 29, 2006). The Santa Margarita Volunteer Fire Department would provide mutual aid to the Ranch property from the station located at 22375 G Street, near the center of the community of Santa Margarita. However, the Agricultural Residential Cluster Subdivision and Future Development Program are outside of their jurisdiction. The Parkhill Fire Station is staffed with two professional firefighters and a volunteer force of up to 15 year round (Robert Lewin, Fire Marshall, San Luis Obispo County Fire Department, Written Communication, June 12, 2006).

During the fire season, two additional fire engines are staffed with three professional fire fighters and a firefighting bulldozer is staffed with a third additional professional fire fighter (Robert Lewin, Fire Marshall, San Luis Obispo County Fire Department, Written Communication, June 12, 2006).

Several recent historical fires have occurred in the vicinity, including the Las Pilitas Fire, which burned about 75,000 acres in 1985, the Highway 41 Fire, which burned about 49,000 acres in 1994, and the Highway 58 Fire, which burned about 107,000 acres in 1996.

According to the San Luis Obispo County Safety Element, the Santa Margarita Ranch property is in a zone of high to very high fire hazard. The majority of the property, including the entire Agricultural Residential Cluster Subdivision site, is located in a high fire hazard severity zone (SLO County Safety Element, 1999). The southwestern portion of the Ranch property, in the Santa Lucia Mountains, is designated a very high fire hazard severity zone. This designation is due primarily to the chaparral vegetation and steep slopes in this portion of the program site (SLO County Safety Element, 1999). Vegetation types throughout the remainder of the Ranch property, including oak and pine forest, oak savannah, open grasslands, chaparral and riparian areas, are also highly susceptible to generation of wildland fire. The topography of the Ranch varies, ranging from gently to moderately sloping areas to deeply incised drainage channels. The intermixing of native vegetation, steep slopes, and difficult access conditions have produced a Wildland Urban Interface (WUI) in the Santa Margarita area, resulting in an increased risk of wildfire-related hazards (SLO County Safety Element, 1999).

Schools. The Atascadero Unified School District (AUSD) provides elementary, junior high, and high school services to the Santa Margarita area. Santa Margarita Elementary School (grades K-6), located at 22070 H Street in the community of Santa Margarita, Atascadero Junior High School (grades 7-8), located at 6501 Lewis Avenue in Atascadero, and Atascadero High School (grades 9-12), located at One High School Hill in Atascadero, would accommodate students from the Agricultural Residential Cluster Subdivision and Future Development Program.

Table 4.10-1 in the EIR shows current enrollments and capacities within these schools. As shown in Table 4.10-1, Santa Margarita Elementary School, Atascadero Junior High School, and Atascadero High School maintain surplus enrollment capacity. Santa Margarita Elementary School has an enrollment of 291 students and Atascadero Junior High School has an enrollment of 705 students. Atascadero High School serves grades nine through twelve and has a current enrollment of 1,644 students.

Operating revenue provided to school districts is funded by local property tax revenue accrued at the state level and then allocated to each school district based on the average daily student attendance. However, physical improvements to accommodate new students come primarily from assessed fees on development projects since state funding for capital improvements typically lags behind enrollment growth.

Solid Waste. Through a franchise agreement with the County, a private Company (Mid-State Solid Waste and Recycling) is responsible for solid waste collection service in the Santa Margarita Ranch area. Solid waste is

collected and disposed of at the Chicago Grade Landfill, located approximately eight miles north of the community of Santa Margarita, on Homestead Road in Templeton. The landfill is a Class III facility owned and operated by Chicago Grade Landfill, Inc. The landfill accepts agricultural, asbestos, construction/demolition, contaminated soil, dead animals, food wastes, green materials, industrial, metals, mixed municipal, and tire waste. The landfill has a remaining capacity of 1,833,176 cubic yards (as of January 2004) and a permitted peak throughput of 500 tons per day with a permitted traffic volume of 240 vehicles per day Sunday through Friday and 280 vehicles on Saturday (Jeff Hackett, California Integrated Waste Management Board, Email Correspondence, May 9, 2006). On average, approximately 273 tons per day are accepted at the Chicago Grade Landfill (Jeff Hackett, California Integrated Waste Management Board, Email Correspondence, July 24, 2006).

This landfill is estimated to have sufficient capacity until 2018 (California Integrated Waste Management Board, SWIS Database, 2006). However, the proposed Chicago Grade Landfill Expansion Development Plan would increase the disposal footprint of the Chicago Grade Landfill from 44.3 acres to 82.74 acres and increase the permitted facility boundary from 45.4 acres to 189 acres (Jeff Hackett, California Integrated Waste Management Board, Email Correspondence, May 9, 2006). The proposed landfill expansion would extend the estimated lifespan of the facility to the year 2045. No change in the daily or annual intake of solid waste or vehicle limits is proposed as part of the landfill expansion.

Existing development within unincorporated San Luis Obispo County generated an estimated 225,918 tons of solid waste in 2000, of which an estimated 72,294 tons (32%) was generated by residential uses and 153,624 tons (68%) was generated by nonresidential uses (CIWMB, May 8, 2006). Residential waste in the County is primarily composed of organic materials (e.g., food, yard waste) and paper products. Solid waste data specific to the community of Santa Margarita is not available.

Libraries. The community of Santa Margarita is served by the Santa Margarita Library, a branch of the San Luis Obispo City-County Library. The library is located at 9630 Murphy Avenue in Santa Margarita and is open from 12:00 noon to 6:00 pm Tuesday through Thursday. The Santa Margarita Library has been serving the community since 1923 in various locations, and moved to its current location in 1996.

The Santa Margarita Library primarily serves residents within the community of Santa Margarita, although library staff indicate that residents from surrounding areas, including Atascadero and Templeton, also utilize the library (Debra Jurey, Branch Manager, Personal Communication, August 23, 2007). Approximately 1,325 people reside in the primary service area. The library structure is 900 square feet and houses approximately 10,300 items (Melody Mullis, San Luis Obispo City-County Library Administration, Personal Communication, August 23, 2007). Library staffing includes two part time employees equaling 0.875 full-time positions, five volunteers, and 14 members of the Friends of the Library organization (Debra Jurey, August 23, 2007).

The San Luis Obispo City-County Library uses a planning ratio of 0.7 square feet of library space per capita for communities with less than 10,000 residents (Melody Mullis, August 23, 2007). This ratio is used to evaluate the library's ability to accommodate the library service area's current and projected population. Using this ratio, the 900 square foot library is presently designed to accommodate a service area that would include approximately 1,286 persons. This indicates that the library is not large enough to accommodate the existing service area population of approximately 1,325, requiring an additional 28 square feet to accommodate the existing service area population. However, it should be noted that this standard does not address changing technologies that allow for a wide dispersal of information through other means, including the Internet. As personal computers become less expensive and more powerful, access to information will continue to improve.

4.10.2 Regulatory Setting

Utilities. The California Public Utilities Commission (CPUC) regulates privately owned electric, telecommunications, natural gas, water, railroad, rail transit and passenger transportation companies in California. The CPUS is responsible for assuring California utility customers have safe, reliable utility service at reasonable rates, protecting utility customers from fraud, and promoting the health of California's economy. In pursuing these goals, the CPUC establishes service standards and safety rules, and authorizes utility rate changes. It monitors the safety of utility and transportation operations, and oversees markets to inhibit anti-competitive activity. In its efforts to protect consumers, it prosecutes unlawful utility marketing and billing activities, governs business relationships between utilities and their affiliates, and resolves complaints by customers against utilities. It implements energy efficiency programs, low-income rates and telecommunications services for disabled customers. It enforces CEQA for utility construction. The CPUS works with other State and Federal agencies in promoting water quality, environmental protection and safety.

The County Division of Environmental Health is responsible under the provisions of Section 4.019.9 of the California Health and Safety Code for the regulation of water systems which fall under the State's criteria of Public Water Systems. At the community level, various Community Services Districts (CSDs) in the County assume responsibility for the operation of community water systems. Responsibilities for sewage are likewise assumed by the several Sanitary Districts (SDs) or CSDs within the County.

Waste Management Regulation. The Federal Resource Conservation and Recovery Act of 1991 (RCRA) and its associated regulations establish a strict and comprehensive regulatory program applicable to hazardous waste. The EPA has promulgated regulations under RCRA for new and existing treatment, storage and disposal facilities including incinerators, storage and treatment tanks, storage containers, storage and treatment surface impoundments, waste piles, and landfills.

The Integrated Waste Management Act of 1989 requires each city and county to divert 50% of its solid waste by 2000 and maintain the achieved reduction after 2000. As of 2003, San Luis Obispo County reached 52% of its waste diversion. A State agency, the Integrated Waste Management Board, monitors the disposal rates through quarterly reports from each jurisdiction.

California Code of Regulations (CCR) Title 23, Chapter 15 establishes requirements and specifications for waste handling. CCR Title 14, Division 7 provides the State's standards for the management of facilities that handle or dispose of solid waste. CCR Title 14, Division 7 is administered by the CIWMB and the designated Local Enforcement Agency (LEA).

CCR Title 14, Division 7, Chapter 9, Article 9 Section 18880-18813 were adopted to implement Public Resources Code Section 41821.5 which requires each solid waste handler, transfer station operator, disposal facility operator, and county to gather information on which jurisdiction the solid waste originated from, their amounts disposed, and amounts of waste exported. Currently, the SLO County Public Works Department, Solid Waste Division is the responsible agency for SLO County.

Schools. California's system of school facility finance is best described as a partnership between the State and local school districts. The State provides local school districts with financial support for new school construction and modernization projects through the School Facility Program (SFP), which was established in 1998 under the Leroy F. Green School Facilities Act of 1998. Under the SFP, new school construction projects are funded on a 50/50 state and local matching basis. Since 1998, voters have approved $35 billion in statewide bond issues to fund the SFP which is administered by the Office of Public School Construction (OPSC) on behalf of the Department of General Services and the State Allocation Board.

At the local level, Government Code section 65995 et seq. authorizes school districts to collect development impact fees to help offset the cost of new school facilities needed to serve new development. The fees are levied on a per-square-foot basis of new construction and must be supported by a Fee Justification Study that establishes the connection (or "nexus") between the development coming into the district and the assessment of fees to pay for the cost of the facilities needed to house future students. Three levels of impact fees may be levied:

- Level I is assessed if a Fee Justification Study documents the need for new school facilities and associated costs.
- The Level II fee is assessed if a district makes a timely application to the State Allocation Board for new construction funding, conducts a School Facility Needs Analysis pursuant to Government Code Section 65995.6, and satisfies at least two of the four requirements listed in Government Code Section 65995.5(b)(3) which relate to the characteristics of current enrollment and district efforts to fund school facility construction.
- The Level III fee is assessed when the State bond funds (described above) are exhausted; in this case the district may impose a developer's fee up to 100 percent of the School Facility Program new construction project cost.

