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State Water Interconnection Project

Public Draft Environmental Impact Report

Prepared for

City of San Buenaventura
Ventura Water
336 Sanjon Road
Ventura, CA 93001

K/J Project No. 1744205*00

Table of Contents

Table of Contents (cont'd)

Table of Contents (cont'd)

Table of Contents (cont'd)

Table of Contents (cont'd)

Table of Contents (cont'd)

Table of Contents (cont'd)

Table of Contents (cont'd)

Table of Contents (cont'd)

Table of Contents (cont'd)

Table of Contents (cont'd)

Table of Contents (cont'd)

Table of Contents (cont'd)

List of Tables

Table of Contents (cont'd)

List of Figures

List of Appendices

List of Acronyms

$\mu g/m^3$	micrograms per cubic meter
A.D.	anno Domini (present time)
AB	Assembly Bill
ADT	average daily traffic
AF	acre-feet
AFY	acre-feet per year
APCD	Air Pollution Control District
B&J	bore and jack
B.P.	before present
BO	Biological Opinion
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
Calleguas	Calleguas Municipal Water District
CARB	California Air Resources Board
Casitas	Casitas Municipal Water District
CBC	California Building Code
CCAA	California Clean Air Act
CCR	California Code of Regulations
CE	Candidate species under California Endangered Species Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFC	chlorofluorocarbons
CH_4	methane
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CRHR	California Register of Historical Resources
CRMP	Project Cultural Resources Management Plan
CSC	California Species of Concern
CWA	Clean Water Act
dB	decibels
dBA	A weighted sound level
DCR	Delivery Capability Report
DDW	Division of Drinking Water
DOGGR	California Division of Oil, Gas, and Geothermal Resources
DWR	California Department of Water Resources
EIR	Environmental Impact Report
FCGMA	Fox Canyon Groundwater Management Agency
FE	Federally Endangered status per the Federal Endangered Species Act
FP	Fully Protected status under the California Fish and Game Code
FT	Federally Endangered status per the Federal Endangered Species Act
GHG	Greenhouse Gases
GPCD	gallons per capita per day

List of Acronyms (cont'd)

HDD	horizontal directional drilling
HFC	hydrofluorocarbons
Hz	hertz
IFI	Important Farmland Inventory
IPCC	Intergovernmental Panel on Climate Change
ISAG	Initial Study Assessment Guidelines
LCA	Land Conservation Act
L_{dn}	Day-Night Level
Leq	equivalent sound level
L_{max}	maximum sound level
LOS	level of service
L_{xx}	percentile exceeded sound
MBTA	Migratory Bird Treaty Act
mg/l	milligrams per liter
mPa	micropascals
MWD	Metropolitan Water District of Southern California
NAAQS	National Ambient Air Quality Standards
NMFS	National Marine Fisheries Service
NO_2	nitrogen dioxide
NO_x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
O_2	sulfur dioxide
O_3	Ozone
ºF	Fahrenheit
O-H	Oxnard-Hueneme (water system)
OPR	Office of Planning and Research
OS	Open Space
pga	peak horizontal ground acceleration
PHWA	Port Hueneme Water Agency
PHT	peak hour traffic
PM_{10}	Respirable Particulate Matter
$PM_{2.5}$	Fine Particulate Matter
ppb	parts per billion
ppm	parts per million
PPV	peak particle velocity
RCRA	Resource Control and Recovery Act
RE	Rural Exclusive
RMP	Risk Management Program
ROC	reactive organic compounds
ROW	right-of-way
RPD	Residential Planned Development
SA	Special Animal
SB	Senate Bill
SCADA	Supervisory Control and Data Acquisition
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCAB	South Central Coast Air Basin

List of Acronyms (cont'd)

SCCIC	South Central Coastal Information Center
SCE	Southern California Edison Company
SCG	Southern California Gas Company
SCRRA	Southern California Railroad Authority
SE	State Endangered status
SF_6	sulfur hexafluoride
SGMA	Sustainable Groundwater Management Act
SIP	State Implementation Plan
SMARA	Surface Mining and Reclamation Act
SOAR	Save Open Space and Agricultural Resources initiative
SOI	Secretary of the Interior
SPL	sound pressure level
SR	State Route
STPs	Shovel Test Probes
SWP	State Water Project
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
T3	Neighborhood General
TDS	total dissolved solids
TEUs	Test Excavation Units (TEUs)
TMDL	total maximum daily load
United	United Water Conservation District
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
VCTC	Ventura County Transportation Commission
VCWPD	Ventura County Watershed Protection District
WL	Watch List status

Section 1: Introduction and Project Description

This Environmental Impact Report (EIR) has been prepared to evaluate the environmental impacts associated with construction and operation of pipeline facilities that enable delivery of State Water Project (SWP) water that has been wheeled through the Metropolitan Water District of Southern California (MWD) and Calleguas Municipal Water District (Calleguas) to the City of Ventura. The pipeline facilities (the "interconnection") would also facilitate direct delivery of SWP water to United Water Conservation District (United) and direct or in-lieu[1] delivery of SWP water to Casitas Municipal Water District (Casitas). In addition, the interconnection would allow the City to deliver water to Calleguas during an outage of Calleguas' imported water supplies. The interconnection would be a pipeline used to transport water between Calleguas' and the City's distribution systems.

1.1 Overview of the Project

The City of Ventura is 62 miles northwest of Los Angeles and 30 miles southeast of Santa Barbara along the California coastline (see Figure 1-1). As of May 2018, the City's population was approximately 113,500 persons with about 32,000 water service connections (Ventura Water 2018). The City's diverse water portfolio of surface water, groundwater, and recycled water is derived from six sources throughout the region. The City has an established right to water from the SWP but cannot currently take delivery due to a lack of infrastructure to deliver that water.

In 1963, the predecessor to the Ventura County Watershed Protection District (VCWPD) contracted with the Department of Water Resources (DWR) for future delivery of up to 20,000 acre-feet per year (AFY) of SWP water to Ventura County. In 1970, administration of the Water Supply Contract for SWP water was assigned to the predecessor of Casitas. The City executed an agreement in 1971 with Casitas to secure 10,000 AFY of Table A[2] entitlement for the City. United also executed an agreement in 1971 with the predecessor of Casitas to secure 5,000 AFY of Table A entitlement for United of which 1,850 AFY is leased to Port Hueneme Water Agency (PHWA) through the year 2035. Therefore, the EIR only considers 3,150 AFY as

[1] A portion of Ventura Water customers receive water from Casitas. In-lieu delivery means that the SWP water would be delivered to a Ventura Water customer in the Casitas service area, rather than directly delivered to Casitas, and this would offset demand on the Casitas system.

[2] Each SWP contractor's SWP Water Supply Contract includes a "Table A," which lists the maximum annual amount of water an agency is entitled to. However, the amount of SWP water available each year, typically presented as a percentage of their Table A entitlement and called an "allocation," varies based primarily on the amount of precipitation in the SWP system tributary watersheds, water in storage, and regulatory restrictions on movement of water through the Sacramento-San Joaquin Delta.

United's entitlement. Casitas holds the entitlement to the remaining 5,000 AFY of the 20,000 AFY Water Supply Contract. The City, Casitas, and United, referred to as the Joint Agencies, pay annual contractual fees to DWR, which cover construction costs for SWP facilities and administration.

The Water Supply Contract expires in 2035 but contains an extension option. Casitas, on behalf of the Joint Agencies, is working with DWR on an extension through approximately 2085 (Ventura Water 2016a).

The nearest entity to the City with a connection to SWP water is Calleguas. The Joint Agencies are working with Calleguas to develop an interconnection to allow for delivery of the City's Table A entitlement. The interconnection could also allow Casitas (through in-lieu deliveries) and United to receive their SWP water via the Calleguas water system. These deliveries would be made under wheeling agreements with MWD and Calleguas. Additionally, the interconnection between the City and Calleguas would allow the City and Calleguas to deliver water to each other.

The interconnection project consists of a connection to the Calleguas system, a pipeline of approximately 7 miles in length, a flow/pressure control and metering station at each United turnout for water delivery, a connection to the City's water distribution system, a flow/pressure control and metering station downstream of the City's connection point, and a blending/monitoring station within the City's system.

The City, in partnership with Casitas, United, and Calleguas, prepared the SWP Interconnection Alignment Study (City, Calleguas, Casitas, and United 2018). The goals of the study were to identify connection points to the City and Calleguas systems, evaluate potential alignments between the various connection points, and assess the advantages and disadvantages of the various alignments. The study evaluated 20 different pipeline segments, including three alignments from the City of Ventura to cross the Santa Clara River, three different connection points with Calleguas, and routes through roadways and privately held agricultural land between the two connection points. The preferred alignment from that study is the proposed project described in this EIR.

1.2 City of Ventura

The City encompasses an area of approximately 21 square miles, with the City's water service area stretching across 40 square miles (see Figure 1-1). Currently the City's water system serves an estimated population of 113,500 with approximately 32,000 service connections. This includes a small number of customers in unincorporated Ventura County receiving City water. Potable water is provided to residential, commercial, industrial, institutional, and irrigation customers. In addition, untreated water is provided to an industrial user and a few irrigation customers in the vicinity of an untreated water pipeline system in the North Ventura Avenue area. Recycled water is provided for irrigation of two golf courses, a City park, and landscape along the existing distribution alignment.

Service Layer Credits: Sources: USGS, ESRI, TANA, AND

Santa Barbara County

Ventura County

Ojai

Lake Casitas

Casitas Municipal Water District Service Area

Ventura

Ventura Water Service Area

United Water Conservation District Service Area

Santa Paula

Fillmore

Calleguas Municipal Water District Service Area

Moorpark

Simi Valley

Camarillo

Thousand Oaks

Oxnard

Port Hueneme

Pacific Ocean

Lake Piru

Path: Z:\Projects\LCWD 2015 UWMP\Figure1-1_ProjectLocation.mxd Printed by: MarioO

Legend

- Calleguas Municipal Water District Service Area
- Casitas Municipal Water District Service Area
- United Water Conservation District Service Area
- Ventura Water Service Area

N

0 1.5 3
Miles

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Calleguas Municipal Water District

Project Location

1744210*00
January 2019

Figure 1-1

In 2017, the City's total water demand was 13,973 AFY, with a five-year average since 2013 of 15,429 AFY. Overall, per capita water demand has declined significantly since the middle of the last century due to effective water use efficiency practices, including plumbing code changes, improved water loss control, and an ongoing and active water use efficiency program. As a result, per capita water use decreased from an average of 277 gallons between 1940-1970 to 166 gallons in 2010. Additional conservation efforts during the most recent drought resulted in even further declines to 117 gallons per capita per day (GPCD) in 2015. Nevertheless, water use is projected to increase to between 19,000 to 21,500 AFY by 2030 and potentially up to 22,700 AFY by 2040.

The City currently depends fully on local water supplies consisting of water from the Ventura River and Lake Casitas, groundwater from three local groundwater basins, and recycled water from the Ventura Water Reclamation Facility. These supplies have been sufficient to meet demands to date, but continued drought conditions, heightened environmental requirements, and water quality impairments, compounded by continued population growth, are threatening the City's ability to meet water demands and will require supplemental supplies.

The City's ability to draw water from the Ventura River has been increasingly impacted in recent years. Drought conditions severely reduced supply availability from the Ventura River resulting in a maximum production of less than one third of normal year availability in 2015 (Ventura Water 2016a, Ventura Water 2016b). In addition, on-going instream flow studies by the California Department of Fish and Wildlife (CDFW) and the State Water Resources Control Board (SWRCB) could result in future limitations on production from this source. At the same time, Lake Casitas levels dropped substantially during the drought, reaching a historic low of 31 percent of capacity as of October 2018. With the declines in lake level, significant conservation by all Casitas customers has been required.

During dry weather conditions, the City generally depends more heavily on groundwater supplies, its largest water supply source, but those supplies cannot compensate for the reduced supplies during severe drought conditions and other losses of supplies. Furthermore, in April 2014, the Fox Canyon Groundwater Management Agency (FCGMA) approved Emergency Ordinance E that limits groundwater extraction within the FCGMA boundary (the City's Oxnard Plain Basin wells are located within the FCGMA boundary), suspends the use of groundwater conservation credits, and prohibits the construction of any groundwater extraction facilities and/or the issuance of any groundwater extraction facilities permits. Prior to approval of Ordinance E, the City was relying on approximately 25,000 AF of conservation credits in the Oxnard Plain Basin during water shortage years. Overall, groundwater pumping is limited by requirements to maintain long-term production within sustainable yields and allocations may be reduced in the near future as a result of groundwater sustainability efforts to achieve compliance with the 2014 Sustainable Groundwater Management Act (SGMA).

Groundwater quality impairments are also impacting the availability of this source. Water quality in the Mound Basin, one of the three groundwater basins utilized by the City, is highly mineralized and blending with a water supply lower in total dissolved solids (TDS) is required by the SWRCB Division of Drinking Water (DDW). Both active City wells in the Mound Basin have elevated TDS concentrations, measured as high as 1,500 milligrams per liter (mg/L) and 2,100 mg/L in 2015 (United 2017a). These levels exceed the DDW TDS water quality objective of 1,200 mg/L and therefore require blending to make the water suitable for potable use. The City's

current (interim) approach is to blend the water from the Mound Basin with water from the Oxnard Plain Basin prior to delivery to customers.

In order to continue to reliably meet the City's existing and future water demands, alternative supply sources are necessary. The City is currently preparing a draft EIR for the Ventura Water Supply Projects, which will examine several potential water supply projects at a programmatic level and a potential potable reuse project, known as the VenturaWaterPure Project, at the project level of review. The proposed State Water Interconnection Project is not anticipated to provide any increased water supply volume for the City and, thus, is not being considered in that EIR. However, the project would improve system reliability by providing access to a replacement supply source for the water supplies that have been reduced or otherwise become less available. It also could meet a requirement for the proposed VenturaWaterPure Project, since the City may need to demonstrate an available backup supply in order to receive certain State approvals. If Calleguas delivers imported water to the City as an emergency backup supply, the City would return an equivalent amount of water to Calleguas at a later time. Additionally, SWP water is a near-term option for providing the necessary water to dilute high TDS levels in groundwater to improve system water quality.

1.3 Calleguas Municipal Water District

Calleguas is a wholesale water provider that delivers drinking water to 20 retail water purveyors within Ventura County (Calleguas 2016). Under normal operating conditions, Calleguas meets its potable water demands exclusively through imported water from MWD, delivering this water through 140 miles of large-diameter pipelines. There is currently no direct connection between Calleguas' water system and the City, Casitas, or United.

The proposed project is to develop an interconnection between the City and Calleguas, which would allow SWP water to be wheeled through the Calleguas system under normal operations. This means excess capacity in the Calleguas water transmission system would be used to deliver the water to a connection point with the City. The connection would thereby allow the City, Casitas (in-lieu delivery), and United to receive their SWP entitlements. Additionally, the interconnection between the City and Calleguas would provide the infrastructure to move water into the Calleguas service area from the City of Ventura in the event of a supply outage.

It is important to note that, with the project, Calleguas would not be selling the SWP water, but merely wheeling it through their system for use by the City, Casitas, and United according to those agencies' existing SWP water entitlements. Under California state law, Calleguas is required to wheel water for others through its system as long as it has the capacity to do so, the wheeling does not degrade water quality, and it is fairly compensated for doing so.

1.4 United Water Conservation District

United is primarily a groundwater management agency and a wholesale purveyor whose operational area extends from Lake Piru Reservoir along the Santa Clara River to the Oxnard Coastal Plain (see Figure 1-1). United works to maximize water resources of the lower Santa Clara River Valley and Oxnard Plain by utilizing surface flow of the Santa Clara River and its tributaries to replenish the groundwater basins. United operates the Oxnard-Hueneme (O-H) System, a public water system in the Oxnard Plain which serves other water agencies and

mutual water companies on a wholesale basis, as well as a small number of retail customers. The SWP water would provide an emergency connection for the O-H system. During dry years water quality in the O-H system declines with elevated TDS and nitrate concentrations. The SWP water would be blended with water in the O-H system or used for groundwater recharge at the O-H wellfield to meet water quality objectives for TDS and nitrates. The central and eastern portions of the City are within United boundaries, partially served by groundwater underlying the Santa Clara River Valley.

United is a party to the contract between DWR and VCWPD for SWP Table A water and has an entitlement of 3,150 AFY. However, United currently cannot receive deliveries of that water directly. United receives its SWP entitlement through Pyramid Lake which eventually flows through Piru Creek to Lake Piru and then down the Santa Clara River contributing to streamflow and groundwater recharge (UWCD 2017a). However, there are environmental restrictions on the timing and quantity of deliveries and significant water is lost to evaporation and consumptive use by vegetation during its conveyance via the Santa Clara River (UWCD 2016). The proposed project would allow United to take direct deliveries of SWP water supplies in order to enhance its groundwater replenishment operations and improve local supply availability.

United overlies all or portions of eight groundwater basins. United estimates that the average annual overdraft for the past 10 years in these basins is approximately 74,600 AF, meaning over the past 10 years average pumping has exceeded average recharge (United 2017a). Of particular concern is the long-term overdraft in the Oxnard Plain groundwater basin, which has resulted in landward migration of saline water (United 2017a). Preliminary modeling suggests it may be necessary to reduce groundwater pumping in the Oxnard Plain groundwater basin by as much as 39 percent (United 2017b). United's ability to replenish groundwater using surface water from the Santa Clara River has been drastically curtailed in recent years due to restrictions on the use of the Freeman Diversion. In July 2008, the National Marine Fisheries Service (NMFS) issued a final Biological Opinion (BO) that concluded that operations at the Freeman Diversion were likely to jeopardize the continued existence of Southern California Steelhead in the Santa Clara River. United has developed a draft multi-species habitat conservation plan and is currently in consultation with NMFS. The habitat conservation plan is likely to require additional bypass flows. The volume of those bypass flows are unknown, but it is estimated that the bypass flow regime will significantly decrease diversions and groundwater replenishment.

1.5 Casitas Municipal Water District

Casitas is the primary and/or backup water supply for nine water purveyors (known as resale customers) within its boundaries and direct supplier to agricultural, commercial, industrial, and residential customers. Altogether, Casitas has approximately 6,000 service connections with a population of approximately 71,000 within its service area. Resale customers represent approximately 45 percent of Casitas's annual water demands. The resale agencies rely on Casitas as a primary supply, and/or supplemental supply, and/or drought contingency supply. The Casitas service area includes the Ojai Valley, the western part of the City of Ventura, Oak View, Upper Ojai Valley, and the coastal area between the City of Ventura and Santa Barbara County (see Figure 1-1) (Casitas 2016). Lake Casitas receives local runoff from Coyote Creek and Santa Ana Creek. Casitas also operates the Robles Dam and Diversion facility on the Ventura River, which diverts a portion of the river flow to the Robles Canal and subsequently

Lake Casitas. In addition, Casitas uses groundwater from the Ojai and the Upper Ventura River groundwater basins to meet water demands within the City of Ojai.

Since 2005, Casitas' ability to divert Ventura River water to Lake Casitas has been curtailed by fishery protection requirements. A BO written by NMFS includes requirements to provide flow for the migration and passage of steelhead trout up and down the main stem of the Ventura River and past the Robles Diversion Facility during the steelhead migration season. There is concern by Casitas that future changes to the BO could require costly infrastructure and impact diversions to, and the water supply within, Lake Casitas (Casitas 2016).

During dry water years, resale and agricultural water demand for Casitas water supply increases dramatically as local groundwater sources become diminished or are no longer available. During dry periods, resale and agricultural customers may rely exclusively on water deliveries from Lake Casitas until groundwater supplies are replenished by rainfall events. The lake capacity is 237,761 AF, but lake levels dropped to a historic low of 31 percent of capacity in October 2018 due to on-going severe drought conditions. These dry weather conditions have required stringent demand management measures.

Casitas is the administrator for Ventura County's 20,000 AFY SWP Table A entitlement and has a SWP entitlement of 5,000 AFY. However, as is the case for the City, Casitas is unable to receive delivery of its SWP entitlement due to a lack of necessary infrastructure. The proposed project would not directly deliver water to Lake Casitas. The City could take Casitas' SWP water in-lieu of Lake Casitas water thereby leaving an equivalent amount of water in the lake. To accomplish direct delivery of SWP to Casitas, additional infrastructure would be necessary (which is not the subject of this EIR). The proposed project would help maintain lake levels and improve Casitas' ability to meet its customer demands through in-lieu deliveries.

Casitas and the City may pursue a separate project at a future date to move water from the western portion of the City into Casitas' transmission system.

1.6 Need for the Proposed Project

The City, Calleguas, United, and Casitas have the following needs:

- The City needs to provide a continued reliable water service to City water customers. This involves making up for losses in annual yield from existing supply sources (Lake Casitas, Ventura River, and groundwater), improving water quality, and providing an emergency/backup connection for Ventura Water's potential potable reuse project.
- Calleguas needs to improve its water supply reliability in the event of an outage of imported supplies.
- United needs to protect local supplies to ensure a long-term supply for its service area. This involves making up for losses in annual yield from existing supply sources (Santa Clara River diversions and groundwater), enhancing groundwater recharge options while reducing groundwater overdraft, improving basin groundwater quality, and providing an emergency connection for United's O-H Pipeline.

- Casitas needs to extend the ability of Lake Casitas to provide water during a long-term drought and to replace water that otherwise would have been diverted for storage at Lake Casitas but is now released downstream as required by the BO for the Robles Diversion Facility.

1.7 Project Objectives

The project would be designed to achieve the following objectives:

- Provide a near-term water supply source for the City to enhance supply reliability;
- Improve City water quality;
- Provide a backup supply for the City's other potential, long-term water supply options;
- Allow Casitas and United to receive their SWP entitlements; and
- Enable the City to deliver water to Calleguas during an imported water supply outage.

1.8 Project Location

The project would be located within Ventura County and the pipeline alignment extends southeast from the City, through the community of El Rio in unincorporated Ventura County, and terminates in the City of Camarillo (see Figure 1-2). The City connection point would be located along an existing 24-inch diameter pipeline on Henderson Road between South Saticoy Avenue and South Wells Road. There would be two physical connections to Calleguas, but in the same general vicinity (called the "Springville Connection"): one upstream of Springville Hydroelectric Generating Station (Springville Hydro) to deliver water to the City at a higher pressure and one downstream of Springville Hydro to receive deliveries from the City at a lower pressure. Both connection points are located near the intersection of Camino Tierra Santa and Via Zamora in the City of Camarillo and near Calleguas' Springville Reservoir.

1.9 Project Components

1.9.1 Connection to City of Ventura Water System

The City connection point is located along the existing 24-inch diameter pipeline on Henderson Road between South Saticoy Avenue and South Wells Road. This connection point was selected based on pipeline capacity and hydraulics (see Figure 1-2).