There are 12 school districts serving San Luis Obispo County. Current enrollment and school capacity information was provided by the participating school districts on a voluntary basis. For the purposes of determining levels of severity, this RSR considers the *Maximum Practical Capacity* of school facilities defined as follows:

> **Maximum Practical Capacity --** The maximum number of students each school could theoretically accommodate by adding relocatable classrooms, but without increasing the capacity of core facilities.

Thus, *capacity* is not based on the ratio of students to teachers, which may be set by contractual arrangements among the various districts, nor does it consider the occupancy load (or design capacity) of the facilities.

Countywide, several school districts have been experiencing significant enrollment declines over the past several years, particularly in elementary schools. The decline may be attributed to high housing costs in some parts of the county which deter families with young children from locating there.

Enrollment at the Cayucos Elementary School has trended generally upward since the 2007-08 school year. If this trend continues, the practical capacity could be reached within seven years. With respect to the San Luis Coastal Unified School District, middle and high school enrollment has generally trended downward over the past 10 years and is expected to remain below capacity for the next seven or more years.

Parks. Parks are an important part of our communities. The Parks and Recreation Element (PRE) of the County General Plan, adopted in 2006, states:

> *"Recreation and exercise are fundamental to a healthy life. The benefits include greater productivity, less disease, and a brighter future. As the population grows, competition for recreational resources increases. Wide open spaces, once the haven of the equestrian, hiker and poet, are more often fenced and the right of exclusivity enforced. As the development and formality of our area increases, so must the provision of recreation spaces that are available to all people."*

Residents of San Luis Obispo County enjoy a diverse array of outdoor recreation opportunities provided by public agencies and non-profit organizations. Cayucos has Hardie Park, a four acre community park in the north end of town and the 1.5 acre Norma Rose Park on Ocean Boulevard.

4.10.3 Significance Criteria

Title 14 of California Code of Regulations §15387 contains checklist questions for determination of environmental impacts. The questions that relate to Public Services and Utilities were analyzed and a comprehensive set of criteria has been developed, against which the significance of the Project impacts can be judged. According to the criteria, the Project would be considered to have a significant impact on public services and utilities if it results in:

- *A need for new or altered police protection, fire protection and/or health care services;*
- *Student generation exceeding school capacity;*
- *Significant amounts of solid waste or breach any national, state, or local standards or thresholds relating to solid waste disposal and generation (including recycling facilities and existing landfill capacity);*
- *A need for new or altered potable water or sewer system/water treatment facilities (water pipelines or treatment plants, sewer lines, lift-stations, etc.);*
- *Substantial increase in demand, especially during peak periods, upon existing sources of energy or potable water;*
- *Requirement for the development or extension of new sources of energy or potable water.*

4.10.4 Impacts and Mitigation Measures

4.10.4.1 CSA10A and Bella Vista MHP

The Project's public services and utilities impacts would be the result of growth which may be induced by a more robust water supply.

Law Enforcement. If the Project did induce growth in the community, there may be incremental effects on law enforcement services. Decisions regarding local funding for law enforcement are made by the Board of Supervisors during the annual budget hearings. If there are additional law enforcement needs which arise from growth in Cayucos, the County Sheriff may make a case for additional funding to meet their needs.

Fire Protection. If the Project did induce growth in the community, there may be incremental effects on fire protection services. Decisions regarding local funding for fire protection are made by the Board of Supervisors during the annual budget hearings. If there are additional fire protection needs which arise from growth in Cayucos, the San Luis Obispo County Fire Department may make a case for additional funding to meet their needs.

Schools. If the Project did induce growth in the community, there may be incremental effects on school services. Local funding for schools is provided through development impact fees. If there is growth in the student population within Cayucos, the Cayucos Elementary District and the San Luis Coastal Unified School District may levy fees to offset their needs.

Solid Waste. If the Project did induce growth in the community, there may be incremental effects on solid waste services. Solid waste services are provided by a private waste management company. If there is growth in Cayucos, the waste company would collect fees from any new customers.

Libraries. If the Project did induce growth in the community, there may be incremental effects on the Cayucos Library. Decisions regarding local funding for libraries are made by the Board of Supervisors during the annual

budget hearings. If there are additional library needs which arise from growth in Cayucos, the County Librarian may make a case for additional funding to meet their needs.

4.10.4.2 Santa Margarita Ranch

The impacts on utilities and public services arising from the agricultural cluster subdivision were analyzed in section 4.10 of the Santa Margarita Ranch EIR.

Law Enforcement. If the Project did induce growth in the community, there may be incremental effects on law enforcement services. Decisions regarding local funding for law enforcement are made by the Board of Supervisors during the annual budget hearings. If there are additional law enforcement needs which arise from growth in Santa Margarita, the County Sheriff may make a case for additional funding to meet their needs.

Fire Protection. If the Project did induce growth in the community, there may be incremental effects on fire protection services. Decisions regarding local funding for fire protection are made by the Board of Supervisors during the annual budget hearings. If there are additional fire protection needs which arise from growth in Cayucos, the San Luis Obispo County Fire Department may make a case for additional funding to meet their needs.

Schools. If the Project did induce growth in the community, there may be incremental effects on school services. Local funding for schools is provided through development impact fees. If there is growth in the student population within Santa Margarita, the Atascadero Unified School District may levy fees to offset their needs.

Solid Waste. If the Project did induce growth in the community beyond the cluster subdivision, there may be incremental effects on solid waste services. Solid waste services are provided by a private waste management company. If there is growth in Santa Margarita, the waste company would collect fees from any new customers.

Libraries. If the Project did induce growth in the community beyond the cluster subdivision, there may be incremental effects on the Santa Margarita Library. Decisions regarding local funding for libraries are made by the Board of Supervisors during the annual budget hearings. If there are additional library needs which arise from growth in Santa Margarita, the County Librarian may make a case for additional funding to meet their needs.

4.10.5 Cumulative Impacts

4.10.5.1 CSA10A Bella Vista MHP

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to utilities and public services were also evaluated. The Project's utilities and public services impacts would be the result of construction activities, and not on-going operational activities. Because there would be no construction activities associated with the Project in Cayucos, cumulative utilities and public services impacts would not be considered significant.

4.10.5.2 Santa Margarita Ranch

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to utilities and public services were also evaluated. The Project's potential utilities and public services impacts are the result of construction activities, and not on-going operational activities. Because of the short duration and limited scope of the construction, cumulative utilities and public services impacts would not be considered significant.

4.11 Transportation/Circulation

4.11.1 Environmental Setting

4.11.1.1 CSA10A

Regional access to the area is via Highway 1. Local access is provided by Ocean Boulevard, Old Creek Road and Studio Drive.

4.11.1.2 Bella Vista MHP

The park fronts North Ocean Avenue, near the northwestern end of Cayucos. Ocean Avenue intersects Highway 1 approximately 0.6 mile west of the site.

4.11.1.3 Santa Margarita Ranch

The following is from section 4.12.1 of the Santa Margarita Ranch EIR.

Regional access to the Santa Margarita Ranch area is provided by US Highway 101 and State Route 58 (SR 58). Local access is provided by El Camino Real, Estrada Avenue, West Pozo Road, and Wilhelmina Avenue. The following text provides a brief discussion of the system components.

U.S. Highway 101 is a regional roadway that traverses through San Luis Obispo County, continuing north to San Francisco and south to Los Angeles. Within the study area, U.S. 101 is a four-lane freeway with an interchange with State Route 58. South of the immediate study area, U.S. 101 is a divided highway with at-grade intersections.

State Route 58 is an east-west, two-lane street/highway that connects U.S. 101 to I-5 and SR 99 in Kern County. Within the study area, SR 58 links the community of Santa Margarita to U.S. 101. The section of SR 58 east of Santa Margarita becomes winding and narrow through the Caliente Range mountains. The following roadways are designated as SR 58: El Camino Real (from U.S. 101 to Estrada Avenue), Estrada Avenue (from El Camino Real to West Pozo Road), West Pozo Road (from Estrada Avenue to Calf Canyon Highway), and Calf Canyon Highway (East of West Pozo Road).

El Camino Real is a north-south roadway connecting Santa Margarita with Atascadero. Within Santa Margarita, El Camino Real is oriented in an east-west direction and contains one lane in each direction between U.S. 101 and Estrada Avenue. East of Estrada Avenue, El Camino Real curves into a north-south orientation and contains one lane in each direction.

Estrada Avenue is a north-south, two-lane local street in Santa Margarita that extends from El Camino Real and turns into West Pozo Road to the south.

West Pozo Road is an east-west, two-lane local street connecting Santa Margarita and the town of Pozo. This roadway extends from Estrada Avenue in the west to Pozo in the east.

Wilhelmina Avenue is a north-south, two-lane local street in Santa Margarita extending from El Camino Real at its northern terminus to I Street to the south.

4.11.2 Regulatory Setting

Transportation system requirements are subject to the policies and plans of the County of San Luis Obispo and Caltrans. San Luis Obispo County outlines policies and standards in the Circulation Element of the San Luis Obispo County General Plan. The standards provide guidance in defining whether proposed projects are consistent with established roadway capacity levels and intersection LOS. Project consistency with roadway

standards is based on the number of daily trips contributed by the project and the potential for exceeding acceptable design capacities and the estimated future volumes for roadways in the project area.

Maximum load limits for trucks and safety requirements for oversized vehicles are generally regulated by Caltrans for operation on highways, and by the County for its roads.

4.11.3 Significance Criteria

In accordance with Appendix H of the State CEQA Guidelines, impacts would be significant if development under the Agricultural Residential Cluster Subdivision or the Future Development Program would result in any of the following:

- *Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections);*
- *Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways;*
- *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;*
- *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);*
- *Result in inadequate emergency access;*
- *Result in inadequate parking capacity; or*
- *Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).*

4.11.4 Impacts and Mitigation Measures

4.11.4.1 CSA10A

There would be no transportation and circulation impacts that could result from the Project because there would be no construction.

The Project could contribute to increased demands on transportation and circulation systems in the community assuming the additional water supply accommodates planned growth. Impacts resulting from potential growth caused by the project are discussed in Section 5, Growth Inducement.

4.11.4.2 Bella Vista MHP

There would be no transportation and circulation impacts that could result from the Project because there would be no construction.

The Project could contribute to increased demands on transportation and circulation systems in the community assuming the additional water supply accommodates planned growth. Impacts resulting from potential growth caused by the project are discussed in Section 5, Growth Inducement.

4.11.4.3 Santa Margarita Ranch

Transportation and circulation impacts would be limited to activities associated with construction of a turnout at a location along the NWP pipeline, the location of which has yet to be determined.

4.11.5 Cumulative Impacts

4.11.5.1 CSA10A and Bella Vista MHP

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to transportation and circulation were also evaluated. The Project's transportation and circulation impacts would be the result of construction activities, and not on-going operational activities. Because there would be no construction activities associated with the Project in Cayucos, cumulative transportation and circulation impacts would not be considered significant.

4.11.5.2 Santa Margarita Ranch

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to transportation and circulation were also evaluated. The Project's potential transportation and circulation impacts are the result of construction activities, and not on-going operational activities. Because of the short duration and limited scope of the construction, cumulative transportation and circulation impacts would not be considered significant.

4.12 Aesthetics/Visual Resources

4.12.1 Environmental Setting

4.12.1.1 CSA10A and Bella Vista MHP

Cayucos is situated on a narrow coastal terrace between the Pacific Ocean and steep coastal hillsides. The primary transportation corridor is Highway 1, which is designated by the California Coastal Act as the most important coastal scenic highway in California. Highway 1 provides many scenic views for people traveling through Cayucos and Morro Bay.

4.12.1.2 Santa Margarita Ranch

This section is from section 4.13.1 of the Santa Margarita Ranch EIR.

The visual character of the Santa Margarita Ranch area is primarily rural, with little development throughout the almost 14,000-acre property. The Ranch is flanked by the Santa Lucia Mountains to the west and the Salinas River to the east, with gently rolling grasslands, vineyards, row crops, grazing land, riparian corridors, and dense oak woodland characterizing the interior portions of the property. The absence of substantial urban development has allowed most areas of the Ranch to retain a rural character. In addition to its rural character, the Ranch's geographic location within an area dominated by mountain and hill terrain also contributes substantially to its visual qualities.

Extending to the south of the Ranch, the visual character of the surrounding area is dominated by agricultural uses, with open space south of the property in the Los Padres National Forest. Some low-density rural residential development and agricultural uses are located east and west of the Santa Margarita Ranch property. North of the Ranch densities increase as neighborhoods transition into residential-suburban homes, the community of Margarita Farms, and commercial retail uses in the City of Atascadero. The Ranch surrounds the urban and suburban uses in the community of Santa Margarita. A sand and gravel quarry is located just outside of the Ranch property, approximately two miles northeast of Santa Margarita. An oil tank storage facility is located along El Camino Real outside of the Ranch boundaries.

4.12.2 Regulatory Setting

San Luis Obispo County regulates the design of the built environment through its Land Use Element (LUE) and Land Use Ordinance (LUO). The LUE prescribes visual resource policies, and the LUO, in some cases, requires development review of projects.

The LUE Framework for Planning (Inland) contains policy statements that serve as a framework for evaluating proposed projects for their aesthetic merit in areas designated as Sensitive Resource Areas (SRAs). The SRA combining designation occurs along the southwestern edge of the Santa Margarita Ranch property. No development is planned in this location, however, due to the steep topography that occurs in the Los Padres National Forest, located south of the Ranch property.

The County General Plan Open Space Element contains policies for development in scenic corridor areas. The Open Space Element states that no officially designated scenic highways are located in the vicinity of Santa Margarita Ranch. However, Open Space Element Policy #24 specifies a number of County roads to be studied to determine if and where scenic corridors should be designated, including two in the project vicinity: Highway 58 from the Santa Margarita urban reserve line to the Kern County line and West Pozo Road between Hi Mountain Road and Highway 58.

The LUO contains provisions that regulate the design of future development, such as:

- For applications that propose development along significant visual corridors, as identified in the Open Space Element or the Land Use Element, a visual analysis shall be required to be prepared by a qualified individual approved by the Office of the Environmental Coordinator (Ordinance 22.02.035-038(h)).
- A grading permit may be issued only where the Building Official first finds, where applicable, that: The proposed grading will not create substantial adverse long-term visual effect visible from off-site. (Ordinance 22.05.030(d)(3)).

The Salinas River Area Plan contains Highway Corridor Design Standards intended to provide public views of:

- Scenic vistas and backdrops containing varied topography including ridgelines and rock features;
- Significant stands of trees and wildflowers; and
- Natural landmarks, historical buildings and pastoral settings.

In addition, County Ordinance 22.02 et seq. contains extensive site design provisions related to building heights, setbacks, landscaping, and other design elements.

4.12.3 Significance Criteria

In accordance with Appendix G of the State CEQA Guidelines, impacts would be significant if development would result in the any of the following:

- *Have a substantial adverse effect on a scenic vista;*
- *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;*
- *Substantially degrade the existing visual character or quality of the site and its surroundings; and/or*
- *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.*

4.12.4 Impacts and Mitigation Measures

4.12.4.1 CSA10A

Because the project would not involve any construction, there would be no impacts to visual/aesthetic resources.

The Project could contribute to changes in the visual landscape assuming the additional water supply accommodates planned growth. Impacts resulting from potential growth caused by the project are discussed in Section 5, Growth Inducement.

4.12.4.2 Bella Vista MHP

Because the project would not involve any construction, there would be no impacts to visual/aesthetic resources.

The Project could contribute to changes in the visual landscape assuming the additional water supply accommodates planned growth. Impacts resulting from potential growth caused by the project are discussed in Section 5, Growth Inducement.

4.12.4.3 Santa Margarita Ranch

Construction of a turnout may have some as yet to be determined impacts on the visual landscape; these impacts would be evaluated during the environmental review process for the turnout. Impacts resulting from development of Tract 2586 were analyzed in section 4.13 of the Santa Margarita Ranch EIR.

4.12.5 Cumulative Impacts

4.12.5.1 CSA10A and Bella Vista MHP

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to visual/aesthetic resources were also evaluated. The Project's visual/aesthetic resources impacts would be the result of construction activities, and not on-going operational activities. Because there would be no construction activities associated with the Project in Cayucos, cumulative visual/aesthetic resources impacts would not be considered significant.

4.12.5.2 Santa Margarita Ranch

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to visual/aesthetic resources were also evaluated. The Project's potential visual/aesthetic resources impacts are the result of construction activities, and not on-going operational activities. Because of the short duration and limited scope of the construction, cumulative visual/aesthetic resources impacts would not be considered significant.

4.13 Agricultural Resources

4.13.1 Environmental Setting

4.13.1.1 CSA10A

The area is urbanized, not used for agricultural production and not adjacent to an agricultural area.

4.13.1.2 Bella Vista MHP

The site is mostly developed, not used for agricultural production and not adjacent to an agricultural area.

4.13.1.3 Santa Margarita Ranch

This section is from section 4.1.1 of the Santa Margarita Ranch EIR.

The Santa Margarita Ranch has been historically utilized for grazing and crop production since the late 1700s. Crops such as wine grapes and olives were cultivated in the Ranch Headquarters area (north of the community of Santa Margarita) and herds of horses, cattle and sheep were grazed on the surrounding rangelands. The area has been in continuous agricultural production since the Spanish Period and has been used historically for commercial horse, cattle, and sheep grazing and for the cultivation of commercial dryland hay, dryland grain, Sudan grass, seed, wine grapes, and pasture crops. As noted in the Cultural Landscape Report prepared for the property (refer to EIR Appendix E), many ranching traditions, lifeways, crafts, and social institutions have been carried out continuously on the ranch for well more than a century. Existing agriculture infrastructure includes ranch wells and storage reservoirs. An existing vineyard (the Cuesta Ridge Vineyard) is located in the southern portion of the Ranch, including portions of the Agricultural Residential Cluster Subdivision Agricultural Conservation Easement (ACE) area and occupies approximately 1,100 acres, 974 acres of which are currently planted in vineyards. The remainder of the 14,000 acre Ranch, including the 676.7-acre grazing unit proposed for Agricultural Residential Cluster Subdivision development, is currently used for cattle grazing. The Santa Margarita Ranch is one of the premier cattle ranches in the area.

4.13.2 Regulatory Setting

The conversion of prime agricultural land to non-agricultural use or impairment of the productivity of prime agricultural land is a significant unavoidable impact. The conversion of Capability Class I and II prime soils to urban uses constitutes such an impact. As a reasonable worst case scenario, the EIR considers soils prime if they meet either State or federal definitions of prime agricultural land or prime farmland, respectively. The State defines prime agricultural land as follows (Government Code § 51201):

> (c) "Prime agricultural land" means any of the following:
>
> > (1) All land that qualifies for rating as Class I or Class II in the Natural Resource Conservation Service land use capability classification [now referred to in the Arabic numerals 1 and 2].
> >
> > (2) Land which qualifies for rating 80 through 100 in the Storie Index Rating [Under the California Revised Storie Index, this translates to Grade 1 (excellent) index rating].
> >
> > (3) Land which supports livestock used for the production of food and fiber and which has an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United State Department of Agriculture.

As defined in the Code of Federal Regulations (CFR) Title 7 (Agriculture) § 657.5(a) (1), prime farmland is defined as follows:

> Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is also available for these uses.

Soils are designated as prime farmland by the U.S. Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), in accordance with 7 CFR § 657.5. As a matter of federal law and County policy [refer to San Luis Obispo County's Agriculture and Open Space Element Appendix C (Agricultural Mapping Criteria)], NRCS farmland classifications of "prime farmland if irrigated" are also considered prime.

Based on the State and federal definitions of prime agricultural land and prime farmland outlined above, for the purposes of this EIR, prime soils are defined as those with a Land Capability Class of 1 or 2, a California Revised Storie Index of Grade One (Excellent), or an NRCS farmland classification of "prime farmland if irrigated."

For the purposes of this analysis, "Farmland" includes land which is currently under agricultural production (including grazing).

4.13.3 Significance Criteria

In accordance with Appendix H of the State CEQA Guidelines impacts would be significant if development under the Agricultural Residential Cluster Subdivision or the Future Development Program would result in any of the following:

- *Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance, (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use;*
- *Conflict with existing zoning for agricultural use, or a Williamson Act contract; and/or*
- *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.*

4.13.4 Impacts and Mitigation Measures

4.13.4.1 CSA10A

As there will be no construction or impacts to agricultural land or interference with nearby agricultural production, the Project will have no impacts in this area. No mitigation measures are needed.

4.13.4.2 Bella Vista MHP

As there will be no construction or impacts to agricultural land or interference with nearby agricultural production, the Project will have no impacts in this area. No mitigation measures are needed.

4.13.4.3 Santa Margarita Ranch

Depending on the location chosen for the turnout and any pipeline construction, there may be impacts to agriculture, however these impacts will be analyzed as part of future environmental review of that project. The impacts of the cluster subdivision on agriculture were evaluated and mitigation measures presented in section 4.1 of the Santa Margarita Ranch EIR.

4.13.5 Cumulative Impacts

4.13.5.1 CSA10A and Bella Vista MHP

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to agricultural resources were also evaluated. The Project's agricultural resources impacts would be the result of construction activities, and not on-going operational activities. Because there would be no construction activities associated with the Project in Cayucos, cumulative agricultural resources impacts would not be considered significant.

4.13.5.2 Santa Margarita Ranch

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to agricultural resources were also evaluated. The Project's potential agricultural resources impacts are the result of construction activities, and not on-going operational activities. Because of the short duration and limited scope of the construction, cumulative agricultural resources impacts would not be considered significant.