1.9.2 Connection to Calleguas Municipal Water District

An analysis was prepared evaluating three potential connection points to the Calleguas system. The alternatives looked at flow range, water age, distance to the City connection point, and required pumping. A connection near Calleguas' Springville Reservoir was selected since this connection point requires no pumping and can provide sufficient flow capacity. The Springville Reservoir is located in the western portion of the City of Camarillo near the intersection of Camino Tierra Santa and Via Zamora (see Figure 1-2).

1.9.3 Pipeline Segments

As described earlier, the City, in partnership with Casitas, United, and Calleguas, prepared a SWP Interconnection Alignment Study. The purpose of the study was to identify connection points to both the City and Calleguas systems and alignments between the various connection points. The study evaluated 20 different pipeline segments. This document uses the pipeline segment designations as defined in the SWP Interconnection Alignment Study.

Pipelines would be a maximum of 36 inches in diameter. For all segments, an average of 5 feet of soil cover over the top of pipe is assumed, except at those locations where trenchless construction is used and where necessary to avoid existing utilities.

Within the City, the alignment is located primarily within public rights of way adjacent to areas zoned as Residential Planned Development (RPD), Neighborhood General (T3), and Civic (City of Ventura 2017). The blending/monitoring station would be located within a Neighborhood General zone or Park. From the Ventura City boundary, the alignment extends southeastward through County unincorporated areas crossing through areas zoned as Open Space (OS) at the Santa Clara River and then Agricultural until the alignment reaches the City of Camarillo boundaries. Within the City of Camarillo, the alignment crosses adjacent to and through areas zoned as Rural Exclusive (RE), Residential Planned Development (RPD), and Open Space (OS) (County of Ventura 2016a, City of Camarillo 2018).

The proposed pipeline alignment is approximately 38,900 feet long. The individual alignment segments are described in the following and depicted in Figure 1-2:

Segment 2. Segment 2 originates at the Ventura connection point on Henderson Road, approximately 1,400 feet east of Saticoy Avenue, then proceeds west on Henderson Road until Saticoy Avenue. As documented in Table 1-1, Segment 2 involves construction in public roadway and within six separate parcels zoned as either Open Space or Agriculture. The pipeline alignment turns south on Saticoy Avenue and continues southeast until North Bank Drive. The pipeline alignment turns south on Saticoy Avenue and continues southeast until North Bank Drive. Horizontal directional drilling (HDD) would be used to cross the Santa Clara River. The drilling machine would be staged in the Ventura County Public Works Saticoy yard or United property on the north riverbank and the receiving staging area would be located on United property on the south riverbank, beyond the levee. Once across the River, the pipeline alignment would continue in United property until reaching Highway 232 (Vineyard Avenue). Total Segment 2 length is approximately 10,600 feet.

Segment 6. Segment 6 starts at the terminus of Segment 2 in Highway 232 and continues east in private property along an existing dirt road (see Table 1-1). The pipeline alignment segment makes a small jog about one half mile from Highway 232, turning southwest briefly, before proceeding southeast along a dirt road until North Rose Avenue. A portion of Segment 6 could be located within property owned by United. Total Segment 6 length is approximately 4,500 feet.

Segment 10. Segment 10 continues southeast from the terminus of Segment 6 in Rose Avenue along a privately-owned dirt access road for approximately 4,740 feet where the alignment has a slight jog to the northeast after passing an irrigation reservoir. After continuing another

1,250 feet southeast, the alignment turns northeast for 380 feet before continuing southeast to Santa Clara Avenue. The total length of Segment 10 is approximately 6,800 feet.

TABLE 1-1
LAND USES ALONG PIPELINE ALIGNMENT

Segment	Assessor Parcel Number	Zoning Designation	General Plan Designation	Current Use
Proposed Project				
2	Not Applicable	Not Applicable	Not applicable	A large portion of Segment 2 is within public roadway
2 Potential Blending Station No. 1	890070250	Civic	Neighborhood Low	Vacant lot
2 Potential Blending Station No. 2	890093311	Park	Parks Open Space	City owned property, recreation park (Huntsinger Park)
2 Potential Blending Station No. 3	890033050	Civic	Parks Open Space	City owned Saticoy Conditioning Facility
2	128-0-046-290	Open Space	Open Space	County of Ventura materials storage yard
2	128-0-040-330	Open Space	Open Space	United recharge basins
2	128-0-040-050	Open Space	Open Space	VCWPD flood control channel
2	128-0-040-160	Agriculture	Agricultural	United recharge basins
2	128-0-040-195	Agriculture	Agricultural	United recharge basins
2	147-0-060-305	Agriculture	Agricultural	United recharge basins
6	147-0-060-305	Agriculture	Agricultural	United recharge basins
6	147-0-060-330	Agriculture	Agricultural	Row crops
10	147-0-040-015	Agriculture	Agricultural	Row crops
10	147-0-040-520	Agriculture	Agricultural	Row crops
13	147-0-050-295, -315, -335, -355, & -255	Agriculture	Agricultural	VCWPD flood control facilities
13	147-0-050-425 & 435	Agriculture	Agricultural	Row crops
16	152-0-170-135 & -15	Agriculture	Agricultural	VCWPD flood control facilities
16	152-0-170-140	Agriculture	Agricultural	Row crops
18	152-0-170-090	Agriculture	Agricultural	Row crops
19	157-0-020-185	Residential Planned Development	Agricultural	Vacant
19	Open Space	Open Space	Neighborhood Park	Open space

TABLE 1-1 Cont.

Segment	Assessor Parcel Number	Zoning	General Plan Designation	Current Use
Alternative Alignment B				
2	Not Applicable	Not Applicable	Not applicable	A large portion of Segment 2 is within public roadway
2 Potential Blending Station No. 1	890070250	Civic	Neighborhood Low	Vacant lot
2 Potential Blending Station No. 2	8900933115	Park	Parks Open Space	City owned property, recreation park (Huntsinger Park)
2 Potential Blending Station No. 3	890033050	Civic	Parks Open Space	City owned Saticoy Conditioning Facility
2	128-0-046-290	Open Space	Open Space	County of Ventura materials storage yard
2	128-0-040-330	Open Space	Open Space	United recharge basins
2	128-0-040-050	Open Space	Open Space	VCWPD flood control channel
2	128-0-040-160	Agriculture	Agricultural	United recharge basins
2	128-0-040-195	Agriculture	Agricultural	United recharge basins
2	147-0-060-305	Agriculture	Agricultural	United recharge basins
4	Not applicable	Not applicable	Not applicable	Public roadway
7	147-0-060-350	Agriculture	Agricultural	Public roadway
7	147-0-040-505	Agriculture	Agricultural	Public roadway
11	147-0-040-445	Agriculture	Agricultural	Public roadway
11	147-0-050-425	Agriculture	Agricultural	Public roadway
14	147-0-050-435	Agriculture	Agricultural	Public roadway
14	152-0-170-140	Agriculture	Agricultural	Public roadway
14	147-0-050-235	Agriculture	Agricultural	VCWPD flood control facilities
17	Not applicable	Not applicable	Agricultural	Public roadway
18	152-0-170-090	Agriculture	Agricultural	Row crops
19	157-0-020-185	Residential Planned Development	Agricultural	Vacant
19	Open Space	Open Space	Neighborhood Park	Open space

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Ventura Connection
890070250
890033050
890033115
Saticoy Conditioning Facility
Henderson Rd
Saticoy Ave
HWY 126
Ventura
2
HDD North Side Construction Staging Area
United Saticoy Basins
United Noble Basins
United Rose Basin
HDD South Side Construction Staging Area
United Ferro Basin
Vineyard Ave / HWY 232
Los Angeles Ave / HWY 118
HWY 118
6
N Rose Ave
10
Santa Clara River
Central Ave
Santa Clara Ave
13
United El Rio Facility
16
Springville Reservoir
Springville Connection
Camarillo
Oxnard
HWY 101
Daily Dr
19
18

Legend

- Potential Blending/Monitoring Station
- Potential United Turnout
- Point of Connection
- Proposed Project

City Boundary

- Camarillo
- Oxnard
- Ventura

- Calleguas Municipal Water District Service Area
- HDD Construction Staging Area
- 7 Pipeline Segment Designation

N

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Miles

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City of Ventura
State Water Project Interconnection EIR

Proposed Project

K/J 1744205*00
January 2019

Figure 1-2

Segment 13. Beginning at the termination of Segment 10, Segment 13 proceeds south along a VCWPD access road for Beardsley Wash. Trenchless construction or a pipe bridge would be required at the termination of Segment 13 across Beardsley Wash. The total length of Segment 13 is approximately 6,100 feet.

Segment 16. Segment 16 begins at the termination of Segment 13 and proceeds southeast along a privately-owned dirt road for approximately 2,300 feet. The alignment then continues south, paralleling a wash. The total length of Segment 16 is approximately 4,200 feet.

Segment 18. Segment 18 begins where Segment 16 terminates and continues southeast along Central Avenue. When approaching the Central Avenue off-ramp on Highway 101, the pipeline alignment segment diverts onto private land north of Central Avenue for roughly 800 feet. Segment 18 then exits private land to parallel Daily Drive for approximately 3,150 feet. The total length of Segment 18 is approximately 4,100 feet.

Segment 19. Segment 19 begins where Segment 18 ends and traverses north along a private dirt road, turns northeast on a paved utility access road, and crosses Camino Tierra Santa to the connection points upstream and downstream of Springville Hydro. The total length of Segment 19 is approximately 2,600 feet.

1.9.4 Turnouts to United Water Conservation District

The proposed project includes two potential future connections to United, one near Vineyard Avenue/Highway 232 and one near Rose Avenue (see Figure 1-2). At these future connection points, the pipeline would be constructed with a flanged outlet, isolation valve, and flow/pressure control and metering station. The future connection near Vineyard Avenue/Highway 232 would also be used during pipeline flushing operations (see Section 1.12.4 “Pipeline Flushing”).

1.9.5 Facilities and Appurtenances

After the interconnection comes online, the City would have two major water sources in its 430-pressure zone: water from the Saticoy Water Conditioning Facility and SWP water treated at MWD’s Jensen Water Filtration Plant. Unless appropriate measures are taken, mixing of waters from different sources with different water qualities can result in water quality issues. To minimize the risk of lead and iron release from the introduction of SWP water into the 430 zone, a blending station is proposed. At the blending station, the different water sources can be mixed and water treatment additives used to condition and stabilize the water before introduction to the City’s water system. The blending station may also house equipment to monitor water quality (e.g., disinfection residual) and provide chemical storage space. In addition, the blending station would house metering facilities and equipment to transmit flow data to Calleguas. The blending station site would be as large as 3,200 square feet. The site would house a one story (approximately 12 feet in height) building with an estimated footprint of 20 by 40 feet with underground pipelines extending to the interconnection pipeline and, if not already accessible, a driveway to the nearest public roadway. The blending station would be secured by a fence or block wall and landscaping would be used, as needed, to visually screen the site. The blending station would be constructed of materials to dampen any equipment sounds; it is anticipated that equipment noise would be barely audible outside of the building. Possible locations include City-owned property, such as Huntsinger Park or the Saticoy Conditioning Facility, or currently

vacant land, such as the parcel located south of Henderson Road and east of Biedermann Place (see Figure 1-2 for the three possible blending/monitoring station locations). The architectural style (color and finishes) would be determined during the City's design review phase of the building permit process, and would need to be consistent with the Saticoy and Wells Development Code.

Metering facilities would be built at each turnout. Metering facilities would likely consist of a below grade concrete vault approximately 10 by 20 feet long housing one or more flow meters, a transmitter, and control valves. At the City turnout, the metering facility would be located at the blending station site. Electrical service, control panel, and related equipment would also be built.

The pipeline would have air vacuum/release valves at high points to allow release of any air trapped in the pipeline or introduce air into the pipeline during draining to prevent the pipeline from collapse. Typically, for this type of system, air vacuum/release valves would consist of a minimum 4-inch diameter air valve and associated piping protected by a valve can or cabinet anchored to an approximately 4-foot square concrete pad. The exact locations of air vacuum/release valves cannot be determined until design of the pipeline has been completed. For the purposes of the environmental analysis, the calculations of ground disturbance, construction excavation, and equipment use assume an air vacuum/release valve approximately every 1,250 feet along the pipeline.

Blow-offs are connections to the bottom of the pipeline at low points in the alignment that allow water to be drained or pumped out of the pipeline. Blow-offs are manually operated with a hose and direct water to a proper disposal route or to a tanker truck. Blow-offs are accessed by a manhole. The exact locations of blow-offs cannot be determined until design of the pipeline has been completed. For the purposes of the environmental analysis, the calculations of ground disturbance, construction excavation, and equipment use assume a blow-off approximately every 1,250 feet along the pipeline.

Isolation valves would be installed to allow portions of the pipelines to be isolated for maintenance or repair. Valves would also be placed at the connection points between the new pipeline and the existing water systems. Isolation valves are essentially in-line with the pipeline and would be installed in a below-ground vault. The above-ground feature would be a manhole, used to access the valve vault, flush with the street pavement or set in concrete slightly above grade in unimproved areas.

When a pipeline is located outside of a roadway, such as in an agricultural field or in a landscaped area, the location of the pipeline could be indicated with flat fiberglass marker posts approximately 4-feet high and 4-inches wide. In agricultural fields, there would also be bollards around surface features (manholes and air/vacuum relief valves) to protect them.

1.10 Project Alternatives

This EIR evaluates project alternatives as required by CEQA, including the "No Project" alternative. Another possible pipeline alignment that would meet the basic project objectives which may avoid or lessen potential project impacts, has been identified, called Alternative Alignment B.

Alternative Alignment B, though similar to the proposed project, aligns much of the pipeline within public streets and rights-of-way. As shown in Figure 1-3, Alternative Alignment B includes Segments 2, 4, 7, 11, 14, 17, 18, and 19. Like the proposed project, the alignment originates at Henderson Road (Segment 2), crosses Vineyard Avenue/Highway 232, and extends southwest along Highway 232. At Central Avenue, the alignment turns southeast and continues within the Central Avenue right-of-way. Trenchless construction methods such as bore and jack (B&J)[3] would be used to cross under a 96-inch storm drain in Segment 7, several channels, and intersections at Rose Avenue, Santa Clara Avenue, and Beardsley Road. The alignment departs from Central Avenue right-of-way after Ponderosa Drive and parallels the City of Oxnard water pipeline adjacent to their permanent easement. The alignment continues to parallel the water pipeline, east along Daily Drive, until connecting with Segment 19. This alternative alignment is approximately 40,800 feet long, or 1,900 longer than the proposed alignment (38,900 feet).

1.11 Project Construction Activities

Most of the proposed pipeline would be placed underground and the ground surface restored to its pre-project condition. Construction of the proposed project would involve open cut construction and trenchless construction.

Open Cut Construction. Most of the pipeline would be installed using open cut construction/trenching. Construction would vary by segment, but it is expected that at any time approximately 1,000 to 1,500 feet of alignment would be in the construction zone, with about 300 feet in active construction and a buffer on each side. The buffer would be used for temporary construction staging and traffic control (placement of cones, lane closure, signage) to move vehicles safely around the construction area. The width of the construction zone would vary but is anticipated to be 25 to 50 feet; for the purposes of this EIR, 100 feet on each side of the pipeline alignment are being analyzed. Construction would progress along the alignment at about 80-160 feet a day, meaning any given location would not be in or adjacent to the construction zone for more than approximately 12 days.

Due to the potential presence of shallow groundwater, dewatering[4] may be required along portions of the alignment. If required, depending on the amount of groundwater present, dewatering could involve constructing dewatering wells and operating them for several weeks prior to active construction in the area or placing pumps in the trench or excavation during construction. The quality of the water anticipated from dewatering would be determined during design. If dewatering water would be of adequate quality, then the only treatment required prior to discharge to a local stream channel would be use of a sedimentation tank. However, if water

[3] Bore and jack is a common form of trenchless construction and its use has been assumed throughout this EIR. However, a contractor could utilize an alternative trenchless construction method, including, but not limited to, auger boring or microtunneling. Equipment needs for and impacts of these trenchless methods are similar to those for bore and jack.

[4] Dewatering involves either pumping water directly out of an excavation or trench or installing wells nearby to extract shallow groundwater so that soils remain stable during digging.

quality testing indicates that the water would not meet the requirements of the Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties, the water would be collected and trucked offsite for disposal or reuse.

It has been assumed that three open cut segments would be built at a time. Staging areas would be located adjacent to or in the vicinity of the pipeline corridors. Each crew performing open cut construction is anticipated to involve the following construction workers:

- Up to 2 inspectors (shared across all three open cut construction crews)
- 1 superintendent
- 1 foreman
- 9 workers
- 4 heavy equipment operators
- 2 truck drivers
- Up to 2 flaggers (dependent on segment)

Each segment of open cut construction would involve up to 32 truck hauls per day (for pipeline delivery, delivery of equipment, removal of spoils, and delivery of backfill materials) and up to 42 worker vehicle trips per day. When three open cut construction segments are under construction concurrently this would involve 96 truck hauls per day and up to 118 worker vehicle trips.

Trenchless Construction. This method of construction would be used for crossing the Santa Clara River, railroad crossings, drainage channels, and at intersections as identified in Table 1-2 below. There are two types of trenchless construction assumed: HDD and B&J. Trenchless construction requires excavation of a bore pit and a receiving pit of various sizes, depending on the trenchless construction method, and then tunneling occurs between the two pits (and beneath the feature to be avoided). Bore pits and receiving pits for HDD are typically small in comparison to those for B&J construction and are around 10 feet by 10 feet wide and 2 to 4 feet deep. The construction staging areas to accommodate HDD under the Santa Clara River are depicted in Figure 1-2. Pits for B&J construction can be much larger and for this pipeline would be roughly 14 feet wide, 30 to 40 feet long and, depending on the depth of the feature being tunneled under, could be 20 to 25 feet deep. Pits and equipment for B&J construction would occur in the near vicinity of the pipeline alignment; for the purposes of this EIR, 100 feet on each side of the pipeline alignment are being analyzed and this captures the construction staging areas for B&J activities.

Dewatering may be required at the bore and receiving pits. If required, it would be handled similarly to how it is described under “Open Cut Construction” above.

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Ventura Connection
Henderson Rd
S Wells Rd / HWY 118
Saticoy Ave
Saticoy Conditioning Facility
HWY 126
Ventura
2
HDD North Side Construction Staging Area
United Saticoy Basins
United Noble Basins
United Rose Basin
HDD South Side Construction Staging Area
United Ferro Basin
Vineyard Ave / HWY 232
4
Los Angeles Ave / HWY 118
HWY 118
7
N Rose Ave
Santa Clara River
11
Central Ave
United El Rio Facility
Santa Clara Ave
14
17
Springville Reservoir
Springville Connection
Camarillo
Oxnard
HWY 101
Daily Dr
19
18

Legend

- Point of Connection
- Potential United Turnout
- Potential Blending/Monitoring Station
- Alternative Alignment B

City Boundary

- Camarillo
- Oxnard
- Ventura

- Calleguas Municipal Water District Service Area
- HDD Construction Staging Area
- 7 Pipeline Segment Designation

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Miles

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City of Ventura
State Water Project Interconnection EIR

Alternative Alignment B

K/J 1744205*00
January 2019

Figure 1-3

Depending on the tunneling length and geologic complexity, the duration for tunneling activities would be up to 12 weeks where crossing the River and up to 6 weeks at the other locations. To the extent feasible, tunneling activities would be located to avoid impacts to roadways and sensitive habitat. Staging areas would be located adjacent to or in the vicinity of the bore pits. Each crew undertaking trenchless construction is anticipated to involve the following construction workers:

- Up to 2 inspectors
- 1 superintendent
- 1 foreman
- 6 workers
- 2 heavy equipment operators
- 1 truck driver
- Up 2 flaggers (dependent on segment)

TABLE 1-2
SEGMENTS WHERE TRENCHLESS CONSTRUCTION PROPOSED

Segment	Location	Public or Private ROW	Deep or Shallow[1]	Length(ft)
2	Railroad crossing on Saticoy Avenue between Mammoth Street and Cinco De Mayo	Public	Shallow	50
2	North bank to south bank of Santa Clara River	Private/Public	Minimal	1800
2	Crossing Highway 232	Private/Public	Shallow	150
10	Channel crossing near Santa Clara Avenue	Private	Shallow	30
10	Channel crossing along Santa Clara Avenue and crossing Santa Clara Avenue	Private/Public	Shallow	120
13	Beardsley Wash and Beardsley Road crossing	Private/Public	Deep	200
16	Channel crossing near Avenida De Aprisa	Private	Shallow	50
19	Crossing Camino Tierra Santa	Private/Public	Shallow	75

1. Shallow crossings involve construction of the bore pit less than 20 feet deep; deep crossings involve construction of the bore pit greater than 20 feet deep; minimal crossings involve bore pits for HDD construction that are approximately 1 to 4 feet deep.

Trenchless construction would involve up to 4 truck hauls per day (for pipeline delivery, delivery of equipment, removal of spoils, and delivery of backfill materials) and up to 56 worker vehicle trips per day. It has been assumed that two trenchless segments would be built at a time.

Tables 1-3, 1-4, and 1-5 summarize the major construction activities related to the project and the type of equipment anticipated to be used. To estimate project impacts, it is assumed that up to five crews could be present at any time; three crews performing open cut construction and two crews performing trenchless construction.