4.14 Recreational Resources

4.14.1 Environmental Setting

Parks and recreational resources are important to identify and evaluate because they provide an important measure of the physical quality of life in a community. Such resources enhance the community's aesthetic qualities, the health of the community's environment, and residents' perceptions and enjoyment of the region. Parks provide opportunities for active and passive recreation, while Natural Areas provide places for nature appreciation and resource protection.

4.14.1.1 CSA10A

This area of Cayucos is divided into approximately 890 parcels, near completely built-out, with roads and other urban infrastructure. Recreational activities include walking and bicycling on the streets. Access to the beach is provided via a number of coastal access pathways originating from the west side of Studio Drive.

4.14.1.2 Bella Vista MHP

Recreational activities include walking and bicycling on the streets. The County's Hardie Park is across Cayucos Creek from the mobile home park. Access to the beach is possible by crossing the North Ocean Avenue bridge and crossing the Cayucos Veteran's Hall parking lot.

4.14.1.3 Santa Margarita Ranch

This section is from section 4.11.1 of the Santa Margarita Ranch EIR.

One park currently exists in the community of Santa Margarita. Santa Margarita Community Park, a 2-acre facility, is located at the northwest corner of Estrada Road and H Street. The park includes group and individual picnicking, play equipment, restrooms, parking, and open play areas.

Other recreation opportunities located in town include Santa Margarita Elementary School, which provides sports fields and children's play equipment, equestrian facilities located at the southern end of the Ranch, and tennis facilities located at the community library site. These facilities are not official County recreational uses; however, they provide recreational opportunities to area residents.

Santa Margarita residents additionally have access to the Santa Margarita Lake Regional Park, a County park facility. Santa Margarita Lake Regional Park is located approximately 8 miles southeast of Santa Margarita and provides boating, camping, play equipment, picnicking, fishing, and trails.

Bike Routes. Bicycle facilities include bike paths, bike lanes, and bike routes. Bike paths (Class I facilities) are paved pathways for use by bicycles that are separated from roadways. Bike lanes (Class II facilities) are lanes on roadways designated for use by bicycles with special lane markings, pavement legends, and signage. Bike routes (Class III facilities) are designated with signs only. Bike lanes are provided on El Camino Real north of Estrada Avenue. Bicycle routes are designated on Wilhelmina Avenue, I Street, West Pozo Road east of Calf Canyon Highway, and U.S. 101 south of SR 58 (refer to EIR Figure 4.12-2 in Section 4.12, *Transportation and Circulation*).

Trails. Several hiking, cycling, and equestrian trails are located in the Santa Margarita vicinity. The East Cuesta Ridge trail is 15-miles long, beginning north of San Luis Obispo and ending near Atascadero (San Luis Obispo Parks Open Space & Trails Foundation). The trail is open to hikers and cyclists. Several trails are also located in the La Panza Range, east of Santa Margarita, and in the Santa Lucia Wilderness, southwest of Santa Margarita.

4.14.2 Regulatory Setting

The Quimby Act gives the legislative body of a city or county the authority, by ordinance, to require the dedication of land or payment of in-lieu fees, or a combination of both, for park and recreational purposes as a condition of approval of a tract map or parcel map. The existing Quimby Act parks to population ratio requirement in the County is 3 acres of parkland per 1,000 residents. The current population in the County of San Luis Obispo is 279,083 (2014 estimate -- http://quickfacts.census.gov/qfd/states/06/06079.html). However, at General Plan buildout, the County population is expected to reach 420,766 (State of California Governor's Office of Planning and Research, "City and County Information," 2000). Therefore, at buildout the County should have approximately 1,262 acres of parkland. The County currently has approximately roughly 1,112 acres of neighborhood and community parkland (Jan Di Leo, Written Communication, November 2004). In addition, the County has roughly 12,000 acres of Natural Areas. The County will is currently not meeting it's the 3 acres of neighborhood and community parkland per 1,000 population standard as set out by the adopted Parks and Recreation Element.

4.14.2.3 Santa Margarita Ranch

This section is from section 4.11.1 of the Santa Margarita Ranch EIR.

The population of Santa Margarita is approximately 1,325 residents. The community currently has 2 acres of parkland, or approximately 1.5 acres of neighborhood and community parkland per 1,000 residents. This is below the County's standard of 3 acres of neighborhood and community parkland per 1,000 residents. At General Plan build-out, which includes 550 additional single-family residences, the population of Santa Margarita will reach approximately 2,551. Based on the standard of three acres per 1,000 residents, Santa Margarita should have approximately 7.7 acres of neighborhood and community parkland at buildout. The community of Santa Margarita therefore would not meet the County's parkland standard at full buildout of the General Plan.

4.14.3 Significance Criteria

In accordance with Appendix G of the State CEQA Guidelines, impacts would be significant if development under the Agricultural Residential Cluster Subdivision or the Future Development Program would result in the any of the following:

- *The project would increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or*
- *The project includes recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.*

The County has a standard requirement of three acres of neighborhood and community parkland per 1,000 residents. Impacts are significant if a development project causes the County to contain less than three acres of neighborhood and community parkland per 1,000 residents, or otherwise result in inconsistencies with the Quimby Act and the adopted Parks and Recreation Element. In addition, impacts are significant if the Project would increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated, or if the Project would include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

4.14.4 Impacts and Mitigation Measures

4.14.4.1 CSA10A

Because there would be no construction needed for the Project, no direct impacts on recreational resources would result.

The Project could contribute to an impact on recreation assuming the additional water supply accommodates planned growth. Impacts resulting from potential growth caused by the Project are discussed in Section 5, Growth Inducement.

4.14.4.2 Bella Vista MHP

Because there would be no construction needed for the Project, no direct impacts on recreational resources would result.

The Project could contribute to an impact on recreation assuming the additional water supply accommodates planned growth. Impacts resulting from potential growth caused by the Project are discussed in Section 5, Growth Inducement.

4.14.4.3 Santa Margarita Ranch

Because there would be only a minor amount of construction needed for the Project, most likely to occur on private property, no direct impacts on recreational resources would result.

The Project could contribute to an impact on recreation assuming the additional water supply accommodates planned growth. Impacts resulting from potential growth caused by the Project are discussed in Section 5, Growth Inducement.

4.14.5 Cumulative Impacts

4.14.5.1 CSA10A and Bella Vista MHP

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to recreational resources were also evaluated. The Project's recreational resources impacts would be the result of construction activities, and not on-going operational activities. Because there would be no construction activities associated with the Project in Cayucos, cumulative recreational resources impacts would not be considered significant.

4.14.5.2 Santa Margarita Ranch

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to recreational resources were also evaluated. The Project's potential recreational resources impacts are the result of construction activities, and not on-going operational activities. Because of the short duration and limited scope of the construction, cumulative recreational resources impacts would not be considered significant.

4.15 Socioeconomic Resources

4.15.1 Environmental Setting

4.14.1.1 CSA10A and Bella Vista MHP

The CSA10A area is comprised mostly of single family residences. Due to its location in a desirable coastal area, the property values tend to be higher than the County average. On the other hand, Bella Vista MHP provides relatively low cost housing in the community, albeit to a limited number of persons.

4.15.1.2 Santa Margarita Ranch

The Santa Margarita Ranch has been historically utilized for grazing and crop production since the late 1700's. Vineyards comprise a significant portion of the agricultural landscape within the southern portion of the Ranch property, while dry farmed grains are found in the northern portion of the Ranch property. Cattle graze over all of the site with the exception of dry-farmed and vineyard areas.

According to section 5 of the Santa Margarita Ranch EIR, the approved agricultural cluster subdivision would be expected to generate approximately 302 residents. These residents would increase activity in nearby retail establishments and may generate demand for such services as landscaping, gardening, home cleaning and maintenance. In addition, the 112 residential units and associated 302 people in the Santa Margarita area would constitute an approximate 22.8% increase in the existing population of the Santa Margarita community.

4.15.2 Regulatory Setting

The purpose of socioeconomic analysis in the context of environmental review is to address the physical effects related to socioeconomic impacts resulting from a project. Emphasis is placed on the potential for a project to cause an effect on population, housing, and economic characteristics of an area. Subsequent to potential impacts on the local economy, CEQA requires an analysis of the physical changes to the environment that result from potential changes in local socioeconomic conditions, which is typically interpreted to an area becoming blighted (i.e. the physical change in the environment).

However, CEQA indicates that social and economic issues "shall not be treated as significant effects on the environment." CEQA also goes on to state that "An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes." What this means is that, if implementing the project would cause businesses to close and people to abandon their homes, which *in turn* would result in a physical change to the environment, such as an area becoming blighted, then socioeconomic information may be included in the EIR.

4.15.3 Impacts and Mitigation Measures

4.15.3.1 CSA10A and Bella Vista MHP

There is no evidence that the Project would have negative social or economic impacts on Cayucos. On the other hand, the Project has the potential to result in beneficial economic impacts by increasing the amount and reliability of the community's water supply. No mitigation measures are necessary.

4.15.3.2 Santa Margarita Ranch

There is no evidence that the Project would have negative social or economic impacts on the Santa Margarita area. On the other hand, the Project has the potential to result in beneficial economic impacts by increasing the amount and reliability of the area's water supply. No mitigation measures are necessary.

4.15.4 Cumulative Impacts

4.15.4.1 CSA10A and Bella Vista MHP

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to socioeconomic resources were also evaluated. The Project's potential socioeconomic resources impacts would be beneficial and as a result of improving the water supply situation. Therefore cumulative socioeconomic resources impacts would not be considered significant.

4.15.4.2 Santa Margarita Ranch

Cumulative effects of the proposed project together with those of the cumulative projects listed in Table 2 relating to socioeconomic resources were also evaluated. The Project's potential socioeconomic resources impacts would be beneficial and as a result from improving the water supply situation. Therefore cumulative socioeconomic resources impacts would not be considered significant.

4.16 Environmental Justice

4.16.1 Regulatory Setting

On February 11, 1994, President Clinton issued an Executive Order directing each Federal agency to identify and address disproportionately high and adverse human health or environmental effects on minority and low income populations. This Executive Order was followed by a memo to the heads of all Federal departments describing the intentions of the Executive Order and some general guidelines for the order.

4.16.2 Significance Criteria

In order to determine if impacts exist due to the proposed Project, a set of significance criteria has been developed. The significance criteria are based on direction given by the Executive Order and associated directives:

- Minority population impacts based on race;
- Social impacts based on income, employment, housing, etc.;
- Safety impacts; and
- Public access impacts related to information access and public participation.

Impacts on the basis of race can be determined by examining the demographics of the community of the proposed project.

Impacts on the basis of social condition are also assessed using Census Bureau data. These issues include income of persons, levels of employment, housing issues, and population densities. Safety impacts include impacts to groups who are already subject to a potentially disproportionate level of risk due to the location of toxic materials in the community.

The thresholds of significance for impacts due to race and social condition can be estimated by comparing the demographics of the project with the demographics of the region.

Significance criteria developed for the NWP are listed below:

- Significant impacts exist if demographics of the project area demonstrate a difference in minority population of greater than 20 percentage points between the project location and the region.
- Significant impacts exist if demographics of the project area indicate that there is a difference in social conditions of greater than 20 percentage points between the project area and the region.
- Significant impacts exist if the project presents a relatively high safety concern as measured by the project being in a location where a significant population density exists, and there is a relatively high number of hazards associated with the use and discharge of toxic materials.
- Significant impacts exist if the project applicant has not made a sincere attempt to provide an opportunity for public participation and access to information. The applicant should also provide this information in the languages of the project area if the percent that speak that language as their only language is in excess of five percent of the population.

4.16.3 Impacts and Mitigation Measures

Based on the comparison analysis conducted for the Nacimiento Water Project (Section 5.16 of the NWP EIR), there was no indication of significant environmental justice impacts resulting from the project. Because the demographics of the County have changed very little since 2003 when the NWP EIR was prepared, the analysis in the NWP EIR remains valid.

5.0 Growth Inducing Impacts

The California Environmental Quality Act (CEQA) Guidelines Section 15126 (d) and Section 15126.2(d) state that an EIR must discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment, using a reasonable worst case analysis. It specifically states that projects which would remove obstacles to population growth (such as bringing supplemental water supplies to an area), may "further tax" other existing community service facilities, and this impact must be addressed. The secondary impacts of growth inducement include reducing the service capacities of roads, sewer, schools and other necessary public services which are needed to accommodate additional development. Removing what was previously a constraint to development, by supplying supplemental water, could also affect the expected rate of growth in a community, unless adopted growth management policies exist to regulate the amount of development.

The analysis in both the State Water FEIR and 2003 NWP EIR made the following assumptions:

1. The project, by supplying supplemental water, would remove an obstacle to growth, and lead to increased growth.
2. Growth in any area cannot be assumed to be beneficial, detrimental, or of little significance to the environment [CEQA Guidelines Sec. 15126.2(d)].
3. Growth inducement is an indirect project impact, which has secondary effects that could be significant.
4. It is recognized that roads, schools, air quality, water, sewer systems, and other resources in San Luis Obispo County have become overtaxed. These resources could be impacted by growth resulting from the proposed project and would be considered secondary impacts.

The CEQA Guidelines indicate that it is reasonable to conclude that if, as a result of a project, water is removed as a constraint to growth in a community, the project can be considered growth-inducing. Also, recognizing that communities sometimes tend to grow even when resources are highly constrained and that growth is a function of each jurisdiction's General Plan, it is also assumed that if a project results in a community having a surplus of water at build-out, that surplus water could be growth-inducing with secondary significant impacts, as surplus water generally allows for accelerated growth under a community's General Plan. The rate and perhaps the significance of such growth will depend on the existing situation in the community and local decisions regarding the use of water.

The 2003 NWP EIR evaluated the effects of providing supplemental water to the existing participants as well as to BVMHP and Santa Margarita Ranch. The analysis concluded that providing ongoing annual supplemental water supplies could induce additional growth, depending on how those supplies are used. That is, the degree to which the additional water is used to off-set groundwater pumping, either to reduce overdraft or improve water quality, will determine how much additional growth is generated. The potential growth-inducing effects of the Project could occur in two ways:

1. By relieving stress on the water supply during critical droughts, the project may result in additional growth “consuming” the drought buffer, placing additional residents in the path of a water supply

emergency. The degree to which this effect may occur is dependent on how vigilant the communities remain with respect to their water supplies, given the inevitable tendency to accommodate growth within the limits of the general plan. Put another way, by removing the current concern about drought period water supplies, the community may become complacent about the overall water situation.

2. The second potential path to additional growth is the existence of the new infrastructure. If a pipeline is sized to deliver a given amount of water over a less than 12-month period, it would be theoretically capable of delivering more water on an annual basis. Under this growth scenario, the existence of the pipeline becomes the foundation of efforts to amend or expand water supply contracts, alter the general plan, and remove or ignore other obstacles to growth. While seemingly remote, this scenario gains validity when it is assumed that these various actions take place over time and in an incremental manner. Also important is the understanding that as water supplies in the County become further constrained, growth will tend to occur first in those areas with immediate access to water, and second in those areas with both adequate infrastructure and the potential for accessing additional sources. At the same time, there are substantial obstacles to this scenario:

   a) Although there is currently an unallocated reserve of Nacimiento water, the participants are currently seeking to fully allocate Nacimiento water. There is no guarantee that water for growth beyond general plan limits will be available for Santa Margarita or Cayucos.

   b) Santa Margarita is surrounded by agricultural lands. Given the strong agricultural protection policies contained in the San Luis Obispo County General Plan it is unlikely that urban growth beyond the current community boundaries would occur.

   c) Cayucos is 80 - 90% built out with established Urban Reserve and Urban Services Lines in the adopted General Plan/Local Coastal Plan. Natural community boundaries in the form of topographical and geologic barriers coincide with the Urban Reserve and Urban Service Lines. The additional water (total of 25 acre feet) combined with existing policies and physical community limits result in minimal potential for substantial unplanned growth.

   d) On December 8, 2015, among other related actions, the Board of Supervisors voted to direct Public Works Department staff to initiate the process to acquire an additional allocation of Nacimiento Project Water on behalf of CSA10A and to develop policies designed to match available water with existing General Plan/Local Coastal Plan policies. These policies will ensure that any growth which occurs as a result of the additional water allocation is within the bounds of the approved General Plan. As an example, the ongoing drought may result in a desire to build a "drought reserve," and/or the opportunity to sell all or a part of CSA10A's Nacimiento allocation on a temporary or permanent basis. In October of 2004, the Board adopted Supplemental Water Policies for CSA10A (attached). The increase in CSA10A's Nacimiento Allocation is consistent with these policies.

   e) BVMHP may be interested in expanding the number of spaces. Given the Park's current water situation, the provision of a Nacimiento water allocation would strengthen their Coastal Development Permit application.

Nevertheless, if additional growth were to occur as a result of the project, the effects are as follows. The 1992 analysis concluded that there was a potential for significant impacts to schools as a result of additional growth, particularly to Santa Margarita Elementary school, which was at that time over capacity. The 2003 NWP EIR approached the issue of growth inducement by updating the 1992 State Water EIR, using the same methodology and approach. By 2003, the Nacimiento EIR concluded that significant secondary effects could occur in the areas of traffic and air quality as well as to schools. The following sections summarize and update the growth inducing

sections of both EIR's, with respect to the communities of Santa Margarita and Cayucos. Section 7 of the NWP FEIR (Growth Inducement) is hereby incorporated by reference in this section.

5.1 CSA10A

Although water supplies including supplemental water from the NWP are not in excess of forecasted demand, population growth would result in secondary or indirect impacts on school facilities in Cayucos. Therefore, potential impacts associated with increased water supplies were considered significant when the 2003 NWP EIR was certified.

CSA10A joined the Nacimiento Water Project in 2006. At that time an analysis of long term water needs for CSA10A indicated that the addition of 25 acre feet of Nacimiento water to the existing Whale Rock allocation of 190 acre feet would serve the buildout needs of the water service area. Therefore, staff has recommended the development of policies to guide the future use of CSA10A's Nacimiento water. The increase in CSA10A's Nacimiento allocation is consistent with the following Supplemental Water Policies for CSA10A that were adopted by the Board of Supervisors in October 2004:

1. The capital costs, including debt service, incurred by CSA10A as a result of participating in the Nacimiento Water Project shall be included in the connection fees charged to new development, in accordance with applicable law.

2. Reserves that have been established for Nacimiento as a result of prior connection fees will be utilized for "rate stabilization" purposes. The Nacimiento reserves and connection fee revenues shall be separately accounted for so that the capital and debt costs for Nacimiento are paid from existing Nacimiento reserves and new connection fees before utilizing any other CSA10A source of funding.

3. Staff is directed to carry-out efforts to develop water entitlement contracts so that CSA10A can participate in the Nacimiento Water Project.

4. Staff is directed to carry-out efforts to secure an exchange of Whale Rock water for Nacimiento.

5. Staff is directed to coordinate community wide requests for Nacimiento water and Whale Rock exchanges with other water purveying entities in Cayucos, provided that those entities are included in the Nacimiento Project Environmental Impact Report, certified on January 6, 2004, and provided that those entities pay 100% of the costs associated with their requests.

6. Public Works staff is directed to work with the staff of the Department of Planning and Building to return to the Board with updated water will serve policies for CSA10A.

5.2 Bella Vista MHP

BVMHP has been exploring the possibility of increasing the number of spaces within the Park. Doing so requires approval of a Coastal Development Permit. Due to the Park's current marginal water supply situation, a Nacimiento water allocation would address an important consideration in deciding on an expansion request. Therefore, the Project would be considered potentially growth inducing. However, the secondary effects of an increase in the number of BVMHP residents would not be considered significant because any growth would necessarily be consistent with the adopted General Plan/Local Coastal Plan on land already designated for the proposed use(s).

5.3 Santa Margarita Ranch

The allocation of Nacimiento water to SMRMWC would facilitate meeting Tract 2586 condition #1.f., which is intended to offset groundwater usage with Nacimiento water. The question of growth that would occur if Tract 2586 is built was decided in 2008 when the subdivision was approved.

With respect to the community of Santa Margarita, the following conclusions can be drawn from, and with respect to, the information contained in the 1992 State Water and 2003 NWP EIR's:

1. Water is not currently a constraint to growth in Santa Margarita. The 1992 EIR found that water was not constraining growth in Santa Margarita, while the 2003 NWP EIR found that water was a constraint. The 2003 conclusion is apparently based on the County's Resource Management System (RMS), which assigned a "supply uncertainty" level of concern to the water supply for Santa Margarita. However, no action to restrict the rate of growth in the community by limiting water hook-ups or building permits has been initiated, and none is currently contemplated. CSA-23 has, however, instituted a water supply warning system in an effort to encourage increased conservation by current users, in appreciation of several consecutive years of below-normal rainfall.

2. The community of Santa Margarita is between 85% and 90% built-out, and there are no plans or proposals to expand the urban boundary. Therefore, any growth that does occur in Santa Margarita will likely occur within the current general plan boundaries, meaning that un-planned growth is not anticipated.

3. The 2003 NWP EIR concluded that significant secondary impacts to traffic could occur from additional growth. The 2003 NWP EIR lacks specifics as to where and how these impacts could occur. Analysis of the roadways in and through the community indicate that no roadways or intersections currently operate at unacceptable levels of service, and that no unacceptable levels of service would occur at build-out. The lone exception in the community is the wait times at the three at-grade railroad crossings within the community which are dependent on railroad traffic, not vehicular traffic. From a more regional perspective, it can be concluded that traffic on Highway 101 will, in the future, suffer from reduced levels of service, and that an increment of the impact will be generated by traffic originating in Santa Margarita.