TABLE 1-3
SUMMARY OF MAJOR CONSTRUCTION ACTIVITIES

Construction Activity	Quantity
Ground Disturbance	42 acres
Estimated Excavation	73,000 cubic yards
Material Disposal	52,000 cubic yards
Maximum Daily Construction Personnel	87 persons[1]
External Vehicle Trips per Day	104 truck trips[2]
	174 worker vehicle trips[3]

1. Open cut assumptions: 3 crews of 19 workers plus 2 inspectors shared across crews = 59
   Trenchless assumptions: 2 crews of 13 workers = 28
   Total maximum daily construction personnel: 59+28=87
2. Open cut assumptions: 32 hauls per day x 3 crews = 96 truck trips
   Trenchless assumptions: 4 truck hauls per day x 2 crews = 8 truck trips
   Total truck trips: 96+8=104 truck trips
3. Open cut assumptions: 3 crews x 19 workers per day x 2 trips (AM and PM) + 2 inspectors (each make 1 roundtrip) for additional 4 trips = 3*19*2+4=118 worker vehicle trips
   Trenchless assumptions: 2 crews x 13 workers per day x 2 trips (AM and PM) + 2 inspectors (each make 1 roundtrip) for additional 4 trips = 2*13*2+4=56 worker vehicle trips
   Total worker vehicle trips: 118+56=174 vehicle trips

TABLE 1-4
EQUIPMENT ANTICIPATED IN CONSTRUCTION AREAS – OPEN CUT METHOD

Type of Equipment[1]	Quantity Used[1]	Duration (days)[2]	Maximum Daily Use (hours)
Grubbing and Pavement Removal			
Concrete saw	1	50	8
Loader	1	130	8
Water Truck	1	130	8
Backhoe	1	130	8
Pipeline Excavation & Installation			
Excavator	1	462	8
Loader	1	462	8
Welders	2	462	8
Water Truck	1	462	8
Sheepsfoot Compactor	1	462	8
Backhoe	1	462	8
Trailer Mounted Generator	1	462	24
Sump Pump	2	462	24
Pipe Delivery Truck	5	62	4
AC/Base/Bedding Delivery Truck	5	62	8
Concrete Truck	5	62	8
Road Restoration			
Paver	1	25	8
Roller	2	25	8
Dump Truck	5	25	8
Street Sweeper	1	25	8

1. Equipment per segment/crew performing open cut pipeline installation
2. Total use duration for all construction

TABLE 1-5
EQUIPMENT ANTICIPATED IN CONSTRUCTION AREAS –TRENCHLESS METHOD

Type of Equipment[1]	Quantity Used[1]	Duration (days)[2]	Maximum Daily Use (hours)
Jack and Bore Construction			
Pit Excavation			
Excavator	1	130	8
Loader	1	130	8
Backhoe	1	130	8
Auger Rig	1	130	8
Trailer Mounted Generator	1	130	24
Well Pump	1	130	24
10 Wheel Dump Truck	2	130	8
Casing Installation			
Excavator	1	65	8
Backhoe	1	65	8
Welder	1	65	8
Trailer Mounted Generator	1	5	24
Well Pump	1	5	24
Backfill			
Excavator	1	65	8
Loader	1	65	8
Sheepsfoot Compactor	1	65	8
10 Wheel Dump Truck	2	65	8
Water Truck	1	65	8
Horizontal Directional Drilling			
Pit Excavation			
Excavator	1	2	8
Loader	1	2	8
Backhoe	1	2	8
10 Wheel Dump Truck	2	2	8
Pipe Installation			
Excavator	1	5	8
Auger Rig	1	5	8
Welder	1	15	8

TABLE 1-5 Cont.

Type of Equipment[1]	Quantity Used[1]	Duration (days)[2]	Maximum Daily Use (hours)
Horizontal Directional Drilling			
Casing and Pipeline Installation via HDD			
HDD rig	1	90	8
Excavator	1	90	8
Slurry Separation Plants	1	90	8
Slurry and Grout Pumps	2	90	8
Welders	2	90	8
Soil-Cement Mixing Machine	1	90	8
Jet Grouting Rig	1	90	8
Backhoe	1	90	8
Backfill			
Excavator	1	2	8
Loader	1	2	8
Sheepsfoot Compactor	1	2	8
10 Wheel Dump Truck	2	2	8
Water Truck	1	2	8

1. Equipment per crew
2. Total use duration for all construction

1.11.1 Construction Schedule

Construction is assumed to last approximately 30 months, which is based on an average pipeline installation rate of 120 feet per day. This includes time for utility relocation, design adjustments, submittals, pipe delivery, and start-up.

1.12 Operations and Maintenance of New Facilities

1.12.1 Annual Water Deliveries

Based on a hydraulic analysis performed, a 36-inch diameter pipeline could deliver as much as 18,800 AFY, if this volume of water was available. However, the availability of water is limited.

DWR prepares a biennial report to assist SWP customers and local planners in assessing the near- and long-term availability of supplies from the SWP. DWR issued its most recent update, the 2017 DWR State Water Project Delivery Capability Report (DCR), in March 2018. In the 2017 update, DWR provides supply estimates for SWP customers to use in their planning efforts, including for use in Urban Water Management Plans (UWMPs). The 2017 DCR includes DWR's estimates of SWP water supply availability under both current and future conditions.

DWR's estimates of SWP deliveries are based on a computer model that simulates monthly operations of the SWP and Central Valley Project systems. Key assumptions and inputs to the model include the facilities in the system, hydrologic inflows to the system, regulatory and operational constraints on system operations, and projected demands for SWP water. For example, the 2017 DCR uses the following assumptions to model current conditions: existing facilities, hydrologic inflows to the model based on 82 years of historical inflows (1922 through 2003), current regulatory and operational constraints, and demands at maximum Table A entitlements.

To evaluate SWP supply availability under existing conditions, the 2017 DCR considers the impacts on SWP delivery capability due to climate change, sea level rise, and multiple Delta-specific concerns: the variability of Delta inflows seasonally and annually, the vulnerability of the Delta's conveyance system and structure due to floods and earthquakes, and water quality objectives that address Delta ecosystem health. Consideration is also given to the major Delta policy planning efforts currently underway: The Delta Plan and the California WaterFix. With these factors, the 2017 DCR projects that under existing conditions (2017), the average annual delivery of Table A water is estimated at 62%.

In a very dry year or in the event of infrastructure failure, it is possible there would be no SWP delivery.

Deliveries could also be impacted by capacity limitations in the MWD and Calleguas water transmission and treatment facilities because wheeling agreements would be for excess capacity not being used by MWD and Calleguas customers. More capacity would typically be available in the winter than in the summer.

1.12.2 Pumping Requirements

Flow from Calleguas to the City, and flow from the City to Calleguas, is expected to be by gravity. No pumping is required.

1.12.3 Maintenance Activities

Regular maintenance activities would include exercising the isolation valves and the valves for the air vacuum/release valves and blow-offs. Routine maintenance of the control valves, flow meter(s), and Supervisory Control and Data Acquisition (SCADA) equipment at the meter facility would also be required. This would generate approximately four trips a year, although more trips might be necessary during start up, testing, or shut down activities.

1.12.4 Pipeline Flushing

Flushing of the pipeline would be required upon startup of the interconnection and after it has been out of service for more than a week or two for disposal of water due to degradation of water quality (reduction in disinfection residual) within the pipeline. During a flushing event, water could be delivered/discharged by gravity to the United connection at Vineyard Avenue for beneficial use (groundwater recharge) in United's existing Noble and/or Ferro Recharge Basins. The United connection would include a tee connection to the pipeline, isolation valves, a flow

meter, a pressure reducing valve, and the appropriate piping to convey the water to the recharge basins.

1.13 Purpose and Intended Uses of the EIR

The proposed project requires the discretionary approval of the City of Ventura. Therefore, it is subject to the requirements of the California Environmental Quality Act (CEQA). In accordance with Section 15121 of the *CEQA Guidelines,* the purpose of this EIR is to serve as an informational document that:

> *...will inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.*

This EIR has been prepared as a Project EIR pursuant to Section 15161 of the *CEQA Guidelines.* A Project EIR is appropriate for a specific development project. As stated in the *CEQA Guidelines:*

> *This type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project, including planning, construction, and operation.*

The City is the Lead Agency under CEQA. Calleguas will make decisions on the proposed project and is also a Responsible Agency under CEQA. United and Casitas will make decisions about participating in the project based on the EIR and are also Responsible Agencies under CEQA. MWD may also use the EIR to inform future decisions such as a wheeling agreement and therefore is a Responsible Agency. Other agencies will rely on information in the EIR to inform their decisions over the issuance of specific permits related to project construction or operation. State agencies, such as the SWRCB and Department of Transportation (Caltrans), will be involved in reviewing or approving the proposed project. The EIR is an informational document for decision-makers and the public that identifies any significant environmental impacts and describes feasible alternatives and mitigation measures to avoid or reduce those significant impacts. The EIR is also intended to support the permitting processes of all agencies whose discretionary approvals must be obtained for this project.

Permits required for the proposed project consist primarily of encroachment permits and one watercourse permit. Final design of the blending station may require design review, if applicable. Table 1-6 lists the permits that are anticipated to be necessary to implement the project.

TABLE 1-6
POTENTIALLY REQUIRED PERMITS, APPROVALS, AND CONSULTATIONS

Agency	Permits/Approvals Potentially Needed to Implement the Project
City of Ventura	Building Permit (Blending Station)
City of Ventura	Design Review Application (as applicable to Blending Station)
City of Ventura Public Works	Encroachment Permit (Segment 2)
County of Ventura	Road Encroachment Permit (Segment 2)
City of Camarillo Department of Public Works	Encroachment Permit (Segments 18 and 19)
Caltrans	Caltrans Standard Encroachment Permit (Segment 18)
RWQCB	General National Pollutant Discharge Elimination System (NPDES) Permit for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (General NPDES Permit No CAG994004)
SWRCB	NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities
Southern California Regional Rail Authority (SCRRA)	Right-of-Way Encroachment Agreement (Segment 2)
VCWPD	Watercourse Permit (Segments 2, 10, 13, 16 and location of any dewatering discharge)

Section 2: Environmental Impact Analysis

The City, as the CEQA Lead Agency, has prepared this EIR to identify potential environmental impacts associated with the proposed project. This document evaluates 19 environmental resources and provides a discussion of mitigation measures recommended to minimize potential impacts in each resource area. The EIR uses the 2018 CEQA Guidelines (AEP 2018) to evaluate resource impacts. The City of Ventura and City of Camarillo have not adopted any local CEQA significance thresholds. The assessment of project impacts that may adversely affect land uses and/or resources located within these cities is based on the environmental checklist provided in the State CEQA Guidelines (Appendix G).

The County of Ventura has developed its own Initial Study Assessment Guidelines (ISAG) (Ventura County 2011). Where appropriate, these analyses use the ISAG thresholds to determine the significance of project impacts within its jurisdiction. The document also references the policies contained within the City of Ventura General Plan (2005), the City of Ventura General Plan Final EIR (2005), the Saticoy and Wells Community Plan (2009), Development Code (2009) and EIR (2009), the Ventura County General Plan, the El Rio/Del Norte Area Plan (2011), and the City of Camarillo General Plan (2004).

The resource topics considered in this EIR include:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality and Greenhouse Gases
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

2.1 Aesthetics

This section evaluates potential impacts to scenic resources, visual conditions, and light and glare resulting from the proposed project and alternatives.

2.1.1 Physical Setting

The proposed project site is located in the southern portion of Ventura County. Scenic resources in the vicinity and within the viewshed of the project area include mountains, plains, open space, and waterways.

The proposed alignment extends southeast from the Saticoy area in the City of Ventura, through the unincorporated community of El Rio, and terminates in the City of Camarillo. The alignment crosses a relatively flat coastal plain with gentle sloping hillsides in the section within the City of Camarillo. Steeper hillsides and mountains can be seen to the north from the project area, towards Santa Paula and the Sespe Wilderness Area.

Land uses along the alignment within the City of Ventura and parts of the City of Camarillo are primarily residential neighborhoods. Within the unincorporated County areas, agricultural fields dominate the landscape with expansive fields of row crops and some orchards, often lined by windrows. Along the segment at Daily Drive, Highway 101 is a clearly visible feature to the south, as it runs in parallel to the road. The Santa Clara River, which is crossed by the western portion of the alignment, provides a natural scenic resource dominated by riparian vegetation and an exposed sandy streambed which is dry for most of the year.

Corridors of scenic value include local rights of way and Highway 101. The City of Ventura has identified that portion of Highway 101 within the City as a scenic corridor, as well as North Bank Drive. The proposed project alignment would cross North Bank Drive where it joins with the southern end of Saticoy Avenue, along Segment 2.The County of Ventura has identified Highway 101 in the project region as potentially eligible for State scenic highway designation. The City of Camarillo has designated all of Highway 101 within the City of Camarillo as a scenic corridor. The project area is visible from Highway 101 where the alignment is located within the City of Camarillo.

Nighttime lighting in the project area results primarily from streetlights within the residential areas and vehicle headlights on nearby roadways.

2.1.2 Regulatory Setting

Development within the cities of Ventura and Camarillo and the County unincorporated areas is subject to various regulatory guidelines that aim to preserve the community's scenic resources and visual character, as described in the following.

- City of Ventura
    - General Plan. There is one primary policy applicable to aesthetic resources, with two actions applicable to the project. Policy 4D: Protect views along scenic routes. Action 4.36 includes North Bank Drive among the scenic routes.

- Zoning Ordinance. The Zoning Ordinance establishes setback, parking and sign standards, building height limits, hillside development restrictions , and building densities. Though facilities for the production, transmission, and storage of water are exempt from local zoning the City of Ventura will follow its own policies related to zoning standards.

- Saticoy and Wells Development Code. This Code addresses those areas in the Saticoy and Wells Community Plan Area that are within the incorporated jurisdiction of the City of Ventura and was adopted to protect and promote the public health, safety, comfort, convenience, prosperity, and general welfare of the community. The Blending Station (Segment 2) may be constructed in uses defined as “Civic District” and “Parks & Open Space” per this Code, re: 24S.100.045.

- Ventura County General Plan. Applicable goals and policies include the following:

  - Goal 1.7.1-1: Preserve and protect the significant open views and visual resources of the County.

  - Goal 1.7.1-2: Protect the visual resources within the viewshed of lakes and State and County designated highways, and other scenic areas as may be identified by an area plan.

  - Goal 1.7.1-3. Enhance and maintain the visual appearance of buildings and developments.

  - Policy 1.7.2-1: Notwithstanding Policy 1.7.2-2, discretionary development which would significantly degrade visual resources or significantly alter or obscure public views of visual resources shall be prohibited unless no feasible mitigation measures are available and the decision-making body determines there are overriding considerations.

  - Policy 1.7.2-2: Scenic Resource Areas, which are depicted on the Resource Protection Map [there are no Scenic Resources Areas within the vicinity of the project], shall be subject to the Scenic Resource Protection (SRP) Overlay Zone provisions and standards set forth in the Non-Coastal Zoning Ordinance.

- El Rio/Del Norte Area Plan. The scenic resources goal aims to protect and, if possible, improve the viewshed from Highway 101, Highway 118, Highway 232, Rose Avenue, Santa Clara Avenue, and Central Avenue within the Area Plan boundary. Those roadways are located within the project area or immediate vicinity. Related policies focus on signage, landscaping, and architectural design and building material.

- City of Camarillo General Plan. The City of Camarillo Community Design Element supports the retention of open space lands to preserve the scenic qualities of hillsides, agriculture areas, and waterways. The Scenic Corridor goal is to maintain the visual quality and scenic views along designated corridors. Highway 101 is a designated scenic

corridor in the project area, where it runs parallel to Daily Drive. The following objectives are applicable:

- Objective SC-1.1: Enhance existing view corridors along scenic corridors. Maintain the visual quality and scenic views along designated corridors.

- Objective SC-1.2: Ensure that development is sited and designated to protect scenic corridors and open space/landscape areas, blending man-made and man-introduced features with the natural environment.

These local ordinances, regulations, and policies are captured by the significance thresholds used to evaluate the project.

2.1.3 Impact Analysis

2.1.3.1 Significance Thresholds

This evaluation assesses the visual resources existing within the project area against anticipated changes and compatibility of the project with the visual character of the area. The evaluation is based on review of the available project reports and details, area maps, aerial photographs, and site reconnaissance.

City of Ventura and City of Camarillo

Pursuant to CEQA Guidelines, potentially significant impacts would occur if implementation of the project would:

a) Have a substantial adverse effect on a scenic vista;

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings;

d) In an urbanized area, conflict with applicable zoning and other regulations governing scenic quality;

e) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

County of Ventura

The ISAG states the significance of an impact to a scenic resource, including impacts from daytime glare, is materially impaired when a project:

f) Is located within an area that has a scenic resource that is visible from a public viewing location and would physically alter the scenic resource either individually or cumulatively when combined with recently approved, current, and reasonably foreseeable future projects;

g) Substantially obstructs, degrades, or obscures a scenic vista, either individually or cumulatively when combined with recently approved, current, and reasonably foreseeable future projects;

h) Is inconsistent with scenic resource policies of the Ventura County General Plan Goals, Policies and Programs or policies of the applicable Area Plan;

i) Causes daytime glare such as a new source of disability glare or discomfort glare for motorists travelling along any road of the County Regional Road Network. A project would be considered significant when the glare source to the median of the background ratio exceeds 3:1 in a luminance histogram.

2.1.3.2 Project-Specific Impacts

Potential project-specific impacts are described in the following.

Scenic Vistas and Highways (Significance Thresholds a, b, g)

Various rights of way within and near the project area are identified as offering scenic value, including North Bank Drive in Ventura, highways and avenues within unincorporated County area, and Highway 101. Construction of the proposed project would not substantially alter views from those rights of way, except temporarily during construction.

Most of the pipeline would be placed underground and the ground surface restored to its pre-project condition. The majority of the alignment would be located within privately held agricultural land, which is often not directly visible or accessible from public streets or rights of way. Above-ground project facilities and appurtenances may be partially visible from roadways, but most are relatively small and would be compatible with the existing visual environment. Fencing and landscaping would be used to screen the facilities. Generally, those project components would be virtually undetectable from scenic corridors. The proposed blending/monitoring station would be located outside of the viewshed of any scenic corridors.

Project implementation would not result in substantial damage to scenic resources, including trees, rock outcroppings, or historic buildings within a state scenic highway, nor within corridors of scenic value.

Visual Character and Quality (Significance Thresholds c, d, f, h)

Most above-ground project components would be barely visible within the existing landscape and would not substantially degrade the existing visual character or quality of the site and its surroundings. The proposed blending/monitoring station would be a new, visible structure within the project area or part of an existing facility if located at the Saticoy Conditioning Facility. It would be located at the western end of the alignment, within an area of the City of Ventura zoned for residential, neighborhood general, civic, and parks uses. The proposed structure is not anticipated to be inconsistent with the existing visual character or quality of the site. Final design details will be determined during the City's design review phase of the building permit process and will be consistent with the Saticoy and Wells Development Code requirements.

Impacts to the visual quality along the alignment are possible during active construction, but are not anticipated to be substantial and would be temporary. After construction, the pipeline and appurtenances would be located underground and no longer visible. Other small appurtenances such as airvacs, marking posts (if used), bollards, and to a lesser extent manholes would be visible, but would not be incompatible with the existing visual character or quality of the site.

Lighting and Glare (Significance Thresholds e, i):

The pipeline would not have new substantial above-ground facilities that create sources of light or glare. The blending station would have lighting to provide safe access to the facility, but lighting would be hooded and directed downward to prevent glare.

2.1.3.3 No Project Alternative

This alternative would not result in any physical changes that would have potential to substantially affect or alter the visual environment of the project area.

2.1.3.4 Alternative Alignment B

This alternative aligns much of the pipeline within public streets and rights of way. A major portion of the alignment would be located along Central Avenue, which has scenic value, according to the El Rio/Del Norte Area Plan, as mentioned above. However, as with the proposed project, Alternative Alignment B would not substantially alter views along the alignment, except temporarily during construction. Most of the pipeline would be placed underground and within existing roadways, and the ground surface restored to its pre-project condition. Most of the above-ground project facilities and appurtenances are relatively small and would not have substantial impacts on scenic resources, nor would they substantially degrade the existing visual character or quality of the site and its surroundings. The construction of the blending/monitoring station would be the same as with the proposed project and would not be incompatible with the existing visual character or quality of the site or surroundings.

No different or additional impacts on aesthetics are expected from Alternative Alignment B in comparison to the proposed project.

2.1.4 Mitigation Measures

Not applicable. Impacts would be less than significant; therefore, mitigation is not required.

2.1.5 Significance After Mitigation

Not applicable. Impacts would be less than significant without mitigation.

2.2 Agriculture and Forestry Resources

This section evaluates potential impacts to agriculture and forestry resources resulting from the proposed project and alternatives.

2.2.1 Physical Setting

Ventura County is one of the principal agricultural counties in the state. In 2015, the gross value for Ventura County agriculture was nearly $2.2 billion, a 2.7% increase over 2014. Strawberries, lemons, raspberries, nursery stock, and celery are among those most valuable crops in the County and were the top five crops in 2015. Total acreage of irrigated cropland in Ventura County is approximately 96,000 acres, most of which is in the southern portion of Ventura County (County of Ventura 2016a).

Most of the proposed alignment crosses through privately held agricultural land, which is located within the unincorporated County portion of the project area. The majority of the lands are cultivated with row crops and some orchards. Farmland designations within these areas, according to the California Resources Agency Farmland Mapping and Monitoring Program, include Prime Farmland, Unique Farmland, and Farmland of Statewide Importance. The project would cross through a large portion of the area covered by the Oxnard-Camarillo Greenbelt agreement, which lies within unincorporated Ventura County. These areas are preserved in agricultural or other open space uses by the cities of Camarillo and Oxnard, and the County. The alignment runs along dirt access roads within the agricultural parcels and would be installed underground.

2.2.2 Regulatory Setting

Various regulatory programs and mechanisms are in place to preserve farmland and agricultural activity, and apply to the project area.

- City of Ventura General Plan. There is one primary policy applicable to agriculture and forestry resources, with three actions applicable to the project.
    - Policy 3D: Continue to preserve agricultural and other open space lands within the City's Planning Area. Action 3.20: Pursuant to SOAR [Save Open Space and Agricultural Resources initiative], adopt development code provisions to "preserve agricultural and open space lands as a desirable means of shaping the City's internal and external form and size," and "continue to preserve agricultural and other open space lands within the City's Planning Area." Action 3.21: Adopt performance standards for non-farm activities in agricultural areas that protect and support farm operations, including requiring non-farm uses to provide all appropriate buffers as determined by the Agriculture Commissioner's Office. Action 3.22: Offer incentives for agricultural production operations to develop systems of raw product and product processing locally.
- Saticoy and Wells Development Code. There is one primary policy applicable to agriculture and forestry resources.

- Policy 11I. Continue to preserve agricultural uses in the City's Sphere of Influence and as identified in the greenbelt agreement between the City of Ventura and Santa Paula, and require new development to provide all necessary buffers.

- Important Farmland Inventory (IFI). The County of Ventura uses the Federal IFI system to inventory County farmlands. The IFI system evaluates farmland based on overall productive capabilities, using soils data and land use information. These classes are similar to California's Department of Conservation Farmland Mapping and Monitoring Program mentioned above, and include five classifications: Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land.

- Ventura County General Plan. Multiple policies are outlined in the County General Plan (County of Ventura 2016b) for farmland protection:

  - Policy 1.6.2.1: Discretionary development located on land designated as Prime or Statewide Importance shall be planned and designed to remove as little land from agricultural production as possible and minimize impacts on topsoil.

  - Policy 1.6.2.2: Hillside agricultural grading shall be regulated by the Public Works Agency through the Hillside Erosion Control Ordinance.

  - Policy 1.6.2.3 Land Conservation Act contracts shall be encouraged on irrigated farmlands.

  - Policy 1.6.2.4 The Public Works Agency shall plan transportation capital improvements so as to mitigate impacts to important farmlands to the extent feasible.

  - Policy 1.6.2.5 The County shall preserve agricultural land by retaining and expanding the existing Greenbelt Agreements and encouraging the formation of additional Greenbelt Agreements.

  - Policy 1.6.2.6 Discretionary development adjacent to Agriculture-designated lands shall not conflict with agricultural use of those lands.