4. The 2003 NWP EIR concluded that significant secondary impacts to air quality would also be significant. Similar to the traffic situation, the 2003 NWP EIR lacks specifics as to where and how these impacts could occur. The growth expected in Santa Margarita is both small in comparison to that in the region as a whole, and is consistent with the area's Clean Air Plan, which seeks to focus growth within existing urban reserve lines. However, from a more regional perspective, it can be concluded that air quality in the Salinas Valley may, in the future, deteriorate and that an increment of the impact will be generated by additional growth in Santa Margarita.

5. The 2003 NWP EIR concluded that significant secondary impacts to schools would be significant. The focus is on Santa Margarita Elementary School, which at the time was over-capacity. However, for the 2008-2009 school year, the school had 329 students with a capacity of 358. However, any additional students generated by growth in the community could exceed the school's capacity. On the other hand, if water is not currently a constraining factor to growth in the community, it could be concluded that growth in the student population will occur with or without the project.

6. Surplus of water. The 2003 NWP EIR concludes that the provision of 200 acre feet of water to Santa Margarita Ranch would be growth inducing because it would cause the expansion of public water services into areas not previously served. In anticipation of supplemental water availability, there is the potential for an increased rate of urban development. Once the availability of additional water is assured, developers may be more inclined to invest or speculate on future development scenarios. This

project however, would not provide excess water to enable substantial growth as the volume of water proposed is 80 acre feet, not 200.

Because the project provides a limited water supply to be used only to offset groundwater usage by the approved cluster subdivision, and given the existing physical, regulatory, and policy limits on expanding the water supply, the project will not foster a substantial amount of population growth, and certainly not an amount that would allow the community to exceed general plan buildout. The increment of population growth that could occur as a result of the increased security of the water supply situation in Santa Margarita cannot be considered to be considerable in relation to the existing population or the ability of roadways, air quality, and schools to accommodate that level of growth. From a regional and cumulative growth perspective, traffic on Highway 101 will, in the future, suffer from reduced levels of service, with an increment of the impact generated by traffic originating in Santa Margarita. Similar to regional growth-induced traffic impacts, air quality in the Salinas Valley may, in the future, deteriorate and an increment of the impact will be generated by additional growth in Santa Margarita. With respect to schools, Santa Margarita Elementary School is approaching capacity. Nevertheless, growth generated by securing the water supply in times of drought does not constitute a substantial increase, and is therefore not significant.

6.0 Decision Not to Prepare Subsequent EIR

In accordance with Section 16164 of the CEQA Guidelines (Addendum to an EIR or Negative Declaration), a lead agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 16162 calling for preparation of a subsequent EIR have occurred. The conditions described in Section 16162 include the following:

1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:

(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

It is important to note that the project would not undergo any changes from the original approval; therefore, no new analysis is required to disclose potential impacts of any project changes. Accordingly, pursuant to CEQA Guidelines Section 16164, an EIR Addendum is the appropriate level of supplemental CEQA review for the project.

Based on these findings, substantial evidence has been provided to support the decision not to prepare a subsequent EIR pursuant to Section 16162 and, as such, this Addendum is the appropriate environmental documentation under CEQA. This Addendum has been prepared in accordance with relevant provisions of the CEQA of 1970 (as amended) and the State CEQA Guidelines.

7.0 Conclusion

The Project would not result in any new significant impacts on the environment or an increase in any previously identified impact. Further, the certified FEIR originally issued in 2003 is still adequate because the changes to the Project are minor and would not result in any new significant impacts. The California Environmental Quality Act (CEQA) defines a "significant effect on the environment" as a "substantial, or potentially substantial, adverse change in the environment." The Project, as proposed, would not result in any impacts to previously undisclosed resources. The Project will not increase the quantities of Nacimiento water for each participant beyond the amount covered in the 2003 NWP EIR.

8.0 References

County of San Luis Obispo. 2003. *Final Environmental Impact Report for the Nacimiento Water Project*. Prepared for County of San Luis Obispo Department of Planning and Building. Prepared by Marine Research Specialists, Ventura, California in Association with The Morro Group, San Luis Obispo, California.

County of San Luis Obispo. 2008. *Final Environmental Impact Report for Santa Margarita Ranch Agricultural Residential Cluster Subdivision Project and Future Development Program*. Prepared for County of San Luis Obispo Department of Planning and Building. Prepared by Rincon Consultants, Inc., San Luis Obispo, California.

County of San Luis Obispo. 2011. *Final Supplemental Environmental Impact Report for the Santa Margarita Drought Reliability Project*. Prepared by County of San Luis Obispo Department of Public Works.

Prepared by:

Kate Ballantyne 12/23/15

Kate Ballantyne Date
Environmental Programs Manager, Department of Public Works

Approved by:

Ellen McWhirter for 12/23/15

Ellen Carroll Date
Environmental Coordinator, Department of Planning and Building

ATTACHMENT 1

Nacimiento Water Project EIR Agencies

2004 Nacimiento Environmental Impact Report Participants List

Nacimiento Water Project Agencies Evaluated in the 2004 Environmental Impact Report Water Volumes in Acre Feet per Year		
Water Purveyor	**EIR Allocation**	**Currently Contracted Allocation**
San Miguel CSD	610	0
Paso Robles City	4,000	4,000
Templeton CSD	250	250
Atascadero MWC	3,000	2,000
Santa Margarita Ranch	200	0
CSA 23–Santa Margarita	100	0
San Luis Obispo City	3,380	3,380
Camp San Luis Obispo	200	0
San Luis CUSD–Morro Bay	55	0
CSA 10A Cayucos	80	25
Lewis Pollard Trust–Cayucos	50	0
Morro Rock MWC–Cayucos	30	0
CSA 22–Airport Area	890	0
Fiero Lane WC–Airport Area	30	0
Edna Valley MWC–Airport Area	700	0
Subtotal	13,575	9,655
SLO County (Contingency)	2,625	0
Pipeline Total	***15,750***	
Reserved for Lakeside use	***1,750***	
Total Allocation	**17,500**	**9,655**

ATTACHMENT 2

Nacimiento Water Project Map

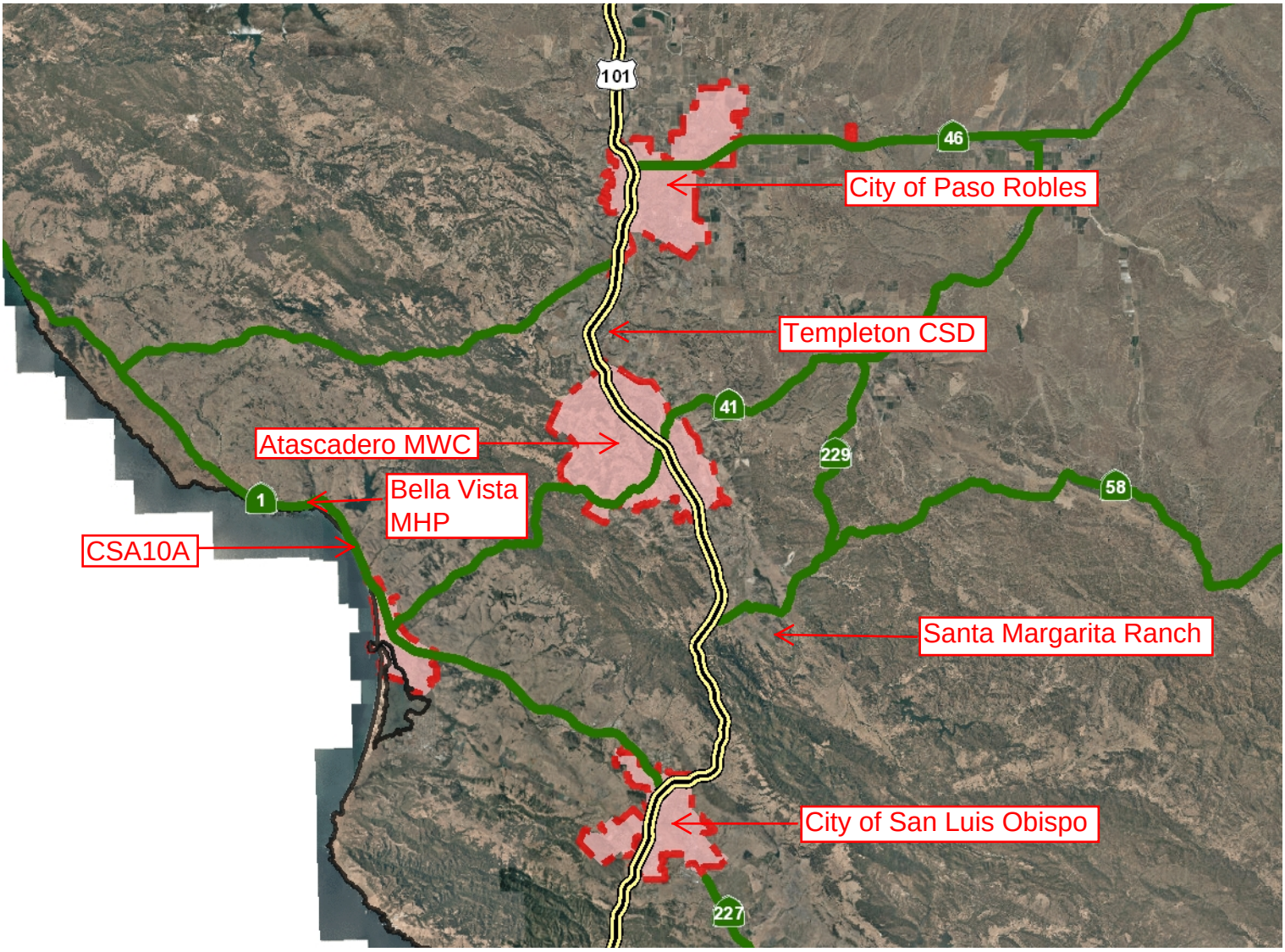
Map of the Nacimiento Water Project

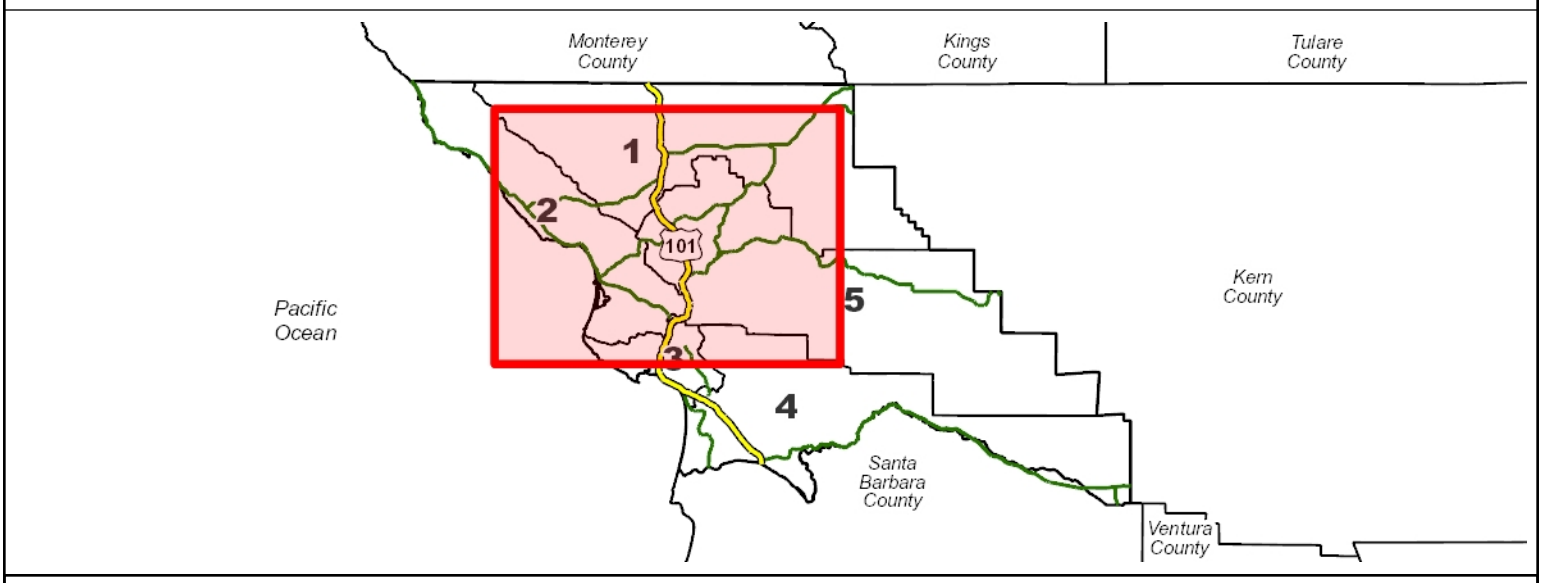
ATTACHMENT 3

General Locations of Existing NWP Participants

and

New Participants





VICINITY MAP

NWP Participants and New Participants

COUNTY OF SAN LUIS OBISPO PUBLIC WORKS & TRANSPORTATION DEPARTMENT

1: 407,746

0 3 6 Miles

Created by: Staff

Printed: 12/22/2015

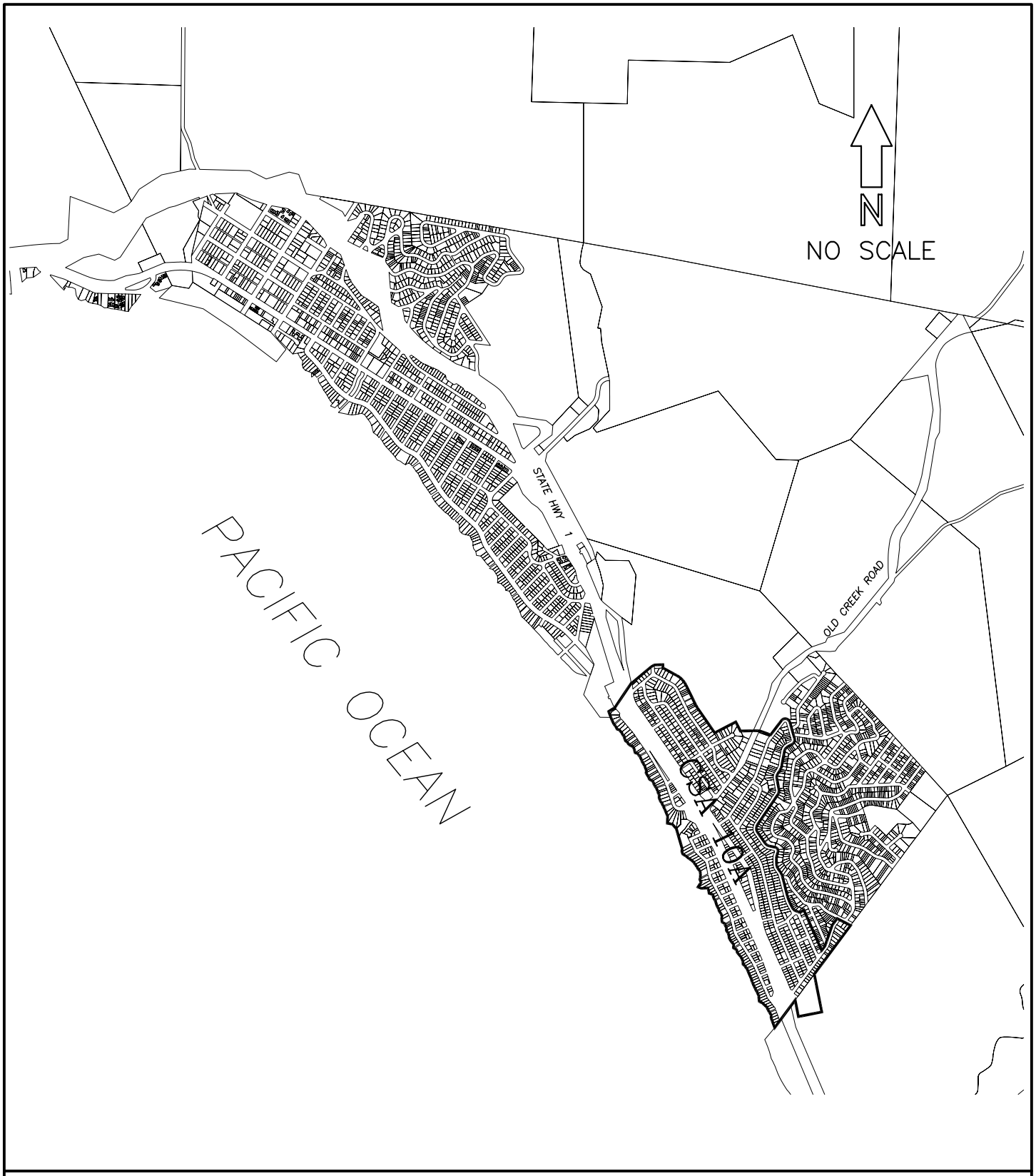
ATTACHMENT 4

Water Service Areas:

CSA10A

Bella Vista Mobile Home Park

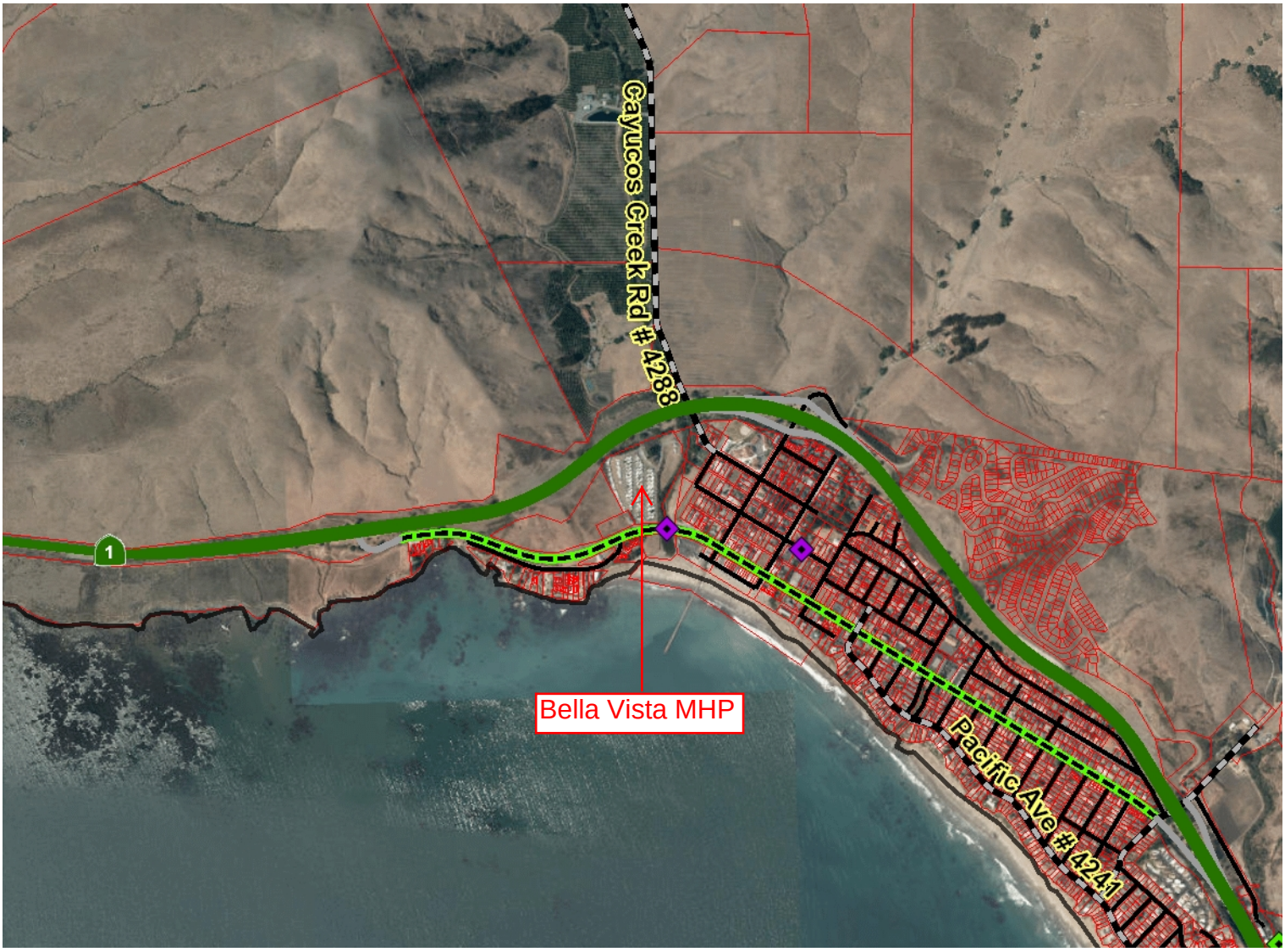
Santa Margarita Ranch Mutual Water Company