- El Rio/Del Norte Area Plan. The following goals are applicable to agriculture, according to the El Rio/Del Norte Area Plan (County of Ventura 2011a):

  - Goal 3.2.1-1: Preserve irrigated agricultural lands in the El Rio/Del Norte area.

  - Goal 3.2.1-2. Minimize incompatibilities between agricultural operations and other land uses.

  - Goal 3.3.1-1: Preserve the essentially undeveloped lands which surround the Existing Community designated areas of the El Rio/Del Norte area to protect

lands which contain biological and mineral resources and water recharge/storage basins.

- Save Open Space and Agricultural Resources (SOAR) Initiative. Initially approved in 1995 in the City of Ventura, a total of nine SOAR initiatives have been enacted to protect open space and agricultural land across Ventura County. The initiative blocks the Ventura County Board of Supervisors from rezoning unincorporated open space, agricultural, or rural land for development without a vote of the people. City SOAR initiatives require voter approval before rezoning agricultural land or allowing urban development beyond a City Urban Restriction Boundary.

- Greenbelt Agreements. Several cities within Ventura County and the County have adopted these agreements, which are intended to prevent inappropriately placed development and protect open space and agricultural lands between city boundaries. Under the agreements, cities commit to not annexing any property while the County agrees to restrict development to uses consistent with existing zoning within the greenbelt. The agreements reinforce the County Guidelines for Orderly Development. The Oxnard-Camarillo Greenbelt agreement covers much of the project area within the unincorporated County portion.

- Williamson Act/Land Conservation Act. The California Land Conservation Act of 1965 (LCA), also known as the Williamson Act, enables local governments to enter into contracts with private landowners to restrict specific land parcels to agricultural or related open space use. Landowners are incentivized by reduced property tax assessments. The minimum contract term is 10 years and is renewed automatically each year unless a nonrenewal process is initiated by the landowner or local government or the contract is cancelled. The proposed project intersects two land parcels that are enrolled under the Williamson Act.

- Ventura County Right to Farm Ordinance. Adopted by the Ventura County Board of Supervisors in the late 1970s, the Right to Farm Ordinance is intended to protect the farming community from legal action taken by new property owners or occupants that would inhibit their ability to continue agricultural production. The ordinance protects farmers engaged in agricultural activity from public nuisance claims that may arise due to agricultural wind machines, odors, dust, or noise. In addition, the ordinance requires disclosure to new purchasers of adjacent properties of potential conflicts with agricultural activities. The City of Ventura approved a Right-To-Farm Ordinance in 1997. Similar to the County ordinance, the City's ordinance also provides protection to farmers against nuisance claims and frivolous lawsuits involving legal and accepted farming practices.

- Ventura County Programs. Additional programs that the County has adopted for preserving farmland include the following:

    - Agricultural land use designation, which established a 40-acre minimum parcel size and Agriculture-Exclusive zoning.

- Participation in water resources development and conservation programs to ensure long-term water availability for agriculture.

These local regulations, ordinances, and policies are captured by the significance thresholds used to evaluate the project.

2.2.3 Impact Analysis

2.2.3.1 Significance Thresholds

This evaluation assesses the potential impacts on agriculture and forestry resources in the project area.

City of Ventura and City of Camarillo

Pursuant to CEQA Guidelines, potentially significant impacts would occur if implementation of the project would:

a) Convert Prime Farmland, Unique Farmland, or 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 non-agricultural use;

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract;

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g));

d) Result in the loss of forest land or conversion of forest land to non-forest use;

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

County of Ventura

The ISAG states the significance of an agricultural resource, including soils and land use compatibility, is materially impaired as follows:

<u>Agricultural Resources – Soils</u>

f) Any project that would result in the direct and/or indirect loss of soils designated Prime, Statewide Importance, Unique or Local Importance will have an impact;

g) Any project that would result in the direct and/or indirect loss of agricultural soils meeting or exceeding the criteria identified in Table 2.2-1 will be considered as having a significant project impact:

TABLE 2.2-1
AGRICULTURAL SOILS CRITERIA TO DETERMINE SIGNIFICANCE

General Plan Land Use Designation	Important Farmland Inventory Classification	Acres Lost
Agricultural:	Prime/Statewide:	5 acres
	Unique:	10 acres
	Local:	15 acres
Open Space/Rural:	Prime/Statewide:	10 acres
	Unique:	15 acres
	Local:	20 acres
All Others:	Prime/Statewide:	20 acres
	Unique:	30 acres
	Local:	40 acres

Agricultural Resources – Land Use Incompatibility

h) Project Impacts - Any land use or project that is not defined as Agriculture or Agricultural Operations (which includes animal husbandry, agricultural contractors' service and storage yards and buildings, crop and orchard production, and related accessory uses and structures) in the zoning ordinances will be evaluated for effects on adjacent classified farmland. Analysis is based on the distance between new non-agricultural structures or uses and any common lot boundary line adjacent to off-site classified farmland. Any project that is closer than the distances set forth in Table 2.2-2 will be considered to have a potentially significant environmental effect on agricultural resources, unless justification exists for a waiver or deviation from these distances.

TABLE 2.2-2
EVALUATION FOR ALL NON-AGRICULTURE OR NON-AGRICULTURAL OPERATIONS PROJECTS

	Distance from Non-Agricultural Structure or Use and Common Boundary Line Adjacent to Classified Farmland
Without vegetative screening	300 feet
With vegetative screening	150 feet
New K-12 School	1,320 feet

2.2.3.2 Project-Specific Impacts

Conversion of Farmland (Significance Threshold a)

While several segments of the project are proposed to be installed within farmland parcels, the project would not be expected to convert or contribute to the conversion of farmland. The pipeline would be placed underground within these parcels and would run along existing access roads. As a result, no changes to the existing land uses along the alignment would be required and, following construction, it is anticipated that all farmland along the project segments can and would return to active agriculture.

Conflict with Existing Zoning or Williamson Act Contract, Land Use Incompatibility (Significance Thresholds b, h)

The project would not result in the conversion of farmland and would not require re-zoning of existing agricultural land uses. There would be no conflict with existing zoning for agricultural use.

The proposed project would cross through a large portion of the area covered by the Oxnard-Camarillo Greenbelt agreement, which lies within the unincorporated County portion. The proposed project would not result in changes to uses of open space or agricultural lands within that area and is therefore not inconsistent with the intent of the Greenbelt Agreements. For the same reasons, the proposed project would not conflict with the SOAR initiative or County General Plan policies that aim to preserve farmland.

The alignment of the proposed project crosses two parcels that are enrolled in Williamson Act contracts. However, the pipeline would be placed underground and would not result in changes or impacts to the agricultural or related open space use of those parcels over the long-term.

Potential Impacts to Forestry Resources (Significance Thresholds c, d)

The nearest forest land or timberland is located within the Los Padres National Forest, located approximately 11 miles northwest from the western end of the proposed project. The proposed project would not have any impacts to those lands, including rezoning or loss or conversion of those forest lands to non-forest uses.

Other Changes Resulting in Conversion of Farmland or Forest Land (Significance Threshold e)

The project would not have a direct effect on the farmland that it crosses, nor would the implementation result in other changes to the existing environment that could result in conversion of farmland to non-agricultural use. The pipeline would be placed underground within the parcels zoned for agricultural uses and would not impact adjacent agricultural operations or land uses over the long-term. Operation and maintenance activities would not prevent continued agricultural operations on adjacent parcels. In addition, the County SOAR initiative would prevent conversion or modification of current agricultural practices at existing farmlands. Similarly, the project would not involve other changes to the environment that could impact forest lands or result in their conversion.

Loss of Agricultural Soils (Significance Thresholds f, g)

The proposed project would involve trenching the proposed pipeline through agricultural lands. The soils removed would be stockpiled and replaced over the pipeline after construction. No loss of agricultural soils is anticipated.

2.2.3.3 No Project Alternative

This alternative would not result in any modification or impacts to existing farmlands or forest land, including loss or conversion of important farmland or forest land. Nor would the no project alternative result in conflicts with or modifications to adjacent agricultural operations or forest land.

2.2.3.4 Alternative Alignment B

Under this alternative, much of the alignment would be installed within Central Avenue, a public right of way, rather than along unpaved access roads within privately-held agricultural land parcels. With the alignment along Central Avenue, the project would not directly result in conversion or loss of agriculture or forest lands. Once the pipeline is installed, roadways would be returned to pre-construction conditions and have no effect on the adjacent farmland. Impacts would be less than the proposed project.

2.2.4 Mitigation Measures

Not applicable. Impacts would be less than significant; therefore, mitigation is not required.

2.2.5 Significance After Mitigation

Not applicable. Impacts would be less than significant without mitigation.

2.3 Air Quality and Greenhouse Gas Emissions

This section evaluates potential impacts to air quality and greenhouse gas emissions resulting from the proposed project and alternatives.

2.3.1 Physical Setting

Climatological Setting

The proposed facilities would be located in the Oxnard Plain Airshed, a sub-basin of the South-Central Coast Air Basin (SCCAB). The Oxnard Plain Airshed is characterized by cool winters and warm, dry summers tempered by cooling sea breezes. Summer, spring, and fall weather is generally a result of the movement and intensity of the semi-permanent high-pressure area located several hundred miles to the west. Marine influences typically predominate during this period and cause afternoon onshore flow and evening off-shore flow. Winter weather is usually a result of the size and location of low pressure weather systems originating in the north Pacific Ocean.

At the Oxnard Airport (6.3 miles to the south of the City connection point), the maximum average monthly temperature is 72.4 degrees Fahrenheit (°F) in August, and the minimum average monthly temperature is 45.2°F in December and January. The average monthly maximum precipitation is 2.68 inches in February, and the average monthly minimum is 0.01 inches in August, with an average annual precipitation of 10.39 inches (1998-2008 averages). At the Oxnard Airport, the average monthly wind speed varies from 2.6 miles per hour (mph) in August to 4.5 mph in December. However, winter storms may bring short periods of much higher wind speeds. The typical wind direction is from the northwest and west. Onshore wind flow is prevalent, with a marine cloud layer causing heavy fog (visibility one-quarter mile or less) an average of 29.4 days per year.

Ambient Air Quality

Air quality in Ventura County is directly related to emissions and regional topographic and meteorological factors. California is divided geographically into air basins for the purpose of managing the air resources of the State on a regional basis. An air basin generally has similar meteorological and geographic conditions throughout. The SCCAB encompasses the counties of Ventura, Santa Barbara, and San Luis Obispo.

The U.S. Environmental Protection Agency (USEPA) and California Air Resources Board (CARB) classify an area as attainment, unclassified, or nonattainment depending on whether the monitored ambient air quality data shows compliance, insufficient data available, or non-compliance with the ambient air quality standards, respectively. The relevant National and California Ambient Air Quality Standards (NAAQS and CAAQS) are provided in Table 2.3-1.

Greenhouse Gases (GHG) and Global Climate Change

Climate change, often referred to as “global warming,” is a global environmental issue that refers to any significant change in measures of climate, including temperature, precipitation, or wind. Climate change refers to variations from baseline conditions that extend for a period

(decades or longer) of time and is a result of both natural factors, such as volcanic eruptions, and anthropogenic (man-made) factors, including changes in land-use and burning of fossil fuels. Anthropogenic activities, such as deforestation and fossil fuel combustion, emit heat-trapping GHGs, defined as any gas that absorbs infrared radiation within the atmosphere.

TABLE 2.3-1
AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards	Federal Standards (NAAQS)	
			Primary	Secondary
Ozone (O_3)	1-hour	0.09 ppm (180 µg/m^3)	--	--
	8-hour	0.07 ppm (137 µg/m^3)	0.070 ppm[1] (137 µg/m^3)	Same as primary
Respirable Particulate Matter (PM_{10})	24-hour	50 µg/m^3	150 µg/m^3	Same as primary
	Annual	20 µg/m^3	--	--
Fine Particulate Matter ($PM_{2.5}$)	24-hour	--	35 µg/m^3	Same as primary
	Annual	12 µg/m^3	12 µg/m^3	Same as primary
Carbon Monoxide (CO)	1-hour	20 ppm (23 µg/m^3)	35 ppm (40 mg/m^3)	--
	8-hour	9 ppm (10 mg/m^3)	9 ppm (10 mg/m^3)	--
Nitrogen dioxide (NO_2)	1-hour	0.18 ppm (339 µg/m^3)	0.10 ppm (188 µg/m^3)	Same as primary
	Annual	0.030 ppm (57 µg/m^3)	0.053 ppm (100 µg/m^3)	Same as primary
Sulfur dioxide (SO_2)	1-hour	0.25 ppm (655 µg/m^3)	0.075 ppm (196 µg/m^3)	--
	3-hour	--	--	0.50 ppm (1300 µg/m^3)
	24-hour	0.04 ppm (105 µg/m^3)	0.14 ppm (for certain areas)	--
	Annual Arithmetic Mean		0.030 ppm (for certain areas)	

1. The 2008 (0.075 ppm) Federal 8-hour ozone standard was revised to 0.070 ppm in 2015.

According to data from the National Oceanic and Atmospheric Administration and the National Aeronautics and Space Administration, the Earth's average surface temperature has increased by about 1.2 to 1.4ºF in the last century. Average temperatures have risen across the contiguous 48 states since 1901, with an increased rate of warming over the past 30 years. Eight of the top 10 warmest years on record have occurred since 1998. Average global temperatures show a similar trend, and all of the top 10 warmest years on record worldwide have occurred since 1998. Within the United States, temperatures in parts of the north, the west, and Alaska have increased the most.

2.3.2 Regulatory Setting

Attainment Status

Ventura County has been designated by the CARB and USEPA as unclassified or in attainment for all criteria ambient air pollutant standards with the exception of:

- Federal 2008 8-hour ozone standard: non-attainment, classified as "serious"
- California 1-hour ozone standard: non-attainment
- California particulate matter less than 10 microns (PM_{10}) standard: non-attainment

Planning for attainment of air quality standards involves the development and implementation of control measures to reduce the baseline inventory of air pollutants. The baseline (2012) air pollutant emissions inventory presented in the Ventura County Air Pollution Control District (APCD)'s 2016 Air Quality Management Plan, indicates mobile sources (on-road vehicles, trains, aircraft, marine vessels, farm equipment) account for about 45 percent of the Reactive Organic Compound (ROC) emissions and 88 percent of the oxides of nitrogen (NOx) emissions in the County.

Air Quality Monitoring

The ambient air quality of Ventura County is monitored by a network of five stations, located in El Rio, Ojai, Piru, Simi Valley, and Thousand Oaks. The nearest air quality monitoring station is the El Rio station (at Rio Mesa High School), located approximately 2.4 miles south of the Ventura connection point. Table 2.3-2 lists the monitored maximum concentrations and number of exceedances of air quality standards at this station for 2015 through 2017. As shown in Table 2.3-2, nitrogen dioxide concentrations monitored at the El Rio station did not exceed the State or Federal standards. The State 8-hour ozone standard was exceeded on very rare occasions. Concentrations of PM_{10} monitored at the El Rio station exceeded the State 24-hour standard an average of 16.3 sampling periods per year from 2015 through 2017. Concentrations of $PM_{2.5}$ monitored at the El Rio station exceeded the Federal 24-hour standard an average of 1.3 sampling periods per year from 2015 through 2017.

TABLE 2.3-2
SUMMARY OF AMBIENT AIR POLLUTANT DATA COLLECTED AT THE EL RIO MONITORING STATION

Parameter	Standard	Year		
		2015	2016	2017
Ozone – parts per million (ppm)				
Maximum 1-hr concentration monitored	0.09	0.070	0.084	0.084
Number of days exceeding CAAQS		0	0	0
Maximum 8-hr concentration monitored	0.070	0.066	0.071	0.071
Number of days exceeding 8-hour ozone NAAQS & CAAQS		0	1	1
PM_{10} – micrograms per cubic meter ($\mu g/m^3$)				
Maximum 24-hour average sample (California sampler)		92.0	101.6	286.0
Number of samples exceeding CAAQS	50	6	14	29
Number of samples exceeding NAAQS	150	0	0	1
$PM_{2.5}$ – micrograms per cubic meter ($\mu g/m^3$)				
Maximum 24-hour sample	35	25.5	22.7	81.3
Number of samples exceeding NAAQS	35	0	0	4
Nitrogen Dioxide – parts per billion (ppb)				
Maximum 1-hour sample		36.0	33.0	36.0
Number of samples exceeding CAAQS	180	0	0	0
Number of samples exceeding NAAQS	100	0	0	0

2.3.2.1 Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to population groups and/or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardio-respiratory diseases. Residential areas are also considered to be sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present.

Recreational land uses may be considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial and commercial areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent, as the majority of the workers tend to stay indoors most of the time. In addition, the working population is generally the healthiest segment of the public.

Residential land uses occur along the proposed pipeline alignment including:

- Henderson Road (Ventura)
- Saticoy Avenue (Ventura)
- North Bank Drive (Ventura, adjacent to the river crossing staging area)
- Rural residences just east of Vineyard Avenue (Ventura County)
- Avenida de Aprisa (Camarillo)
- Camino Tierra Santa (Camarillo)
- Corte Viento (Camarillo)

Three schools are located along the proposed pipeline alignment:

- Sacred Heart School (Henderson Road, Ventura)
- Douglas Penfield School (Henderson Road, Ventura)
- Saticoy Elementary (off of Henderson Road on Jazmin, Ventura)

2.3.2.2 Planning for Attainment of Ambient Air Quality Standards

Federal

The Federal government first adopted the Clean Air Act (CAA) in 1963 to improve air quality and protect citizens' health and welfare, which required implementation of the NAAQS. The NAAQS are revised and changed when scientific evidence indicates a need. The CAA also requires each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP). The CAA Amendments of 1990 added requirements for states with non-attainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is modified periodically to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins as reported by their jurisdictional agencies.

The USEPA has been charged with implementing Federal air quality programs, which includes the review and approval of all SIPs to verify compliance with the mandates of the CAA and its amendments, and to determine whether implementation of the SIPs will achieve air quality goals. If the USEPA determines that a SIP is inadequate, a Federal Implementation Plan that imposes additional control measures may be prepared for the non-attainment area. Failure to submit an approvable SIP or to implement the plan within the mandated time frame may result in application of sanctions to transportation funding and stationary air pollution sources within the air basin.

Pursuant to the CAA, State and local agencies are responsible for planning for attainment and maintenance of the NAAQS. The APCD and the CARB are the responsible agencies for providing attainment plans and demonstrating attainment of these standards within the proposed project area.

The APCD updated the County's Air Quality Management Plan (AQMP) in 2016. The update includes a strategy to attain the 2008 Federal 8-hour ozone standard. The 2016 AQMP also includes control strategies to be implemented both locally (Ventura County) and Statewide to reduce air pollutant emissions as needed to attain the Federal 8-hour ozone standard. The 2016 AQMP includes four new stationary source control measures to be adopted as rules to facilitate attainment of the Federal 8-hour ozone standard.

USEPA has not yet designated non-attainment areas for the 2015 8-hour ozone standard, but has indicated Ventura County is anticipated to attain this standard (0.070 ppm) by 2025 (Ventura County APCD 2017).

State

The California Clean Air Act (CCAA), signed into law in 1988, requires all areas to achieve and maintain attainment with the CAAQS by the earliest possible date. The CCAA, enforced by the CARB, requires that each area exceeding the CAAQS develop a plan aimed at achieving those standards. The California Health and Safety Code, Section 40914, requires air districts to design a plan that achieves an annual reduction in district-wide emissions of 5 percent or more, averaged every consecutive 3-year period. To satisfy this requirement, the local air districts are required to develop and implement air pollution reduction measures, which are described in their clean air plans, are incorporated into the SIP, and outline strategies for achieving the the CAAQS for criteria pollutants for criteria pollutants for which the region is classified as non-attainment.

In 1991, the APCD adopted an AQMP to attain the California ozone standards. The most recent update (dated January 2013) indicates Ventura County is making significant progress towards attaining the California 1-hour ozone standard. The "every feasible measure" analysis conducted for the update identified five existing APCD rules for enhancement and three possible new control measures to facilitate progress toward attainment.

Local

The APCD is the local agency that has primary responsibility for regulating stationary sources of air pollution located within its jurisdictional boundaries. To this end, the APCD implements air quality programs required by State and federal mandates, develops and enforces local rules and regulations based on air pollution laws, and educates businesses and residents about their role in protecting air quality. The APCD is also responsible for managing and permitting existing, new, and modified sources of air emissions within the County. Applicable rules and regulations for the proposed project include the following:

- Rule 51 (Nuisance): This rules states that a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. This rule would apply to fugitive dust generated during project-related construction.

- Rule 55 (Fugitive Dust): This rule regulates visible dust beyond the property line, opacity (amount of light blocked by a dust cloud), and track-out of soil onto adjacent roads and applies to construction activities. This rule would apply to dust generated by the installation of the proposed pipeline and related facilities.

2.3.2.3 Greenhouse Gases and Global Climate Change

GHG emissions are a global issue, as climate change is not a localized phenomenon. Eight recognized GHGs are described below. The first six are commonly analyzed for projects, while the last two are often excluded for reasons described below.

- Carbon Dioxide (CO_2): Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic degassing. Anthropogenic sources include burning fuels such as coal, oil, natural gas, and wood.
- Methane (CH_4): Natural sources include wetlands, permafrost, oceans, and wildfires; anthropogenic sources include fossil fuel production, rice cultivation, biomass burning, animal husbandry (fermentation during manure management), and landfills.
- Nitrous Oxide (N_2O): Natural sources include microbial processes in soil and water, including those reactions which occur in nitrogen-rich fertilizers; anthropogenic sources include industrial processes, fuel combustion, aerosol spray propellant, and use of racing fuels.
- Chlorofluorocarbons (CFCs): No natural sources; synthesized for use as refrigerants, aerosol propellants, and cleaning solvents.
- Hydrofluorocarbons (HFCs): No natural sources, synthesized for use in refrigeration, air conditioning, foam blowing, aerosols, and fire extinguishing.
- Sulfur Hexafluoride (SF_6): No natural sources; synthesized for use as an electrical insulator in high voltage equipment that transmits and distributes electricity. SF_6 has a long lifespan and high global warming potency.
- Ozone: Unlike the other GHGs, ozone in the troposphere is relatively short-lived and, therefore, is not global in nature. Due to the nature of ozone, and because this project is not anticipated to contribute a significant level of ozone, it is excluded from consideration in this analysis.
- Water Vapor: The most abundant and variable GHG in the atmosphere. It is not considered a pollutant and maintains a climate necessary for life. Because this project is not anticipated to contribute significant levels of water vapor to the environment, it is excluded from consideration in this analysis.

The primary GHGs that would be emitted during construction and operation of the proposed project are CO_2, CH_4, and N_2O. The project would not be expected to have any associated use or release of HFCs, CFCs, or SF_6.