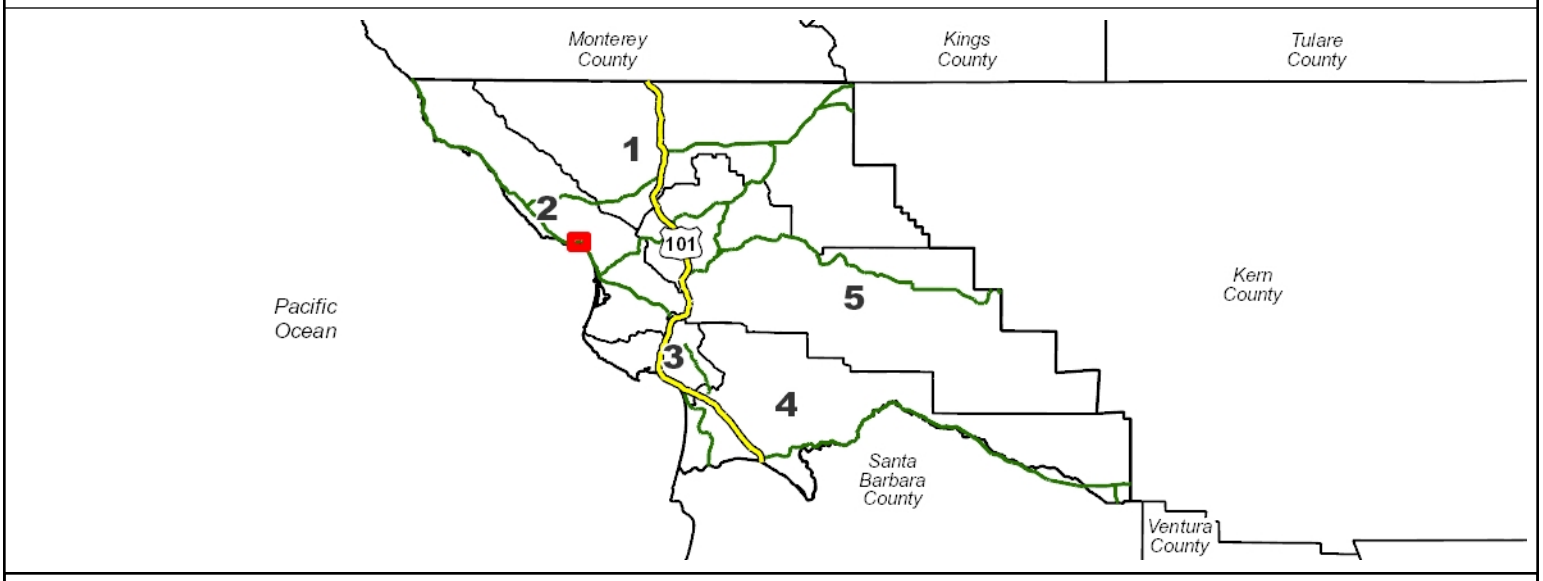


VICINITY MAP

TOWN OF CAYUCOS

COUNTY OF SAN LUIS OBISPO, CA.
PUBLIC WORKS DEPARTMENT





VICINITY MAP

Bella Vista Mobile Home Park, Cayucos

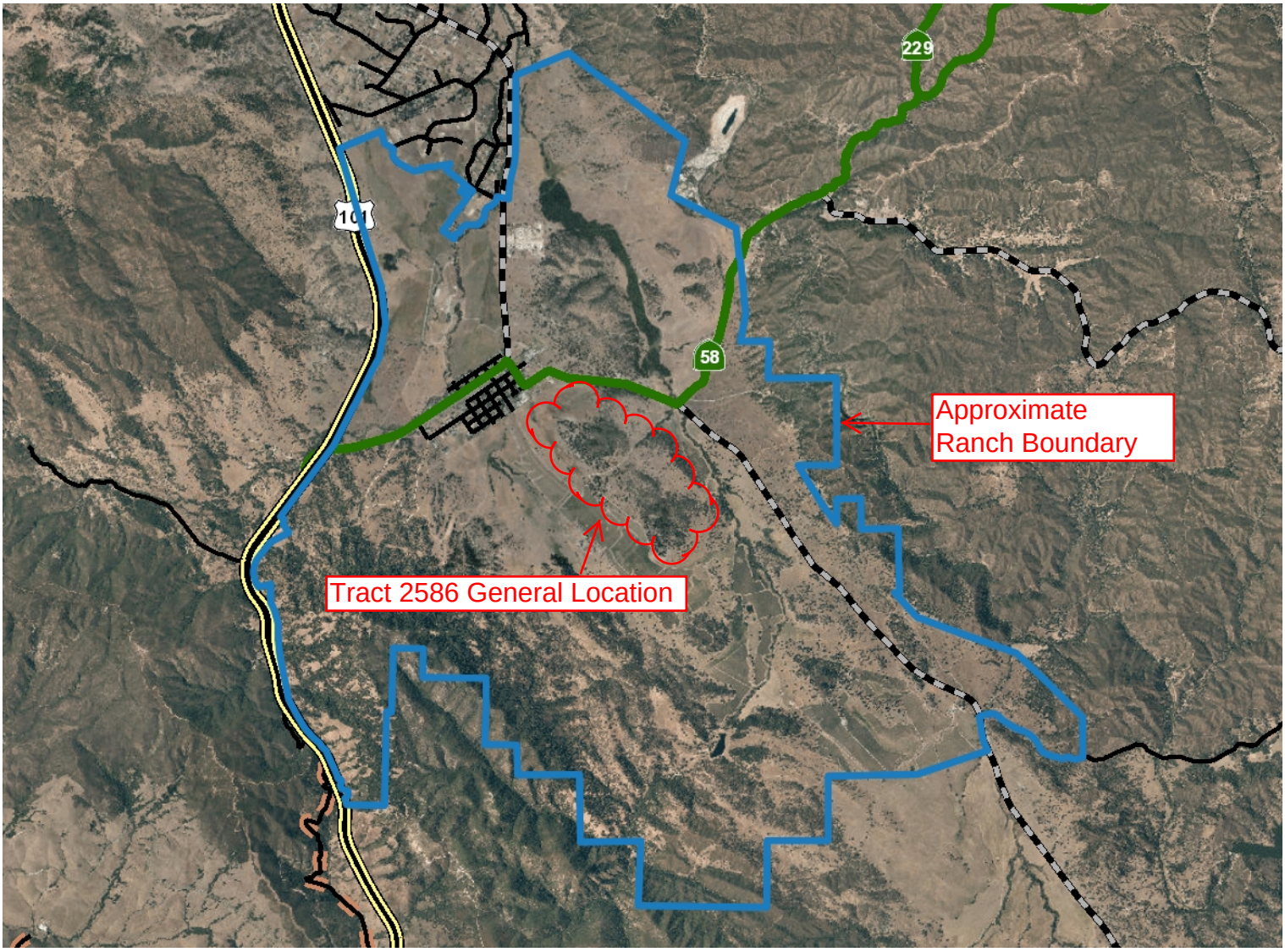
COUNTY OF SAN LUIS OBISPO PUBLIC WORKS & TRANSPORTATION DEPARTMENT

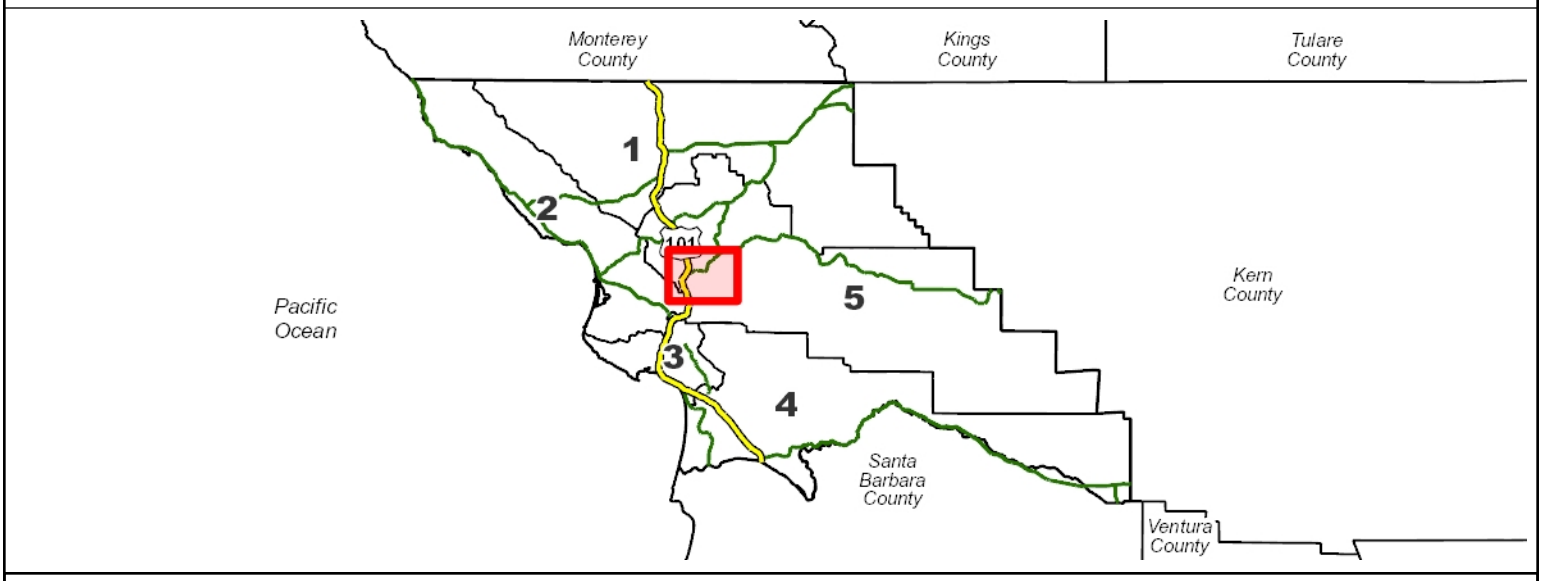
1: 19,407

0 809 1,617 Feet

Created by: Staff

Printed: 12/22/2015





VICINITY MAP

Santa Margarita Ranch and Tract 2586

COUNTY OF SAN LUIS OBISPO PUBLIC WORKS & TRANSPORTATION DEPARTMENT

1: 81,549

0 1 1 Miles

Created by: Staff

Printed: 12/23/2015

ATTACHMENT 5

CSA10A:

Supplemental Water Policies

Adopted by the Board of Supervisors

October 26, 2004

County Service Area No. 10, Zone A (CSA 10A)
Supplemental Water Policies
Adopted by the Board of Supervisors
October 26, 2004

1. The capital costs, including debt service, incurred by CSA 10A as a result of participating in the Nacimiento Water Project shall be included in the connection fees charged to new development, in accordance with applicable law.

2. Reserves that have been established for Nacimiento as a result of prior connection fees will be utilized for "rate stabilization" purposes. The Nacimiento reserves and connection fee revenues shall be separately accounted for so that the capital and debt costs for Nacimiento are paid from existing Nacimiento reserves and new connection fees before utilizing any other CSA 10A source of funding.

3. Staff is directed to carry-out efforts to develop water entitlement contracts so that CSA 10A can participate in the Nacimiento Water Project.

4. Staff is directed to carry-out efforts to secure an exchange of Whale Rock water for Nacimiento.

5. Staff is directed to coordinate community wide requests for Nacimiento water and Whale Rock exchanges with other water purveying entities in Cayucos, provided that those entities are included in the Nacimiento Project Environmental Impact Report, certified on January 6, 2004, and provided that those entities pay 100% of the costs associated with their requests.

6. Public Works staff is directed to work with the staff of the Department of Planning and Building to return to the Board with updated water will serve policies for CSA 10A.