The heat absorption potential of a GHG is referred to as the “Global Warming Potential” (GWP). Each GHG has a GWP value based on the heat-absorption properties of the GHG relative to CO_2. This is commonly referred to as CO_2 equivalent (CO_2E). The GWP of the three primary

GHGs associated with the proposed project are defined by the USEPA: CO_2 – GWP of 1, CH_4 – GWP of 25, and N_2O – GWP of 298.

International Authority

The Intergovernmental Panel on Climate Change (IPCC) is the leading body for the assessment of climate change. The IPCC is a scientific body that reviews and assesses the most recent scientific, technical, and socio-economic information produced worldwide relevant to the understanding of climate change. The scientific evidence presented in first IPCC Assessment Report of 1990 unveiled the importance of climate change as a topic deserving international political attention to tackle its consequences; it therefore played a decisive role in leading to the creation of the United Nations Framework Convention on Climate Change, the key international treaty to reduce global warming and cope with the consequences of climate change.

On March 21, 1994, the United States joined a number of countries around the world in signing the United Nations Framework Convention on Climate Change. Under the Convention, governments gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

The Kyoto Protocol is an international treaty which extends the United Nations Framework Convention on Climate Change and commits governments to reduce greenhouse gas emissions, based on the premise that (a) global warming exists and (b) human-made CO_2 emissions have caused it. The Kyoto Protocol was adopted in Kyoto, Japan, on December 11, 1997 and entered into force on February 16, 2005. There are currently 192 signatory parties to the Protocol including the United States; however, the United States has not ratified the Protocol and is not bound by its commitments.

At the 2015 United Nations Climate Change Conference in Paris, a global agreement was initiated, which represented a consensus of the representatives of the 196 parties attending it. On April 22, 2016 (Earth Day), 174 countries signed the Paris Agreement, and began adopting it within their own legal systems (through ratification, acceptance, approval, or accession). As of November 2017, 197 United Nations Climate Change Conference members have signed the agreement, 175 of which have ratified it. The United States ratified the Paris Agreement on September 3, 2016.

Federal Authority

On September 22, 2009, the USEPA released its final GHG Reporting Rule (Reporting Rule). The Reporting Rule applies to most entities that emit 25,000 metric tons (MT) CO_2E or more per year. On September 30, 2011, facility owners were required to submit an annual GHG emissions report with detailed calculations of facility GHG emissions. The Reporting Rule mandates recordkeeping and administrative requirements for the USEPA to verify annual GHG emissions reports but does not regulate GHG as a pollutant.

The CAA defines the USEPA’s responsibilities for protecting and improving the nation's air quality and the stratospheric ozone layer. On May 13, 2010, USEPA set greenhouse gas emissions thresholds to define when permits under the New Source Review Prevention of

Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities. This final rule "tailors" the requirements of these CAA permitting programs to limit covered facilities to the nation's largest greenhouse gas emitters: power plants, refineries, and cement production facilities.

State Authority

In efforts to reduce and mitigate climate change impacts, state and local governments are implementing policies and initiatives aimed at reducing GHG emissions. California, one of the largest state contributors to the national GHG emission inventory, has adopted significant reduction targets and strategies. The primary legislation affecting GHG emissions in California is the California Global Warming Solutions Act (Assembly Bill [AB] 32). AB 32 focuses on reducing GHG emissions in California, and requires the CARB to adopt rules and regulations that would achieve GHG emissions equivalent to statewide levels in 1990 by 2020. In addition, two State-level Executive Orders have been enacted by the Governor (Executive Order S-3-05, signed June 1, 2005, and Executive Order S-01-07, signed January 18, 2007) that mandate reductions in GHG emissions.

The CARB approved a Scoping Plan for Climate Change, pursuant to AB 32, on December 12, 2008. The Scoping Plan proposes a comprehensive set of actions designed to reduce overall carbon emissions in California, improve the environment, reduce dependence on oil, diversify energy sources, save energy, and enhance public health while creating new jobs and enhancing the growth in California's economy. Key elements of the Scoping Plan for reducing California's greenhouse gas emissions to 1990 levels by 2020 include:

- Expansion and strengthening of existing energy efficiency programs and building and appliance standards.
- Expansion of the Renewables Portfolio Standard to 33 percent.
- Development of a California cap-and-trade program that links with other Western Climate Initiative Partner programs to create a regional market system.
- Implementation of existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard.
- Targeted fees to fund the State's long-term commitment to AB 32 administration.

The Climate Change Scoping Plan was updated in May 2014, and again in November 2017. In 2016, the State Legislature passed Senate Bill (SB) 32, which codifies a 2030 GHG emissions reduction target of 40 percent below 1990 levels. With SB 32, the Legislature passed companion legislation AB 197, which provides additional direction for developing the Scoping Plan. The 2017 update to the Scoping Plan indicates the State is on track to reduce GHG emissions to 1990 levels by the 2020 target, and focuses on strategies to achieve the 2030 target set by Executive Order B-30-15 and codified by SB 32.

The CARB has developed regulations for mandatory reporting of GHGs, which incorporated by reference certain requirements promulgated by the USEPA in its Final Rule on Mandatory

Reporting of Greenhouse Gases (Title 40, Code of Federal Regulations, Part 98). The proposed project would not be subject to these regulations, as it does not involve any industrial processes and does not meet the 10,000-metric ton CO_2E reporting threshold.

SB 97, enacted in 2007, amends the CEQA statute to clearly establish that greenhouse gas emissions and the effects of GHG emissions are appropriate for CEQA analysis. It directs the California Office of Planning and Research (OPR) to develop guidelines *"for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions as required by this division."* (Pub. Res. Code § 21083.05(a)).

Effective March 18, 2010, the California Natural Resources Agency adopted amendments to the CEQA Guidelines (Title 14, Cal. Code of Regulations, §15000 et seq.) to comply with the mandate set forth in Public Resources Code §21083.05. According to GHG amendments to the CEQA Guidelines, each public agency that is a CEQA lead agency needs to develop its own approach to performing a climate change analysis for projects that generate GHG emissions. A consistent approach should be applied for the analysis of all such projects, and the analysis must be based on best available information.

Local Authority

Many California counties have developed a climate change action plan focusing on reducing GHGs from local sources to facilitate meeting the State reduction targets of AB 32. To date, Ventura County has not adopted any documents related to GHG emissions reduction planning in the County. The City of Ventura is preparing an Energy Action Plan, which will form part of the City's climate action plan to be developed in coordination with the City's 2021 General Plan Update.

City of Ventura

There is one primary policy applicable to air resources in the City of Ventura General Plan, with three actions applicable to the project. City Policy 7D states, "Minimize exposure to air pollution and hazardous substances." Action 7.20 requires that air pollution point sources be located a safe distance from sensitive sites such as homes and schools. Action 7.21 requires analysis of individual development projects in accordance with the current Ventura County APCD Air Quality Assessment Guidelines and implementation of feasible mitigation measures if significant impacts are identified. Action 7.23 requires individual contractors to implement the construction mitigation measures included in the most recent version of the Ventura County APCD Air Quality Assessment Guidelines.

County of Ventura

The County of Ventura General Plan goals and policies related to air quality include:

- Requiring projects be consistent with the AQMP (Policy 1.2.2-1).
- Evaluating project impacts using the APCD Guidelines (Policy 1.2.2-2).
- Using mitigation to minimize air pollutant emissions (Policy 1.2.2-3).
- Complying with applicable APCD rules (Policy 1.2.2-5).

City of Camarillo

The applicable City of Camarillo General Plan policies include:

- Requirement that impacts of motor vehicle trips have been estimated (Circulation Element Policy 1.3.1).
- Requirement that new development mitigate air quality impacts to bring the project emissions below the thresholds established by the Ventura County APCD (Circulation Element Policy 1.3.3).

2.3.3 Impact Analysis

2.3.3.1 Significance Thresholds

Air pollutant and GHG emissions associated with installation of the proposed pipeline were estimated based on construction scenarios (equipment lists and scheduling). Peak day air pollutant emissions were estimated for comparison to the APCD's significance thresholds. Total GHG emissions were estimated for pipeline installation consistent with Section 15064.4(a)1 of the State CEQA Guidelines. Criteria air pollutant and CO_2 emissions factors were obtained from the CARB's EMFAC2014 and OFFROAD models. Emissions factors for N_2O were obtained from the California Climate Action Registry General Reporting Protocol. It was conservatively assumed that pipeline installation would be completed in a single year, such that total GHG emissions would be the same as annual emissions.

Significance thresholds for air quality impacts are derived from the State CEQA Guidelines, the Ventura County Air Quality Assessment Guidelines (VCAPCD 2003), and rules and regulations of the APCD.

Criteria Pollutants

Short-term/Construction Emissions. Short-term air quality impacts generally occur during project construction. CEQA requires a discussion of short-term impacts of a project in the environmental document. However, the APCD considers temporary construction emissions insignificant and quantitative thresholds for construction emissions have not been established. However, the City and Calleguas (the entities that will construct the pipeline) will follow the APCD recommended measures to reduce emissions of fugitive dust and ROC and NOx provided in Section 7.4 of the Ventura County Air Quality Assessment Guidelines.

Long-term/Operational Emissions Thresholds. Long-term air quality impacts occur during project operation and include emissions from any equipment or process used in the project (e.g., residential water heaters, engines, boilers, and operations using paints or solvents) and motor vehicle emissions associated with the project. These emissions must be summed in order to determine the significance of the project's long-term impact on air quality.

A significant adverse air quality impact may occur when a project triggers any one of the following:

a) Result in daily emissions exceeding 25 pounds of ROC or NOx;

b) Cause a violation or make a substantial contribution to a violation of an ambient air quality standard;

c) Directly or indirectly cause the existing population to exceed the population forecasts in the most recently adopted AQMP; or

d) Be inconsistent with the AQMP and emit greater than 2 pounds per day ROC or NOx.

Greenhouse Gas Emissions

To date, GHG thresholds of significance have not been adopted by Ventura County. On November 8, 2011, the APCD completed a staff report assessing several options and strategies in developing GHG thresholds for land development projects. Although no GHG thresholds were developed, the staff report stated that consistency with any GHG thresholds developed by the South Coast Air Quality Management District (SCAQMD) is preferred. The SCAQMD governing board has adopted an interim GHG significance threshold of 10,000 metric tons per year CO_2 equivalent (including amortized construction emissions) for industrial projects. Due to the lack of any other applicable threshold, this value is used in this EIR to determine the significance of the contribution to global climate change.

e) Results in emissions of 10,000 metric tons per year CO_2E.

2.3.3.2 Project-Specific Impacts

Construction Air Pollutant Emissions

Construction activities associated with implementation of the proposed project would result in air pollutant emissions that may affect regional air quality, but this is a less than significant impact.

Construction of new facilities would generate air pollutant emissions, including exhaust emissions and fugitive dust. Activities would include installation of the proposed water pipeline and blending/monitoring station. A peak day during construction was used to estimate construction emissions and is defined as three open-cut (trenching) pipeline installation crews and two trenchless pipeline installation crews (one HDD and one B&J) operating concurrently. Peak day open cut pipeline installation activities would include all three sub-activities (grubbing/pavement removal, trench excavation/pipe installation/backfill, road restoration) occurring simultaneous as the crews progress along the alignment. Peak day trenchless pipeline installation activities were assumed to include the worst-case activity for B&J (bore pit excavation) and HDD installation (casing and pipeline installation).

Heavy equipment assumed to be used on a peak day includes wheeled loaders, backhoes, excavators, air compressors, portable generators, auger rig, pavers, pavement rollers, welding machines, soil compactors, street sweepers, and HDD equipment. Construction equipment

exhaust emissions were calculated using project activity assumptions and emission factors from the CARB OFFROAD model.

Construction activities would also involve motor vehicles, including heavy-duty trucks to transport materials and equipment and light-duty vehicles to transport workers. Transportation emissions were estimated using the EMFAC2014 model developed by the CARB and assuming that construction would occur in 2019.

Peak day construction-related NO_x and ROC emissions would be 316.2 pounds and 43.6 pounds, respectively (see Table 2.3-3), and are not considered a significant impact due to their short-term nature. However, construction activities would be required to comply with APCD Rules 51 and 55 and other CARB and APCD regulations.

TABLE 2.3-3
PEAK DAY CONSTRUCTION AIR POLLUTANT EMISSIONS

Source	ROC (pounds)	CO (pounds)	NO_x (pounds)	PM_{10} (pounds)
Open-Cut Pipeline Installation (3 crews simultaneously)				
Heavy equipment	33.4	157.7	240.3	13.1
On-road motor vehicles	1.2	19.1	15.2	0.9
Trenchless Pipeline Installation (1 HDD crew & 1 B&J crew simultaneously)				
Heavy equipment	8.8	43.6	59.2	2.8
On-road motor vehicles	0.2	3.6	1.5	0.2
All Construction Sites				
Fugitive dust	0.0	0.0	0.0	221.2
Total	43.6	224.0	316.2	238.2

Operational Air Pollutant Emissions (Significance Thresholds a, b, c, d)

Project maintenance activities would generate motor vehicle trips and the associated air pollutant emissions. It is anticipated that up to four maintenance-related vehicle trips would occur on a peak day, which would generate 0.02 pounds of NO_x and 0.01 pounds of ROC. These emissions are less than the APCD's 25 pound per day significance threshold and are considered a less than significant impact to air quality.

Greenhouse Gas Emissions (Significance Threshold e)

Construction activities associated with implementation of the proposed project would result in GHG emissions that may affect global climate change. The proposed project would result in short-term GHG emissions associated with construction activities (see Table 2.3-4). Emissions of GHG from construction-related sources were estimated using the CARB's EMFAC2014 Model and emission factors provided in the California Climate Action Registry General Reporting Protocol. Estimated emissions of GHG associated with construction are 2,993.9 $MTCO_2E$ and 95.1 $MTCO_2E$ if amortized over 30 years (presumed minimum life of the project) as recommended in the SCAQMD interim significance threshold. As these emissions are less than the significance threshold, GHG emissions are considered a less than significant impact.

TABLE 2.3-4
TOTAL (ANNUAL) CONSTRUCTION GREENHOUSE GAS EMISSIONS (METRIC TONS)

Source	CO_2	N_2O	CH_4	CO_2E
Heavy equipment: open cut pipeline installation	1659.3	0.062	0.138	1681.2
Heavy equipment: trenchless pipeline installation	654.5	0.018	0.039	660.7
On-road motor vehicles	649.5	0.007	0.016	652.0
Total	2963.3	0.087	0.193	2993.9

2.3.3.3 No Project Alternative

This alternative would not result in any new construction or related equipment emissions, nor would the alternative result in any new emissions related to employee trips or operations and management of the water system.

2.3.3.4 Alternative Alignment B

The alternative pipeline alignment (see Figure 1-3) would be installed using similar construction methods and equipment as the proposed alignment, including mostly open-cut methods with B&J methods to cross under roadways and drainage channels and HDD under the Santa Clara River. This alternative also includes the same blending/monitoring station, turn-outs, blow-offs, and other facilities as the proposed project. Peak day air pollutant emissions would be the same as the proposed project.

The alternative alignment is approximately 40,800 feet long, or 1,900 feet longer than the proposed alignment (which is approximately 38,900 feet long); therefore, total construction-related air pollutant emissions and greenhouse gas emissions would be proportionally greater than the proposed alignment, but also considered less than significant. Operational emissions (maintenance-related motor vehicle emissions) would be the same as the proposed alignment, and less than significant.

2.3.4 Mitigation Measures

Not applicable. Impacts would be less than significant; therefore, mitigation is not required. However, the City and Calleguas (the entities that will construct the pipeline) will follow the APCD's recommendations for controlling fugitive dust, ROC and NOx emissions as provided in Section 7.4 of the Ventura County Air Quality Assessment Guidelines (2003).

2.3.5 Significance After Mitigation

Not applicable. Impacts would be less than significant without mitigation.

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2.4 Biological Resources

This section evaluates potential impacts to biological resources resulting from the proposed project and alternatives. Existing biological resources were assessed based on the extensive field experience of Padre Associates' biologists in the project area and a field visit on July 9, 2018 in areas of intact vegetation and wildlife habitat.

2.4.1 Physical Setting

The proposed pipeline alignment is mostly located within roadway rights-of-way and agricultural areas (primarily row crops). Native vegetation and wildlife habitat along the pipeline alignment is mostly limited to patches of mulefat scrub within the Santa Clara River. Generalized biological habitat mapping of the proposed pipeline alignment is provided in Figures 2.4-1 through 2.4-3.

Segment 2

This segment extends from the Ventura connection, southwest along Henderson Road, then southeast along Saticoy Avenue, and across/under the Santa Clara River to Vineyard Avenue. The northern portion of Segment 2 is mostly developed with residences, institutional land uses (Sacred Heart Church, Douglas Penfield School, Saticoy Elementary), and a City park (Huntsinger Park).

The Santa Clara River crossing site supports mulefat scrub on the south bank, dominated by mulefat (*Baccharis salicifolia*), big saltbush (*Atriplex lentiformis*), and coyote brush (*Baccharis pilularis*). The riverbed at the crossing site supports scattered patches of mulefat and giant reed (*Arundo donax*). The north bank of the Santa Clara River at the crossing site is disturbed and supports weedy species, such as summer mustard (*Hirschfelda incana*) and Russian thistle (*Salsola tragus*), and a few Peruvian pepper trees (*Schinus molle*).

The northern HDD staging area is located within the VCWPD's Saticoy Storage and Stockpile Yard and is entirely and frequently disturbed by the stockpiling and movement of soil and rock by heavy equipment. Vegetation is limited to occasional herbaceous weeds and a few blue gum trees (*Eucalyptus globulus*). An active hawk nest was observed by a Padre biologist in the Saticoy Storage and Stockpile Yard in 2015, but the blue gum tree supporting this nest and adjacent trees have since died.

The southern HDD staging area is located immediately south of the Santa Clara River levee, and had been recently tilled at the time of the field visit. Vegetation was limited to scattered telegraph weed (*Heterotheca grandiflora*) and white sweet-clover (*Melilotus alba*). A white iron-bark tree (*Eucalyptus leucoxylon*) windrow located along the eastern boundary of this staging area was observed by Padre biologists to be used by nesting common ravens in April 2015.

Segment 6

This segment extends across farmland from Vineyard Avenue southeast to Rose Avenue. Row crops are typically grown in this area, with mostly strawberries present at the time of the field visit.

Segment 10

This segment extends across farmland from Rose Avenue southeast to Santa Clara Avenue. Row crops are typically grown in this area, with mostly strawberries present at the time of the field visit. A small avocado orchard is located adjacent to Rose Avenue along the northern end of Segment 10.

Segment 13

This segment extends across farmland from Santa Clara Avenue south to Beardsley Road, along the Santa Clara Diversion (rectangular concrete channel). Row crops are typically grown in this area, with mostly cabbage and strawberries present at the time of the field visit.

Segment 16

This segment extends across farmland from Beardsley Road southeast along the Las Posas Estates Diversion (rectangular concrete channel), then south along the Las Posas Estates Drain (trapezoidal earthen channel). Row crops are typically grown in this area, with brussels sprouts present at the time of the field visit. The Las Posas Estates Drain supports opportunistic vegetation dominated by rusty flat-sedge (*Cyperus odoratus*), white sweet-clover, summer mustard, red brome (*Bromus madritensis* ssp. *rubens*), and Mexican sprangle-top (*Leptochloa fusca* ssp. *uninervia*). Landscaping dominated by Peruvian pepper trees has been planted on the slope between the Las Posas Estates Drain and Avenida de Aprisa.

Segment 18

This segment extends southeast along Central Avenue to the U.S. Highway 101 interchange, then east along Daily Drive which is immediately north and parallel to U.S. Highway 101. Row crops and berries (in sheet plastic greenhouses/hoop houses) are grown immediately north of Central Avenue and Daily Drive.

Segment 19

This segment extends north from Daily Drive along a blue gum tree windrow, then east along an asphalt paved access road, then crosses Camino Tierra Santa and ends at Calleguas' Springville Hydro Station. Row crops are typically grown on both sides of the blue gum tree windrow. Native vegetation has colonized the shoulders of most of this access road, dominated by California buckwheat (*Eriogonum fasciculatum*) with California sagebrush (*Artemisia californica*), California golden-bush (*Encelia californica*), and coyote brush.

Potential Blending/Monitoring Station Sites

The northern site (on Henderson Road) is located adjacent to the Sacred Heart Church on a vacant lot. This area is frequently disturbed as part of fire prevention (mowing or discing) and supports weedy species including bassia (*Bassia hyssopifolia*), alkali mallow (*Malvella leprosa*), prickly lettuce (*Lactuca serriola*), and hare barley (*Hordeum murinum*).

The southern potential site is located along Saticoy Avenue or Telephone Road within Huntsinger Park and supports turfgrass.

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LEGEND:

- Potential Blending/Monitoring Station

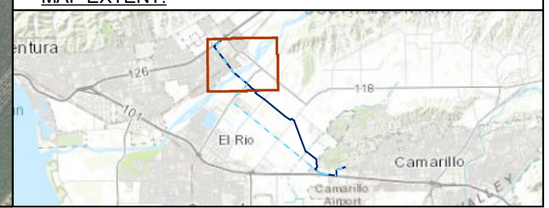
HDD Construction Staging Area
- HDD Construction Staging Area

Pipeline Alignments
- Proposed
- Alternative

Alignment Buffers (100 ft)
- Proposed
- Alternative

Habitats
- Agriculture
- Developed
- Disturbed
- Mulefat scrub

MAP EXTENT:



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Source: Esri Online Imagery Basemap, Kennedy/Jenks Consultants
Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet
Notes: This map was created for informational and display purposes only.

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

PROJECT NAME: STATE WATER PROJECT INTERCONNECTION CITY OF VENTURA, CA

PROJECT NUMBER: 1702-1601

DATE: December 2018

BIOLOGICAL HABITAT MAP

FIGURE 2.4-1

State Water Interconnection Alignment Study/Biological Habitat Map.mxd 12/3/2018

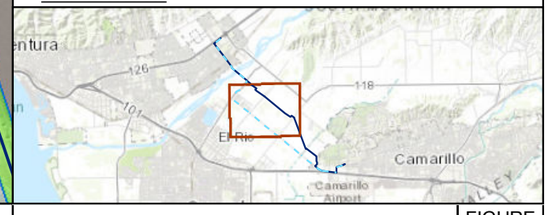
LEGEND:

Pipeline Alignments
- Proposed
- Alternative

Alignment Buffers (100 ft)
- Proposed
- Alternative

Habitats
- Agriculture
- Developed
- Disturbed

MAP EXTENT:



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Source: Esri Online Imagery Basemap, Kennedy/Jenks Consultants
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ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

PROJECT NAME: STATE WATER PROJECT INTERCONNECTION CITY OF VENTURA, CA

PROJECT NUMBER: 1702-1601

DATE: December 2018

BIOLOGICAL HABITAT MAP

FIGURE 2.4-2

State Water Interconnection Alignment Study\Biological Habitat Map.mxd 12/3/2018

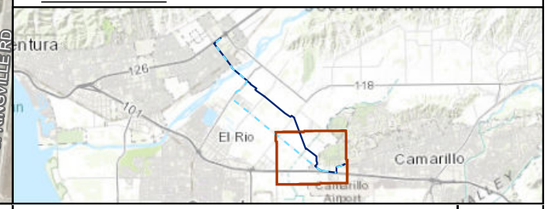
LEGEND:

Pipeline Alignments
- Proposed
- Alternative

Alignment Buffers (100 ft)
- Proposed
- Alternative

Habitats
- Agriculture
- California buckwheat
- Developed
- Disturbed

MAP EXTENT:



0 500 1,000
FEET

Source: Esri Online Imagery Basemap, Kennedy/Jenks Consultants
Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet
Notes: This map was created for informational and display purposes only.

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

PROJECT NAME:
STATE WATER PROJECT INTERCONNECTION
CITY OF VENTURA, CA

PROJECT NUMBER: 1702-1601

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BIOLOGICAL HABITAT MAP

FIGURE 2.4-3

State Water Interconnection Alignment Study\Biological Habitat Map.mxd 12/3/2018

The third site is located within or immediately adjacent to the Saticoy Conditioning Facility at the southwest corner of Wells Road and Telephone Road. The Saticoy Conditioning Facility is surrounded by a block wall, is paved, and does not support vegetation or wildlife habitat. This proposed blending/monitoring station site may require expansion of the Saticoy Conditioning Facility to the north into the Saticoy Regional Golf Course. This area is not maintained as an active part of the Golf Course and is dominated by herbaceous non-native plants.

2.4.1.1 Wildlife

Table 2.4-1 provides a list of wildlife species observed at, or flying over, the proposed pipeline alignment during a field survey conducted by Padre Associates biologists on July 9, 2018.

TABLE 2.4-1
WILDLIFE SPECIES OBSERVED IN THE VICINITY OF THE PIPELINE ALIGNMENT

Common Name	Scientific Name	Location
Reptiles		
Western fence lizard	*Sceloporus occidentalus*	Segments 2, 16, 19
Birds		
Turkey vulture	*Cathartes aura*	Segment 19
Wrentit	*Chamaea fasciata*	Segment 2 (Santa Clara River crossing)
Anna's hummingbird	*Calypte anna*	Segments 2, 16, 19
Common raven	*Corvus corax*	Segment 2 (Santa Clara River crossing)
American crow	*Corvus brachyryhnchos*	Segments 2, 6
Song sparrow	*Melospiza melodia*	Segment 2 (Santa Clara River crossing)
Western gull	*Larus occidentalis*	Segments 10, 19
Least Bell's vireo[1]	*Vireo pusillus bellii*	Segment 2 (Santa Clara River crossing)
Pacific slope flycatcher	*Empidonax difficilis*	Segment 2 (Santa Clara River crossing)
Mourning dove	*Zenaida macroura*	Segments 2, 19
Eurasian collared dove	*Streptopelia decaocto*	Segments 2, 19
Rock pigeon	*Columba livia*	Segment 19
California towhee	*Melozone crissalis*	Segment 2 (Santa Clara River crossing)
Bushtit	*Psaltriparus minimus*	Segment 2 (Santa Clara River crossing)
Bewick's wren	*Thyromanes bewickii*	Segment 2 (Santa Clara River crossing)
Lesser goldfinch	*Spinus psaltria*	Segment 2 (Santa Clara River crossing)
California quail	*Callipepla californica*	Segment 2 (Santa Clara River crossing)
Northern mockingbird	*Mimus polyglottos*	Segments 2, 16, 19

TABLE 2.4-1 Cont.

Common Name	*Scientific Name*	Location
Western meadowlark	*Sturnella neglecta*	Segment 2 (Santa Clara River crossing)
Northern rough-winged swallow	*Steligidopteryx serripennis*	Segment 2 (Santa Clara River crossing)
Cassin's kingbird	*Tyrannus vociferans*	Segment 2 (Santa Clara River crossing)
Black phoebe	*Sayornis nigricans*	Segments 2, 16
Common yellowthroat	*Geothlypis trichas*	Segment 2 (Santa Clara River crossing)
Bullock's oriole	*Icterus bullockii*	Segment 2 (Santa Clara River crossing)
Orange-crowned warbler	*Oreothlyptis celata*	Segments 2, 16
European starling	*Strunus vulgaris*	Segment 19
Killdeer	*Charadrius vociferus*	Segment 2 (Santa Clara River crossing)
Yellow-breasted chat[2]	*Icteria virens*	Segment 2 (Santa Clara River crossing)
Mammals		
California ground squirrel	*Otospermophilus beechyi*	Segments 2, 19
Audubon's cottontail	*Sylvilagus audubonii*	Segments 2, 16, 19
Raccoon	*Procyon lotor*	Segment 18 (road kill)
Coyote	*Canis latrans*	Segments 2, 19

[1] State and Federal Endangered
[2] California Species of Special Concern

2.4.1.2 Wildlife Corridors

Wildlife migration corridors are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Migration corridors may be local, such as between foraging and nesting or denning areas, or they may be regional in nature. Migration corridors are not unidirectional access routes; however, reference is usually made to source and receiver areas in discussions of wildlife movement networks. "Habitat linkages" are migration corridors that contain contiguous strips of native vegetation between source and receiver areas. Habitat linkages provide cover and forage sufficient for temporary inhabitation by a variety of ground-dwelling animal species. Wildlife migration corridors benefit the long-term survival of local wildlife populations as they allow individuals to move between areas as food and habitat abundance/quality changes, and allows for interbreeding and associated genetic exchange which may increase genetic diversity and the ability to adapt to future conditions.

The proposed pipeline alignment and blending/monitoring station sites are located within the lower Santa Clara River Valley and Oxnard Plain, which has been highly modified by agricultural and residential development. Although the Santa Clara River is confined by levees in the project area, regional wildlife movement may occur along the riverbed from coastal areas to adjacent less developed areas (such as Sulfur Mountain, South Mountain) and areas more inland (Los Padres National Forest, Oak Ridge, Lake Piru). These lands function as a regional wildlife

network, forming a genetic and population reservoir that is important in maintaining species and genetic diversity through migration between habitat blocks.

2.4.1.3 Special-Status Plant Species

Special-status plant species are either listed as endangered or threatened under the Federal or California Endangered Species Acts, or rare under the California Native Plant Protection Act, or considered to be rare or of scientific interest (but not formally listed) by resource agencies, professional organizations (e.g., Audubon Society, California Native Plant Society [CNPS], The Wildlife Society), and the scientific community.

For the purposes of this project, special-status plant species are defined in Table 2.4-2. The literature search conducted for this impact analysis included the California Natural Diversity Data Base (CNDDB, researched February 9, 2018) and the CNPS on-line inventory of rare and endangered plants and indicates two special-status plant species have been reported within five miles of the proposed pipeline alignment and blending/monitoring station sites. Table 2.4-3 lists these species, their current status, and the nearest known location relative to the proposed project.

TABLE 2.4-2
DEFINITIONS OF SPECIAL-STATUS PLANT SPECIES

- Plants listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.12 for listed plants and various notices in the Federal Register for proposed species).
- Plants that are candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (Federal Register, December 2, 2016).
- Plants that meet the definitions of rare or endangered species under CEQA (*State CEQA Guidelines,* Section 15380).
- Plants considered by the CNPS to be "rare, threatened, or endangered" in California (Lists 1B and 2).
- Plants listed by CNPS as plants about which we need more information and plants of limited distribution (Lists 3 and 4).
- Plants listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (14 CCR 670.5).
- Plants listed under the California Native Plant Protection Act (California Fish and Game Code 1900 et seq.).
- Plants considered sensitive by other Federal agencies (e.g., U.S. Forest Service, Bureau of Land Management), State, and local agencies or jurisdictions.
- Plants considered sensitive or unique by the scientific community or occurring at the limits of its natural range (S*tate CEQA Guidelines*).
- Trees protected under the County Tree Protection Regulations (Section 8107-25 of the Non-Coastal Zoning Ordinance).
- Ventura County Locally Important Plant Species as identified by the Ventura County Resource Management Agency.

Excluding the Santa Clara River, the proposed pipeline alignment and associated facility sites do not support native vegetation or otherwise provide suitable habitat for special-status plant species. The Santa Clara River at the proposed pipeline crossing also does not provide suitable habitat for special-status plants reported from the area (see Table 2.4-3). In any case, the staging areas to be used for HDD installation of the Santa Clara River pipeline crossing do not support native vegetation or wildlife habitat.

TABLE 2.4-3
SPECIAL-STATUS PLANT SPECIES REPORTED WITHIN 5 MILES OF THE PIPELINE ALIGNMENT AND BLENDING/MONITORING STATION SITES

Common Name	Status	Habitat Description	Nearest Known Location Relative to the Proposed Facilities
Davidson's saltscale *Atriplex serenana var. davidsoni*	List 1B	Coastal bluff scrub, coastal scrub; 30-650' elevation	Non-specific, general vicinity of El Rio, likely near the Santa Clara River (Segment 2) (CDFW 2018)
White rabbit tobacco *Pseudognaphalium leucocephalum*	List 2B	Woodland, coastal scrub, chaparral; 100-1700' elevation	Santa Clara River floodplain, 2.7 miles southwest of the pipeline crossing (Segment 2) (CDFW 2018)

Status Codes:
List 1B Plants rare, threatened, or endangered in California and elsewhere (CNPS)
List 2B Plants rare, threatened, or endangered in California, but more common elsewhere (CNPS)

2.4.1.4 Special-Status Wildlife Species

Special-status wildlife species are defined in Table 2.4-4. The potential for these species to occur in the vicinity of the proposed project was determined by habitat characterization of areas along the proposed pipeline alignment, review of sight records from other environmental documents, and generalized range maps provided by CDFW. Table 2.4-5 lists special-status wildlife species that have the potential to occur near the proposed project for at least a portion of their life cycle.

TABLE 2.4-4
DEFINITIONS OF SPECIAL-STATUS WILDLIFE SPECIES

- Animals listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.11 for listed animals and various notices in the Federal Register for proposed species).
- Animals that are candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (Federal Register December 2, 2016).
- Animals that meet the definitions of rare or endangered species under CEQA (*State CEQA Guidelines*, Section 15380).
- Animals listed or proposed for listing by the State of California as threatened and endangered under the California Endangered Species Act (14 CCR 670.5).
- Animal species of special concern to the CDFW (Shuford & Gardali 2008 for birds; Williams 1986 for mammals; Moyle et al. 1989 for fish; and Jennings and Hayes 1994 for amphibians and reptiles).
- Animal species that are fully protected in California (California Fish and Game Code, Section 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).
- Ventura County Locally Important Animal Species as identified by the Ventura County Resource Management Agency..

TABLE 2.4-5
SPECIAL-STATUS WILDLIFE SPECIES REPORTED WITHIN 5 MILES OF THE PROPOSED PIPELINE ALIGNMENT AND BLENDING/MONITORING STATION SITES

Common Name	Habitat	Status	Nearest Known Location Relative to Proposed Facilities	Discussion
Invertebrates				
Monarch butterfly *Danaus plexippu*	Eucalyptus groves and parks	SA	Harmon Barranca, 2.6 miles southwest of Segment 2 (CDFW 2018)	Eucalyptus windrows along Segments 2 and 19 are not suitable habitat, considered absent
Fish				
Southern California steelhead *Oncorhynchus mykiss*	Coastal streams and rivers	FE	Santa Clara River, including Segment 2 crossing (CDFW 2018)	Considered present at the pipeline crossing during periods of high flows
Tidewater goby *Eucyclogobius newberryi*	Coastal lagoons and adjacent stream reaches	FE, CSC	Santa Clara River, 2.9 miles southwest of Segment 2 (CDFW 2018)	Considered present at the pipeline crossing during periods of connectivity to the estuary
Unarmored 3-spined stickleback *Gasterosteus aculeatus williamsoni*	Streams	FE, SE, FP	Santa Clara River, including Segment 2 crossing (CDFW 2018)	Considered present at the pipeline crossing when surface water is present
Santa Ana sucker *Catostomus santaanae*	Streams and rivers	FT	Santa Clara River (introduced), including Segment 2 crossing (CDFW 2018)	Considered present at the pipeline crossing when surface water is present
Reptiles				
Western pond turtle *Emys marmorata*	Vegetated ponds, stream pools	CSC	Santa Clara River, 3.2 miles southwest of Segment 2 (Aspen 2016)	Considered absent from the pipeline crossing due to the rarity of aquatic habitat
Coast horned lizard *Phrynosoma blainvillii*	Open sandy areas in coastal scrub, chaparral	CSC	Santa Clara River floodplain, 3.5 miles southwest of Segment 2 (CDFW 2018 and Aspen, 2016)	Considered absent from the pipeline crossing due to the long disturbance history of this area
South coast garter snake *Thamnophis sirtalis ssp.*	Ponds, streams, wetlands & adjacent areas	CSC	Santa Clara River floodplain, 3.9 miles northeast of Segment 2 (CDFW 2018)	Considered absent from the pipeline crossing due to the long disturbance history of this area
Two-striped garter snake *Thamnophis hammondii*	Streams	CSC	Santa Clara River, 3.8 miles southwest of Segment 2 (CDFW 2018)	Considered absent from the pipeline crossing due to the lack of aquatic prey

TABLE 2.4-5 Cont.

Common Name	Habitat	Status	Nearest Known Location Relative to Proposed Facilities	Discussion
Birds				
Least Bell's vireo *Vireo bellii pusillus*	Riparian scrub & woodlands	FE, SE	Two least Bell's vireo breeding territories were documented in the Santa Clara River near Segment 2 on April 24, 2018	Present at the proposed pipeline river crossing (Segment 2)
Cooper's hawk *Accipiter cooperi*	Woodlands	WL	Santa Clara River, 3.2 miles southwest of Segment 2 (Padre 2009 and Aspen 2016)	May forage within the Santa Clara River and adjacent areas at the proposed pipeline crossing
Yellow warbler *Dendroica petechia ssp. brewsteri*	Riparian scrub & woodlands	CSC	Santa Clara River, 3.2 miles southwest of Segment 2 (Padre 2009)	Considered absent from the pipeline crossing due to the lack of riparian woodland habitat
Burrowing owl *Athene cunicularia*	Grassland and open scrub, chaparral	CSC	Santa Clara River floodplain, 4.2 miles northeast of Segment 2 (CDFW 2018)	Considered absent from the pipeline crossing due to the long disturbance history of this area
Yellow-breasted chat *Iciteria virens*	Riparian scrub & woodlands	CSC	A single individual was observed in the Santa Clara River near Segment 2 on April 24, 2018	May forage within the Santa Clara River and adjacent areas at the proposed pipeline crossing
Costa's hummingbird *Calypte costae*	Scrub, chaparral, woodland	SA	Santa Clara River, ~3.8 miles southwest of Segment 2 (Aspen 2016)	May forage within the Santa Clara River and adjacent areas at the proposed pipeline crossing
White-tailed kite *Elanus leucurus*	Woodlands, grasslands	FP	Santa Clara River, ~3.8 miles southwest of Segment 2 (Aspen 2016)	Considered absent from the pipeline crossing due to the lack of woodland habitat
California horned lark *Eremophila alpestris actia*	Grasslands	WL	Santa Clara River floodplain, ~3.8 miles southwest of Segment 2 (Aspen 2016)	Considered absent from the pipeline crossing due to the long disturbance history of this area
Loggerhead shrike *Lanius ludovicianus*	Grassland, open shrubland and woodland	CSC	Santa Clara River, ~3.8 miles southwest of Segment 2 (Aspen 2016)	May forage within the Santa Clara River and adjacent areas at the proposed pipeline crossing

TABLE 2.4-5 Cont.

Common Name	Habitat	Status	Nearest Known Location Relative to Proposed Facilities	Discussion
Mammals				
American badger *Taxidea taxus*	Grassland and open scrub, chaparral	CSC	South Mountain, 2.4 miles northeast of Segment 2 (CDFW 2018)	Considered absent from the pipeline crossing due to the long disturbance history of this area

Status Codes:

CSC	California Species of Special Concern (CDFW)
FP	Fully protected under the California Fish and Game Code
FE	Federal Endangered (USFWS)
FT	Federal Threatened (USFWS)
SA	Special Animal (CDFW)
SE	State Endangered (CDFW)
WL	Watch List (CDFW)

Special-status wildlife species with a moderate to high potential to occur in proximity to the proposed project are those associated with habitat along the Santa Clara River (Segment 2), including least Bell's vireo, Cooper's hawk, yellow-breasted chat, Costa's hummingbird, and loggerhead shrike. In addition, special-status fish species could be present at the proposed pipeline crossing for brief periods when adequate surface water is available.

2.4.2 Regulatory Setting

Federal, State, and local regulations have been established to protect and conserve biological resources. The descriptions below provide a brief overview of the regulations applicable to the resources that occur within or adjacent to the proposed project and their respective requirements.

Federal

Federal Endangered Species Act (ESA)

Enacted in 1973, the ESA provides for the conservation of threatened and endangered species and their habitat. The Act prohibits the "take" of threatened and endangered species except under certain circumstances and only with authorization from the U.S. Fish and Wildlife Service (USFWS) through a permit under Section 4(d), 7, or 10(a) of the Act. Under the ESA, "take" is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The ESA requires federal agencies to make a finding on all federal actions, including approval by an agency of a public or private action, as to the potential to jeopardize the continued existence of any listed species. As there is no Federal nexus for the project, Section 10 of the ESA applies, and a habitat conservation plan would be required for any potential take of listed species.

Migratory Bird Treaty Act

Congress passed the Migratory Bird Treaty Act (MBTA) in 1918 to prohibit the pursuit, hunt, kill, capture, possession, purchase, barter, or transport of native migratory birds, or any part, nest, or egg of any such bird unless allowed by another regulation adopted in accordance with the MBTA. The USFWS has jurisdiction over migratory birds. No permit is issued under the MBTA; however, project construction and operation should be conducted to avoid take of migratory birds.

Federal Water Pollution Control Act (Clean Water Act)

The Federal Water Pollution Control Act was first passed by Congress in 1948. The Act was later amended and became known as the Clean Water Act (CWA). The CWA establishes the basic structure for regulating discharges of pollutants into the waters of the U.S. It gives the USEPA the authority to implement pollution control programs, including setting wastewater standards for industry and water quality standards for contaminants in surface waters. The CWA makes it unlawful for any person to discharge any pollutant from a point source into navigable waters, without a permit under its provisions. CWA Section 404 permits are issued by the U.S. Army Corps of Engineers (USACE) for dredge/fill activities within wetlands or non-wetland waters of the U.S. CWA Section 401 certifications are issued by the RWQCB for activities requiring a federal permit or license which may result in discharge of pollutants into waters of the U.S.

State

California Fish and Game Code

The California Fish and Game Code, administered by the CDFW, regulates the taking or possession of birds, mammals, fish, amphibians, and reptiles, as well as natural resources, such as wetlands and waters of the state. It includes Streambed Alteration Agreement regulations (Sections 1600-1616), provisions for legal hunting and fishing, and tribal agreements for activities involving take of native wildlife. The California Fish and Game Code also includes Sections 3503 and 3513, which prohibit take or destruction of bird nests and eggs and take of migratory birds.

California Endangered Species Act

The California Endangered Species Act (CESA) generally parallels the main provisions of the Federal ESA and is administered by the CDFW. CESA prohibits take of any species that the California Fish and Game Commission determines to be a threatened or endangered species. CESA allows for take incidental to otherwise lawful development projects upon approval from the CDFW. Under the California Fish and Game Code, "take" is defined as to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.

California also has identified wildlife species of special concern. These species are rare, restricted in geographic distribution, or declining throughout their geographic range. Having been so designated, sensitive species are also considered in resource planning and management. The rare designation applies to plants only and includes those plants that are not threatened or endangered, but that could become eligible due to decreasing numbers or further

restrictions to habitat. Any project-related impacts to State-listed species may require an incidental take permit under CESA.

Local

The proposed project would be located in three jurisdictions (City of Ventura, Ventura County, City of Camarillo) and the lead agency (City of Ventura) has decided to utilize local standards and CEQA thresholds for portions of the project located outside the City.

City of Ventura

The City's 2005 General Plan includes policies to reduce beach and hillside erosion, protect open space, and protect native plants and animals. The four primary goals related to biological resources include:

- Policy 1A. Reduce beach and hillside erosion threats to coastal ecosystem health
- Policy 1B. Increase the area of open space protected from development impacts
- Policy 1C. Improve protection for native plants and animals
- Policy 1D. Expand use of green practices (Policy 1D)

County of Ventura

The Ventura County General Plan includes two elements related to the protection of biological resources: Resources Appendix and Goals, Policies and Programs document. The Resources Appendix provides an overview of the County's biological resources, including vegetation, fish, and wildlife resources; endangered, threatened and rare species; and locally unique habitats. The Goals, Policies and Programs document identifies goals, policies, and programs to protect biological resources, including :

- Policy 1.5.2.1. Discretionary development which could potentially impact biological resources shall be evaluated by a qualified biologist to assess impacts and, if necessary, develop mitigation measures.
- Policy 1.5.2.2 Discretionary development shall be sited and designed to incorporate all feasible measures to mitigate any significant impacts to biological resources. If the impacts cannot be reduced to a less than significant level, findings of overriding considerations must be made by the decision-making body.
- Policy 1.5.2.3. Discretionary development that is proposed to be located within 300 feet of a marsh, small wash, intermittent lake, intermittent stream, spring, or perennial stream (as identified on the latest USGS 7½ minute quad map) shall be evaluated by a County approved biologist for potential impacts on wetland habitats. Discretionary development that would have a significant impact on significant wetland habitats shall be prohibited, unless mitigation measures are adopted that would reduce the impact to a less than significant level; or for lands designated "Urban" or "Existing Community", a statement of overriding considerations is adopted by the decision-making body.

- Policy 1.5.2.4. Discretionary development shall be sited a minimum of 100 feet from significant wetland habitats to mitigate the potential impacts on said habitats. Buffer areas may be increased or decreased upon evaluation and recommendation by a qualified biologist and approval by the decision-making body. Factors to be used in determining adjustment of the 100-foot buffer include soil type, slope stability, drainage patterns, presence or absence of endangered, threatened or rare plants or animals, and compatibility of the proposed development with the wildlife use of the wetland habitat area. The requirement of a buffer (setback) shall not preclude the use of replacement as a mitigation when there is no other feasible alternative to allowing a permitted use, and if the replacement results in no net loss of wetland habitat. Such replacement shall be "in kind" (i.e., same type and acreage), and provide wetland habitat of comparable biological value. On-site replacement shall be preferred wherever possible. The replacement plan shall be developed in consultation with CDFW.

- Policy 1.5.2.5. The CDFW, the USFWS, National Audubon Society, and the CNPS shall be consulted when discretionary development may affect significant biological resources.

City of Camarillo

The City's 2006 General Plan Open Space and Conservation Element includes policies to preserve open space, including:

- Policy 7. Identify and protect natural watersheds, natural drainage beds and water recharge areas to achieve recovery of local water and the preservation of natural plant and animal habitat.

- Policy 8. Preserve the natural features and general environmental characteristics of the hillside areas with minimum disturbance to native plants and animals.

2.4.3 Impact Analysis

2.4.3.1 Significance Thresholds

City of Ventura and City of Camarillo

Pursuant to CEQA Guidelines, potentially significant impacts would occur if implementation of the project would:

a) Have a substantial adverse effect, 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 CDFW or USFWS;

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS;

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

d) 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 native wildlife nursery sites;

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

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

County of Ventura

The ISAG states the significance of a biological resource is materially impaired when a project would cause:

Species Project Impact Thresholds

g) Loss of one or more individuals, occupied habitat, or Critical Habitat designated by the USFWS of a species officially listed as Endangered, Threatened, or Rare under the Federal ESA or CESA, a species under review as a candidate for listing, or a California Fully Protected Species listed in the California Fish and Game Code;

h) Impacts that would eliminate or threaten to eliminate one or more element occurrences[6] of a special-status species[7] not otherwise listed under the Federal ESA or CESA, or as a Candidate Species or California Fully Protected Species.

i) Impacts that would threaten the viability of a habitat that sustains a population of a special-status wildlife species;

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[6] Element Occurrence: defined as a biological unit that has practical conservation value for a species or ecological community and sustains or contributes to the survival of a species or ecological community. For plants, a population or group of populations found within 0.25 miles and not separated by significant habitat discontinuities. For animals with limited mobility, a breeding population. For mobile animals, the location of breeding areas or parts of the range of a mobile population that contribute to the persistence of that population, such as roosts, overwintering areas, migration areas, and migration staging areas.

[7] Special Status Species: defined as species listed as Endangered, Threatened, or Rare under the Federal ESA or CESA, Candidate Species, California Fully Protected Species, and, pursuant to CEQA Guidelines Section 15380(d), all other species considered by the CDFW to be those species of greatest conservation concern, and locally important species as defined by the Ventura County General Plan. Includes plant species with a CNPS Rank of 1 (plants presumed extinct in California, or rare, threatened, or endangered in California and elsewhere), 2 (plants that are rare, threatened, or endangered in California but more common elsewhere) or 4 (plants of limited distribution in California).

j) Impacts that would restrict the reproductive capacity of a special-status species;

k) Take of birds protected under the California Fish and Game Code and the Federal MBTA;

l) Increases in noise and/or nighttime lighting to a level above ambient levels that would adversely affect a special status species;

m) Increases in human access, predation, or competition from domestic animals, pests, or exotic species, or other indirect impacts, to levels that would adversely affect special status species;

n) Impacts severe enough to substantially reduce the habitat of a wildlife species or cause a wildlife population to decline substantially or drop below self-sustaining levels, pursuant to Section 15065 of the CEQA Guidelines, Mandatory Findings of Significance;

Sensitive Plant Communities[8] Project Impact Thresholds

o) Construction, grading, clearing, or other activities that would temporarily or permanently remove sensitive plant communities. Temporary impacts to sensitive plant communities would be considered significant unless the sensitive plant community is restored once the temporary impact is complete;

p) Indirect impacts resulting from project operation at levels that would degrade the health of a sensitive plant community;

Waters and Wetlands[9] Project Impact Thresholds

q) Any of the following activities that would adversely affect waters and wetlands: removal of vegetation; grading; obstruction or diversion of water flow; change in velocity, siltation, volume of flow, or runoff rate; placement of fill; placement of structures; construction of a road crossing; placement of culverts or other underground piping; and/or any disturbance of the substratum;

r) Disruptions to wetland or riparian plant communities that would isolate or substantially interrupt contiguous habitats, block seed dispersal routes, or increase vulnerability of wetland species to exotic weed invasion or local extirpation;

s) Interference with ongoing maintenance of hydrological conditions in a water or wetland;

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[8] Sensitive Plant Communities: defined as plant communities that are ranked as G1 or S1 (critically imperiled globally or sub-nationally [state]), G2 or S2 (imperiled), or G3 or S3 (vulnerable to extirpation or extinction) through NatureServe's Natural Heritage Program and the California Natural Diversity Database, and oak woodlands, pursuant to Section 21083.4 of the California Public Resources Code.

[9] Waters and Wetlands: defined as areas that meet the definition of water, wetlands or streambeds used by one or more of the following agencies: USACE (Section 404 of the Clean Water Act), CDFW (California Fish and Wildlife Code, Section 1602), the California Coastal Commission (in Coastal Zone only, Section 30121 of the California Coastal Act), or Ventura County (as defined in the Ventura County General Plan).

t) The project does not provide an adequate buffer for protecting the functions and values of existing waters or wetlands. Ventura County General Plan Policy 1.5.2-4 requires a minimum buffer of 100 feet from significant wetland habitat;

Habitat Connectivity Project Impact Thresholds. A project would impact habitat connectivity if it would: (a) remove habitat within a wildlife movement corridor[10]; (b) isolate habitat; (c) construct or create barriers that impede fish and/or wildlife movement, migration, or long-term connectivity; or (d) intimidate fish or wildlife via the introduction of noise, light, development, or increased human presence. The following types of impacts to habitat connectivity are considered potentially significant:

u) A habitat connectivity feature (e.g., a linkage, corridor, chokepoint, stepping stone) would be severed, substantially interfered with, or potentially blocked;

v) Wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction would be prevented or substantially interfered with;

w) Wildlife would be forced to use routes that endanger their survival;

x) Lighting, noise, domestic animals, or other indirect impacts that could hinder or discourage fish and/or wildlife movement within habitat connectivity feature (e.g., a linkage, corridor, chokepoint, stepping stone) would be introduced;

y) The width of linkage, corridor or chokepoint would be reduced to less than the sufficient width for movement of the target species (the species relying upon the connectivity feature). The adequacy of the width shall be based on the biological information for the target species; the quality of the habitat within and adjacent to the linkage, corridor, or chokepoint; topography; and adjacent land uses;

z) For wildlife relying on visual cues for movement, visual continuity (i.e., lines-of-sight) across highly constrained wildlife corridors, such as highway crossing structures or stepping stones, would not be maintained.

[10] Wildlife Movement Corridor: defined as a space identifiable by species using it that facilitates the movement of animals and plants over time between two or more patches of otherwise disjunct habitat. Examples include riparian pathways along streams and creeks and other remaining pathways of natural vegetation between developed areas that are frequented by wildlife moving between habitats.

2.4.3.2 Project-Specific Impacts

Special-Status Plant Species (Significance Thresholds a-c, i, j)

Special-status plant species are not anticipated to occur within areas affected by construction and operation of the project. Therefore, impacts to special-status plant species are not anticipated.

Special-Status Wildlife Species (Significance Thresholds a, b, d, g-n)

Least Bell's Vireo

***Impact BIO-1*:** The installation of the proposed Santa Clara River pipeline crossing may result in take of the endangered least Bell's vireo – potentially significant, but mitigable.

The installation of the proposed Santa Clara River pipeline crossing would occur adjacent to two least Bell's vireo breeding territories. At least one of these territories appears to have been occupied consistently during the breeding season since at least 2014. Noise, dust, and heavy equipment activity associated with the HDD pipeline installation may result in take of this endangered species through harassment, nest abandonment, and reduced breeding success.

Migratory Birds

Impact BIO-2: Pipeline installation activities may disrupt breeding of migratory birds – potentially significant, but mitigable.

Vegetation removal, noise, dust, and heavy equipment activity associated with pipeline installation may result in direct impacts (loss of nests during vegetation removal) and indirect impacts (nest abandonment, alteration of breeding behavior) to breeding birds. These impacts may result in violation of the MBTA and Sections 3503 and 3513 of the California Fish and Game Code, and are considered potentially significant. Project sites where these impacts may occur include Segments 2, 16, 18 and 19, the HDD staging areas, and blending/monitoring station sites.

Other Special-Status Wildlife Species

Noise, dust, and heavy equipment activity associated with the HDD pipeline installation may adversely affect foraging of Cooper's hawk, yellow-breasted chat, Costa's hummingbird, and loggerhead shrike in the Santa Clara River and adjacent areas. However, pipeline installation activities would not be located in close proximity to suitable breeding habitat such that impacts are considered less than significant.

Conflict with Local Policies or Ordinances Protecting Biological Resources or Provisions of Adopted Habitat Conservation Plans (Significance Thresholds e and f)

The applicable local policies come from the City of Ventura, County of Ventura, and City of Camarillo. There are no adopted habitat conservation plans in the project area.

The proposed project is consistent with applicable City of Ventura policies as it would:

- Not result in beach or hillside erosion or threaten coastal ecosystem health (Policy 1A).
- Not reduce open space (Policy 1B).
- Not reduce protection for native plants and animals, as project mitigation would prevent significant impacts (Policy 1C).
- Not affect the expansion of green practices (Policy 1D).

The proposed project is consistent with the biological resources policies of the Ventura County General Plan Goals, Policies and Programs document (Section 1.5.2) because:

- The potential biological impacts have been evaluated by a qualified biologist as part of EIR preparation.
- Impacts of the proposed project (with mitigation) would be reduced to a less than significant level.
- The proposed facilities would not be located within 100 feet of any significant wetland habitats. Installation of the proposed pipeline crossing of the Santa Clara River would occur at least 100 feet from any wetland habitats.
- The CDFW, USFWS, Native Plant Society, Ventura Audubon Society, and California Native Plant Society were contacted regarding the proposed project as part of the Notice of Preparation process or as part of Draft EIR preparation and distribution.
- Proposed facilities would be buried or located in urban areas and would not act as a barrier to wildlife movement. Therefore, no adverse effects on wildlife passage would occur.

The proposed project is consistent with the City of Camarillo's General Plan Conservation Element policies as it would:

- Preserve natural watersheds and associated natural plant and animal habitat.
- Not affect the preservation of hillside areas and open space areas.
- Not encourage development in areas where public services and facilities do not already exist.

Sensitive Plant Communities and Wetlands (Significance Thresholds c, o-t)

Sensitive plant communities and/or wetlands do not occur within areas affected by construction and operation of the project. Therefore, impacts to these resources are not anticipated.

Habitat Connectivity/Wildlife Movement Corridors (Significance Thresholds u-z)

The Santa Clara River may function as a wildlife movement corridor as it provides nearly contiguous habitat and cover to facilitate regional wildlife movement between inland and coastal

areas. The proposed pipeline crossing would be located under the riverbed and would not result in any barriers or loss of habitat that could adversely affect wildlife movement.

2.4.3.3 No Project Alternative

This alternative would not result in any new construction and would not affect species or result in changes to habitat.

2.4.3.4 Alternative Alignment B

The alternative pipeline alignment shares Segments 2, 18, and 19 with the proposed pipeline alignment, including the Santa Clara River crossing, HDD staging areas, and proposed blending/monitoring station sites. Segment 4 extends southwest along Vineyard Avenue to Central Avenue, with mostly agricultural land uses along both sides of the roadway. Segment 7 extends southeast along Central Avenue to Rose Avenue, with residential and institutional (Rio Mesa High School) land uses to the north and agricultural areas (row crops) to the south. Segment 11 extends southeast along Central Avenue from Rose Avenue to Santa Clara Avenue, with agricultural areas (mostly orchards and berry greenhouses/hoop houses) on both sides of the roadway. Segment 14 extends southeast along Central Avenue from Santa Clara Avenue to Beardsley Road, with agricultural areas (mostly row crops) on both sides of the roadway. Segment 17 extends southeast along Central Avenue from Beardsley Road to Avenida de Aprisa, with agricultural areas (mostly row crops) on both sides of the roadway and the Casa Del Norte community located immediately south of Central Avenue. Generalized biological habitat mapping of the alternative pipeline alignment is provided in Figures 3.4-1 through 3.4-3.

Least Bell's Vireo

Impact BIO-A1: The installation of the proposed Santa Clara River pipeline crossing may result in take of the endangered least Bell's vireo – potentially significant, but mitigable.

The installation of the proposed Santa Clara River pipeline crossing would occur adjacent to two least Bell's vireo breeding territories. At least one of these territories appears to have been occupied consistently during the breeding season since at least 2014. Noise, dust, and heavy equipment activity associated with the HDD pipeline installation may result in take of this endangered species through harassment, nest abandonment, and reduced breeding success.

Migratory Birds

***Impact BIO-A2*:** Pipeline installation activities may disrupt breeding of migratory birds – potentially significant, but mitigable.

Vegetation removal, noise, dust and heavy equipment activity associated with pipeline installation may result in direct impacts (loss of nests during vegetation removal) and indirect impacts (nest abandonment, alteration of breeding behavior) to breeding birds. These impacts may result in violation of the MBTA and Sections 3503 and 3513 of the California Fish and Game Code and are considered potentially significant. Alternative project sites where these impacts may occur include Segments 2, 18, and 19, HDD staging areas, and blending/monitoring station sites.

Other Special-Status Wildlife Species

Noise, dust, and heavy equipment activity associated with the HDD pipeline installation may adversely affect foraging of Cooper's hawk, yellow-breasted chat, Costa's hummingbird, and loggerhead shrike in the Santa Clara River and adjacent areas. However, pipeline installation activities would not be located in close proximity to suitable breeding habitat such that impacts are considered less than significant.

Mitigation Measures

The following mitigation measures will be implemented and would reduce potential impacts to a less than significant level:

BIO MM-1: Least Bell's Vireo Surveys. Protocol surveys utilizing the January 19, 2001 Least Bell's Vireo Survey Guidelines (or equivalent approved by USFWS) shall be conducted in all suitable habitat within 500 feet of any proposed staging areas near the Santa Clara River to demonstrate absence of this species. If absence cannot be demonstrated to the satisfaction of the USFWS, least Bell's vireo avoidance measures (see below) shall be implemented.

Least Bell's Vireo Avoidance Measures. If absence of this species cannot be demonstrated, all construction activity/pipeline installation work involving excavation, drilling and/or use of heavy equipment or heavy-duty trucks within 500 feet of the Santa Clara River at the proposed pipeline crossing site shall be conducted when least Bell's vireo is not breeding (August 1 through April 1).

BIO MM-2: Breeding Migratory Bird Avoidance Measures. Vegetation removal and pipeline installation and related construction activity adjacent to tree windrows or native vegetation (portions of Segment 2 near Huntsinger Park and the Santa Clara River, portions of Segment 16 near the Las Posas Estates Drain, Segment 18 and Segment 19 along the blue gum windrow and native scrub vegetation, near the Saticoy Conditioning Facility) shall avoid the migratory bird and raptor breeding season (February 15 to August 15).

- If construction in these areas cannot be avoided during this period, a nest survey within the area of impact and a 200 foot buffer for passerines and any available raptor nesting areas within 500 feet shall be conducted by a qualified biologist no more than 5 days prior to any native habitat removal or ground disturbance to determine if any nests are present.

- If an active nest is discovered during the survey, a buffer of 200 feet for migratory birds or 500 feet for raptors (or as determined by the biologist based on a field assessment) would be established around the nest. No construction activity may occur within this buffer area until a biologist determines that the nest is abandoned or fledglings are adequately independent from the adults.

2.4.5 Significance After Mitigation

Implementation of the mitigation measures would reduce biological resource impacts to a less than significant level.

2.5 Cultural Resources

This section evaluates potential impacts to cultural resources resulting from the proposed project and alternatives.

2.5.1 Physical Setting

Prehistory

Early Period (c. 8,000 – c. 3,350 B.P.)

Reliable evidence of Holocene (post-10,000 years ago) settlement in Ventura County begins circa 8,000 years Before Present (B.P.). The earliest sites were located on terraces and mesas; however, settlement gradually shifted to the coast (Wlodarski 1988, Glassow and Wilcoxon 1988). Site assemblages dating to this period often contained large amounts of milling stones and manos, crude choppers, and core tools (W&S Consultants 1997). Prehistoric peoples used these tools to harvest terrestrial and sea mammals, shellfish, and fish. Mortars and pestles appear toward the end of the period, suggesting a shift towards a greater reliance on acorns (Glassow et al. 1985).

Middle Period (c. 3,350 – c. 800 B.P.)

Archaeological material dating to the Middle Period represents a significant evolution in hunter-gatherer technology. The presence of chipped stone tools increases and diversifies, projectile points became more common, and fish hooks and plank canoes (tomol) appear (W&S Consultants 1997). Burials dating to this period provide evidence of wealth and social stratification indicating a transition to ranked society (Ventura County RMA 2011). Excavation data from the Santa Monica Mountains demonstrate expansion to the inland region allowing trade and ceremonial exchange patterns to develop (Ventura County RMA 2011).

Late Period (c. 800 – c. 150 B.P.)

The cultural complexity initiated during the Middle Period intensified in the Late Period. This period is also referred to as the Chumash Era as Chumash social and religious development peaked during this time (Arnold 1987). Villages became the main population centers with satellite camps geared toward the seasonal harvest of plants, seeds, game, and material resources. The Chumash became experts at crafting baskets, stone vessels, shell beads, tomol, and fishing implements (Moratto 1984). It is also likely that communication and trade with non-Chumash tribes and villages accelerated during this period (Ventura County RMA 2011).

Ethnography

The proposed project would be located within the ethnographic territory of the Chumash, who inhabited the Coast Ranges between San Simeon and Malibu (Kroeber 1925). The Chumash have been divided into several geographic groups, each associated with a distinct language dialect (Hoover 1986). The Chumash living in Ventura County formed the Ventureño dialect group of the Chumash language family (Golla 2007). This group was named for their association with the Spanish Mission San Buenaventura, founded in 1782.

The Chumash political organization comprised a named village and the surrounding resource areas governed by a chief, known as the Wot (Sampson 2013). Some higher status chiefs controlled large chiefdoms containing several villages. It is likely the proposed project sites were included in the chiefdom Lulapin, whose limits extended from Malibu to just beyond modern Santa Barbara. The village Muwu, at modern Point Mugu, was the main headquarters for this chiefdom (Whitley and Clewlow, 1979; Whitley and Beaudry 1991). Other villages included Sa'aqtik'oy, at modern Saticoy, which is believed to be one of the oldest Chumash settlements in the region (Clericuzio and Delaney-Rivera 2012); Humaliwo, located on a high point near Malibu Lagoon; and Ta'lopop, located a few miles up Malibu Canyon from the lagoon. According to ethnographic studies, inhabitants from different villages bonded through trade, joint ceremonies, and intermarriage (Sampson 2013).

The chiefly offices were normally inherited through the male line with a primogeniture rule (i.e., the custom of the firstborn inheriting the office) in effect (Hoover 1986). Chiefs had several bureaucratic assistants to help in political affairs and serve as messengers, orators, and ceremonial assistants. Several status positions were associated with specialized knowledge and rituals, such as weather prophet, ritual poisoner, and herbalist (Bean 1974).

The Chumash were a non-agrarian culture and relied on hunting and gathering for their sustenance. Archaeological evidence indicates that the Chumash exploited marine food resources from the earliest occupation of the coast at least 9,000 years ago (Greenwood 1978). Much of their subsistence was derived from pelagic fish, particularly during the late summer and early fall. Shellfish were also exploited, including mussel and abalone from rocky shores and cockle and clams from sandy beaches. Acorns were a food staple; they were ground into flour using stone mortars and pestles and then leached to remove tannic acid. In addition, a wide variety of seeds, including chia from various species of sage (*Salvia sp.*), was utilized. The Chumash harvested many plants for their roots, tubers, or greens (Hoover 1986).

In this area, as elsewhere in California, basketry served many of the functions that pottery did in other places. The Chumash used baskets for cooking, serving, storage, and transporting burdens. Some basket makers wove baskets so tightly that they could hold water while others waterproofed their baskets by lining them with pitch or asphaltum (Chartkoff and Chartkoff 1984).

The coastal Chumash practiced a regular seasonal period of population dispersal and aggregation in response to the location and seasonal availability of different food resources. In this way, large coastal villages would have been fully populated only in the late summer when pelagic fishing was at its peak. Through winter, the Chumash depended largely on stored food resources. During the spring and summer, the population dispersed through inland valleys to harvest wild plant resources (Landberg 1965).

The Chumash lived in large, hemispherical houses constructed by placing willow limbs or other poles in a circle and bending and tying them together at the top. These structures were then covered with tule mats or thatch. Structures such as this housed 40 to 50 individuals, or three-to-four member family groups. Dance houses and sweathouses are also reported for the Chumash (Kroeber 1925). Archaeological evidence supports observations that twin or split villages existed on opposite sides of streams or other natural features, possibly reflecting the moiety system of native California (Greenwood 1978).

Spanish colonization and the establishment of Mission San Buenaventura led to the loss of Chumash culture in Ventura County. Chartkoff and Chartkoff (1984) note that Spanish settlement barred many Native Americans from traditionally important resources including clamshell beads, abalone shells, Catalina steatite, shellfish, and asphaltum. The introduction of European customs and diseases transformed the hunter-gatherers into agricultural laborers and decimated the native population.

History

Contact Period (A.D. 1542 – 1782)

Juan Cabrillo, while exploring the California coast, became the first European to travel near the project site when he investigated the area now occupied by the City of Ventura in 1542. Over two hundred years later, Gaspar de Portolá led the first Spanish land expedition in August 1769 traveling down the Santa Clara River and camped near present day Saticoy on August 13, 1769. Portola renamed the native village at this site La Asuncion de Nuestra Señora or La Asumpta because the expedition reached the location of the eve of The Assumption of the Blessed Virgin (Galvin 2011). The expedition continued down the Santa Clara River Valley and camped at the outlet of the Ventura River on August 14, 1769. Fray Juan Crespi, a Franciscan missionary, noted a large and sophisticated Chumash village (likely Shisholop) near this campsite (Bolton 1926).

In February of 1774, Juan Bautista de Anza traveled through Ventura County as leader of the San Francisco colonists. The de Anza expedition camped near La Asumpta and traveled about ¼-mile south of the proposed pipeline alignment as it continued north along the Pacific Coast (Galvin 2011).

Mission Period (A.D. 1782 – 1834)

Junípero Serra founded Mission San Buenaventura in 1782, approximately eight miles west of the northern terminus of the proposed pipeline alignment. Newly baptized Chumash provided almost all the labor to construct and maintain the mission, which included the seven-mile-long aqueduct system that carried water from the Ventura River. The aqueduct allowed the mission to maintain large orchards and gardens, which produced surplus food for trade. Most of the missions were similar in design and consisted of a church and living quarters for the priests, soldiers, and baptized Chumash. By the early nineteenth century, the surrounding Chumash villages were barely inhabited (Triem 1985).

Rancho Period (A.D. 1822 – 1845)

In 1821, Mexico declared independence from Spain; a year later, California became a Mexican Territory. After the secularization of the missions in 1834, lands were gradually transferred to private ownership via a system of land grants (Hoover 1990). Specifically, most of the proposed pipeline alignment traverses the Rancho Santa Paula y Saticoy, a 17,773-acre property granted to Manuel Jimeno Casarin in 1843, and Rancho Santa Clara del Norte, a 13.989-acre property granted to Juan Maria Sanchez in 1837. Short segments of the proposed pipeline alignment also traverse Rancho El Rio de Santa Clara o la Colonia and Rancho Las Posas.

Anglo-Mexican Period (A.D. 1845 – 1860)

Following the Bear Flag Revolt in 1846, John C. Frémont and the California Battalion marched into San Buenaventura, finding all the inhabitants had fled except the Chumash neophytes. The Treaty of Hidalgo formally transferred California to the United States in 1848. At the time, the area that would become Ventura County was originally the southern portion of Santa Barbara County (Murphy 1979).

Across California, courts reviewed the legality of each land grant on an individual basis. While the Treaty of Hidalgo promised all property belonging to the Californios would be respected, the Land Act of 1851 required all land grant owners to prove their title and ownerships rights. Because the Californios relied on vague surveys and land titles, it took an average of 17 years to receive their American land patents (Bean 1968). Sanchez filed a claim for the Rancho Santa Clara del Norte in 1852 and received his patent in 1869. Casarin sold Rancho Santa Paula y Saticoy to a group of investors in 1852, which received the land patent in 1872.

Americanization Period (A.D. 1860 – Present)

During the early American Period, the *ranchos* continued to raise cattle and sheep, but a severe drought from 1862 to 1864 caused financial difficulties for many of the *ranchos*. Several *ranchos* were divided and sold to east coast capitalists hoping to encounter petroleum deposits (Murphy 1979). Sanchez sold Rancho Santa Clara del Norte to the Schiappa Pietra brothers in 1864 (Gidney et al. 1917). During the 1860s, the Rancho Santa Paula y Saticoy was owned by the More brothers, who were the largest landowner in the region; however, the drought forced the More brothers to divide their lands. George Briggs purchased the rancho from the More brothers in 1862 and intended to plant fruit orchards. In 1867, Briggs subdivided the rancho into 150-acre parcels for sale, which allowed ranchers of moderate means to purchase workable family farms (SBRA 2014).

Ventura County was officially split from Santa Barbara County on January 1, 1873, and a dozen communities were established within the next 25 years. The proposed pipeline alignment begins in Saticoy and traverses the Santa Clara River Valley northeast of El Rio before ending in western Camarillo. The founding of Saticoy as a pioneer settlement is credited to William De Forest Richards, who purchased 850 acres to the west of present-day Saticoy in 1868. The formation of the Farmer's Canal and Water Company in 1869 immediately improved the prospects for agricultural development in the area, and attracted more settlers. A small village containing a school, post office, blacksmith shop, hotel, and general store emerged along Telephone Road west of Saticoy Avenue (SBRA 2014).

The arrival of the Southern Pacific Railroad and Southern Pacific Milling Company warehouse in 1887 turned Saticoy into a railroad boomtown. A dispute between William De Forest Richards and the railroad led to the brief establishment of two Saticoys: "Railroad Saticoy" along the railroad and "Richards Saticoy", which was platted on Richards' property west of town. Land sales were slow and it became clear that the townsite could only support one Saticoy. By the late 1890s, some of the buildings constructed in Richards Saticoy were moved to present-day Saticoy or Oxnard (SBRA 2014).

By 1900, Saticoy had become a center of the walnut industry and a major shipping point for lima beans, sugar beets, barley, corn, hay, dried apricots, and stock. Despite the railroad access,

Saticoy remained somewhat isolated from the rest of the County, due mainly to the lack of a reliable river crossing. The construction of a modern road connection across the Santa Clara River in 1912 passed directly through the center of town. The bridge caused the commercial district to reorient along the new transportation corridor, which was later designated State Route 118. Plans were made to expand Saticoy to the north; however, the rapidly-growing communities of Santa Paula, Ventura, and Oxnard attracted most of the county's population (SBRA 2014).

Efforts to expand Saticoy geographically and economically continued through the 1920s; however, the small community experienced little of the growth that changed the rest of the county during this period. Saticoy was the first community in the Santa Clara Valley to be alerted to the flooding from the collapse of the St. Francis Dam on March 12, 1928, and for days State Route 118 was the only route open to emergency traffic from Los Angeles. After World War II, suburban development caused Ventura County to become the fastest growing county in California. During this time, Saticoy expanded to its current boundaries (SBRA 2014).

The town of New Jerusalem, later renamed El Rio, was founded in 1875 by Simon Cohn. Cohn, a Jewish immigrant from Germany, settled in an area known as the San Pedro precincts and built a general store (Woodard 1991) near a spot where travelers could cross the Santa Clara River (Sheridan 1923). The general store, located at the intersection of what was then Hueneme Road and El Camino Real, soon attracted other businesses and the area, dubbed the "Four Corners" by local ranchers and farmers, would at one point include saloons, a hotel, a restaurant, two blacksmith shops, a church, and a school (Brant 2000). Although a post office was built in 1882, the construction of the first bridge across the Santa Clara River in 1898 eliminated the need for the town. The newly christened El Rio underwent a gradual abandonment that began with the shuttering of the post office in 1911, and ended with the demolition of the former town center during the construction of Highway 101 in the 1950s (Ricard 1972).

In 1837, Jose Pedro Ruiz received a land grant for the 10,000-acre Rancho Calleguas in what is now the Camarillo area. The grant was later sold to Juan Camarillo, a former member of the Hijar-Padres Expedition, who also purchased Rancho Ojai (Hazeltine 2018). Two of Camarillo's sons, Adolfo and Juan, are credited with the founding of the town that would eventually bear their family's name. The Camarillo family began breeding the famed Camarillo White Horses on their ranch in the 1920s, which they would ride in colorful Spanish attire at regional events such as the Fiesta of Santa Barbara and the Tournament of Roses Parade.

Agriculture played a key role in the initial growth of Camarillo, with groves of orange, lemon, and walnut trees dotting the surrounding area. When the railroad coast route was completed in 1898, a station was built in the town, facilitating further growth. The Camarillo State Hospital, built in 1936, was at one point the town's largest employer. During World War II, Oxnard Army Air Field (which would later evolve into the present-day Camarillo airport), was constructed on the west side of town. During the postwar period, the construction of U.S. Highway 101 further accelerated Camarillo's growth and prosperity, as did the establishment of the Seabee base at Port Hueneme and the Naval Air Facility at Point Mugu, with the latter providing a significant boost to the city's resident population and non-agricultural employment. In 1964, with a population of approximately 10,000, the City of Camarillo was incorporated under the council-manager form of government.

During the 1960s and 1970s, many working-class people migrated from east and central Los Angeles to southern and eastern Ventura County. As a result, there was significant population growth in Ventura County along the U.S. Highway 101 corridor. Further expansion of U.S. Highway 101 has facilitated commuting to Los Angeles and prompted further development to the west (Murphy 1979).

Records Search Results

Padre Associates received a Cultural Resources Record Search from the South Central Coastal Information Center (SCCIC) on June 28, 2017. The records search included a review of all recorded historic-era and prehistoric archaeological sites within a 0.25-mile radius of the proposed pipeline and the alternative pipeline alignments, as well as a review of known cultural resource surveys and technical reports. The State Historic Property Data Files, National Register of Historic Places, National Register of Determined Eligible Properties, California Points of Historic Interest, and the California Office of Historic Preservation Archaeological Determinations of Eligibility were also analyzed.

The records search revealed that 93 cultural resources studies have been completed within a 0.25-mile radius of the proposed pipeline and/or alternative pipeline alignments. Of these, 29 previous cultural resources studies have been completed in areas which include the proposed pipeline alignment. The records search identified two previously recorded cultural resources traversed by the proposed pipeline alignment. Of these resources, CA-VEN-223 is within Segment 18 and P-56-15001 is within Segment 19. The records search also identified 11 previously recorded cultural resources within a 0.25-mile radius of the proposed pipeline alignment. Table 2.5-1 lists and describes these resources.

Phase I Pedestrian Survey

Based on the results of previous cultural studies, an intensive pedestrian survey was conducted of the unstudied portions of Segments 2, 6, 10, 16, and 18 of the proposed pipeline alignment. The remaining segments (Segment 13 and 19) have been sufficiently covered by multiple studies and do not warrant further field investigation for this EIR.

Padre archaeologists conducted an intensive pedestrian survey of the unstudied portions of Segments 2, 6, 10, 16, and 18 on July 9 through 11, 2018, including a minimum 25 foot-wide buffer on both sides of the proposed alignment. Each segment was surveyed in transect intervals of no greater than 10 meters, where not constrained by steep slopes, dense vegetation, existing agricultural infrastructure, residential and commercial development, or roads. Surface visibility ranged from zero to 100 percent, with dense vegetation, roads, sidewalks, and existing infrastructure accounting for areas of zero percent visibility. Sufficient opportunities for soil assessment were provided by areas of thinner vegetation; unvegetated, fallow, and plowed agricultural fields; exposed cuts along the banks of the Santa Clara River; and fresh dirt piles generated by burrowing animals.

TABLE 2.5-1
PREVIOUSLY RECORDED CULTURAL RESOURCES

Nearest Pipeline Segment	Site Number	Description
Segment 2	CA-VEN-31	Prehistoric Chumash village site of Sa'aqtik'oy, situated on a slope above the Santa Clara River.
Segment 2	CA-VEN-32	Prehistoric cemetery situated on a slope above the Santa Clara River. No longer extant.
Segment 2	CA-VEN-33	Multicomponent site consisting of lithic debitage and groundstone fragments and historic debris
Segment 2	CA-VEN-34	Concentration of prehistoric groundstone artifacts.
Segment 2	P-56-152759	Historic district consisting of several commercial buildings constructed between 1917 and 1940. The Walnut Growers Association Warehouse is eligible for listing on the National Register of Historic Places (NRHP).
Segment 18	**CA-VEN-223**	**Large prehistoric village site. Shell midden with lithics and tools and potential for human remains.**
Segment 18	CA-VEN-224	Prehistoric shell scatter or possible paleontological deposit.
Segment 18	CA-VEN-1205	Prehistoric lithic scatter.
Segment 18	P-56-100030	Isolated prehistoric artifact.
Segment 19	P-56-100104	Two isolated prehistoric artifacts.
Segment 19	**P-56-150001**	**Historic ranch complex associated with Springville town site.**

Note: Resources that are bolded occur within the proposed pipeline alignment
Source: SCCIC 2017

Segment 2 is situated between Henderson Road and Vineyard Avenue (State Route 232). The northern portion of Segment 2 extends through developed residential and commercial areas along Henderson Road and Saticoy Avenue. The southern portion of Segment 2 crosses the Santa Clara River. Sediments on the north bank of the Santa Clara River appeared to be mechanically disturbed and large amounts of sand, gravel, and non-local clayey material interspersed with modern trash (possibly fill) have been stockpiled along the eastern edge of the proposed HDD northern staging area. Vegetation was dense along the edges of the river channel. The proposed HDD southern staging area is situated within an unvegetated field that formerly served as a gravel quarry.

Segment 2 also includes three potential blending/monitoring station sites. The first potential blending/monitoring station site is located at the start of Segment 2 along Henderson Road, and the second potential site is located along Saticoy Avenue in Huntsinger Park. These locations

are within the northern portion of Segment 2, which had been previously surveyed, and were not visited during the current survey.

The third potential blending/monitoring station site is located within the Saticoy Conditioning Facility on the northwest corner of Telephone and South Wells Roads, and approximately 2,400 feet of ancillary pipeline would connect the station with the proposed pipeline along Saticoy Avenue. The 2,400-foot ancillary pipeline is proposed to be installed on the north side of Telephone Road. The third potential blending/monitoring station site and ancillary pipeline were added to the project on October 4, 2018, after the pedestrian survey was completed. Because eight previous cultural resources studies had sufficiently covered these areas, no additional survey was completed.

While no cultural resources were observed along Segment 2 or within the HDD staging areas, the records search identified four prehistoric sites within a 0.25-mile radius of the proposed pipeline alignment and third potential blending/monitoring station site. Thus, Segment 2, the 2,400-foot ancillary pipeline, and the third potential blending/monitoring station are located within an area that potentially contains subsurface Native American resources.

Segment 6 is oriented northwest-southeast and located between Vineyard Avenue and North Rose Avenue. The northwestern portion of Segment 6 runs along the southern edge of the United's recharge basins. The southeastern portion of Segment 6 is characterized by rectilinear plots of commercial agriculture. No cultural resources were observed along Segment 6.

Segment 10 is oriented northwest-southeast and located between North Rose Avenue and Santa Clara Avenue. Similar to Segment 6, this segment is characterized by numerous rectilinear plots of commercial agriculture. Segment 10 appears to trace the route of an existing, unpaved farm road and avocado plantings were observed extending northeast from the edge of the road. A moderately vegetated drainage channel runs along the southern edge of this segment. No cultural resources were observed along Segment 10.

Segment 16 is located between Beardsley Road and Central Avenue. The northern portion of this segment extends northwest-southeast along the western edge of the Las Posas Estates Diversion (rectangular concrete channel operated by VCWPD) and did not warrant additional field investigation. The southern portion of Segment 16 is aligned north-south and runs through the eastern margins of a series of agricultural fields. The southern portion of Segment 16 follows the route of an unpaved farm road and the moderately vegetated Las Posas Estates Drain (earthen trapezoidal channel). No cultural resources were observed along Segment 16.

Segment 18 is located along Central Avenue and West Daily Drive and extends east-west along the southern margin of a series of agricultural fields. U.S. Highway 101 is located immediately to the south of this segment. Soils observed within Segment 18 appeared moderately to severely disturbed by modern road development and ongoing agricultural usage. Areas of dense vegetation were noted along the eastern edge of Central Avenue and the northern edge of West Daily Drive. No cultural resources were observed along Segment 18.

Segments 13 and 19 have been sufficiently covered by multiple studies and were not included in the pedestrian survey. The records search indicated that Segment 19 passes through

resource P-56-150001, also known as the Simmons/Reiman/Scholle farm. Further discussion of this resource is provided in Section 2.5.3.2.

2.5.2 Regulatory Setting

State

CEQA State Guidelines include procedures for identifying, analyzing, and disclosing potential adverse impacts to historical resources, which include all resources listed in or formally determined eligible for the California Register of Historical Resources (CRHR) or local registers. CEQA further defines a "historical resource" as a resource that meets any of the following criteria:

- A resource listed in, or determined to be eligible for listing in, the CRHR;
- A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code, unless the preponderance of evidence demonstrates that it is not historically or culturally significant;
- A resource identified as significant (i.e., rated 1-5) in a historical resource survey meeting the requirements of Public Resource Code Section 5024.1(g) (Department of Parks and Recreation Form [DPR] 523), unless the preponderance of evidence demonstrates that it is not historically or culturally significant; or
- Any object, building, structure, site, area, place, record or manuscript, which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military or cultural annals of California, provided the determination is supported by substantial evidence in light of the whole record. Generally, a resource is considered "historically significant" if it meets the criteria for listing on the CRHR (CEQA Guidelines Section 15064.5).

The CRHR is a listing of California resources that are significant within the context of California's history. The CRHR is a state-wide program of similar scope to the National Register of Historic Places. In addition, properties designated under municipal or county ordinances are eligible for listing in the CRHR. A historic resource must be significant at the local, state, or national level under one or more of the following criteria that are defined in the California Code of Regulations Title 14, Chapter 11.5, Section 4850:

- It is associated with events or patterns of events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States; or
- It is associated with the lives of persons important to local, California, or national history; or
- It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master, or possesses high artistic values; or
- It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

If an archaeological site does not meet the criteria for a historical resource contained in the CEQA Guidelines, then the site may be treated in accordance with the provisions of Section 21083, as a unique archaeological resource. As defined in Section 21083.2 of CEQA, a "unique" archaeological resource is an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information
- Has a special and particular quality such as being the oldest of its type or the best available example of its type
- Is directly associated with a scientifically recognized important prehistoric or historic event or person

If an archaeological site meets the criteria for a unique archaeological resource as defined in Section 21083.2, then the site is to be treated in accordance with the provisions of Section 21083.2, which state that, if the lead agency determines that a project would have a significant effect on unique archaeological resources, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place (Section 21083.1(a)). If preservation in place is not feasible, mitigation measures shall be required.

The CEQA Guidelines note that, if an archaeological resource is neither a unique archaeological or a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment (CEQA Guidelines Section 15064.5(c)(4)).

Tribal Consultation

See Section 2.17.

Local

City of Ventura

- City of Ventura Municipal Code – Historic Preservation Regulations and Overlay Zone Regulations. City of Ventura Municipal Code, Chapter 24.455 establishes procedures for identifying, designating, and preserving historic landmarks or points of interest that were the site of an historic event, that are connected with the life of an important person, or that contain a building, structure, or other object that is architecturally significant, representative of a type, period, or particular method of construction, or is associated with a significant builder, architect, designer or artist. In addition to designating individual historical landmarks and points of interest, the Historic Preservation Committee, Planning Commission, and, ultimately City Council may designate areas of the City as Historic District Overlay Zones to regulate development in areas that may include a landmark or point of interest. Uses within such Zones must follow provisions related to building height, materials, details, elements, roof, grounds, and signs as outlined in Chapter 24.340 of the City of Ventura Municipal Code.

- City of Ventura General Plan. There is one primary policy applicable to cultural resources, with five actions applicable to the project. Policy 9D states, “Ensure proper treatment of archeological and historic resources.” Action 9.14 requires archeological assessments for projects proposed in the Coastal Zone and other areas where cultural resources are likely to be located. Action 9.15 is to suspend development activity when archeological resources are discovered and require the developer to retain a qualified archeologist to oversee handling of the resources in coordination with the Ventura County Archeological Society and local Native American organizations as appropriate. Action 9.18 requires that modifications to historically-designated buildings maintain their character. Action 9.19 requires any project in a historic district or that would affect any potential historic resources or structure more than 40 years old to assess eligibly for State and federal register and landmark status.

County Ventura

Cultural resource policies of the Ventura County General Plan Goals, Policies and Programs document (Section 1.8.2) include:

- Policy 1.8.2.1. Discretionary developments shall be assessed for potential paleontological and cultural resource impacts, except when exempt from such requirements by CEQA. Such assessments shall be incorporated into a Countywide paleontological and cultural resource data base.
- Policy 1.8.2.2. Discretionary development shall be designed or re-designed to avoid potential impacts to significant paleontological or cultural resources whenever possible. Unavoidable impacts, whenever possible, shall be reduced to a less than significant level and/or shall be mitigated by extracting maximum recoverable data. Determinations of impacts, significance, and mitigation shall be made by qualified archaeological (in consultation with recognized local Native American groups), historical, or paleontological consultants, depending on the type of resource in question.
- Policy 1.8.2.3. Mitigation of significant impacts on cultural or paleontological resources shall follow the Guidelines of the State Office of Historic Preservation and the State Native American Heritage Commission and shall be performed in consultation with professionals in their respective areas of expertise.
- Policy 1.8.2.4.Confidentiality regarding locations of archaeological sites throughout the County shall be maintained in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts.
- Policy 1.8.2.5. During environmental review of discretionary development, the reviewing agency shall be responsible for identifying sites having potential archaeological, architectural, or historical significance and this information shall be provided to the County Cultural Heritage Board for evaluation.
- Policy 1.8.2.6. The Building and Safety Division shall utilize the State Historic Building Code for preserving historic sites in the County.

City of Camarillo

The proposed project would be consistent with City's General Plan policies because:

- Mitigation measures have been provided to preserve areas of historical and cultural significance (Community Design Element, Policy CD-1.4.2, Objective CD-1.8).

These local ordinances, regulations, and policies are captured by the significance thresholds used to evaluate the project.

2.5.3 Impact Analysis

2.5.3.1 Significance Thresholds

City of Ventura and City of Camarillo

Pursuant to the CEQA Guidelines, potentially significant impacts would occur if implementation of the project would:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5;

b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5;

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or

d) Disturb any human remains, including those interred outside of formal cemeteries.

Ventura County

The ISAG states the significance of an archaeological resource is materially impaired when a project:

e) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1 (k) requirements of Section 5024.1 (g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not archaeological or culturally significant; or

f) Demolishes or materially alters in an adverse manner those physical characteristics of an archaeological resource that conveys its archaeological significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA.

2.5.3.2 Project-Specific Impacts

The records search identified two cultural resources traversed by the proposed pipeline alignment. Segment 18 is located within the boundary of CA-VEN-223, which is considered a historical resource under CEQA. Segment 19 is located within P-56-15001, which is not

considered a historical resource under CEQA, but may qualify as a unique archaeological resource.

Historical Resources (Significance Threshold a)

Impact CR-1: Project-related excavation has the potential to adversely affect historical resources – potentially significant, but mitigable.

CA-VEN-223 is a large prehistoric village site located on the north and south sides of U.S. Highway 101 near the Central Avenue interchange. Chester King and Dean Decker initially recorded the site in 1970 and described it as a "large midden with moderate amounts of shell," situated on a small rise within an active citrus orchard. King noted that the site had been affected by periodic ground disturbance related to agriculture but felt that these disturbances had not been severe enough to destroy the site's integrity (King 1970). CA-VEN-223 was surveyed again in 1981 as part of an impact assessment project for the widening of U.S. Highway 101. The 1981 survey identified cultural deposits, which consisted of marine shell, lithic debitage, numerous groundstone and flaked tools, and human remains. Historic background research revealed that CA-VEN-223, which is situated in an area once referred to as Punta de Loma del Posita, may represent the ethnographic Chumash village *Swini* or *Swina* (Padon 1981).

A portion of CA-VEN-223 (adjacent to Segment 18) was excavated in 1991 and yielded lithic artifacts to an average depth of 80 centimeters below surface. However, historic trash was found in the same depth range and it was determined that the deposit had been disturbed (Bissell 1991). The remainder of CA-VEN-223 has not been systematically tested and is considered a historical resource under CEQA until testing is completed. Installation of the proposed pipeline along Segment 18 may result in significant impacts through the destruction of artifacts and/or loss of physical characteristics that contribute to the cultural significance of CA-VEN-223.

Archaeological Resources (Significance Thresholds b, c, e, f)

Impact CR-2: Project-related excavation has the potential to adversely affect archaeological resources – potentially significant, but mitigable.

While no cultural resources were observed along Segment 2 or within the HDD staging areas, the records search identified four prehistoric sites within a 0.25-mile radius of the proposed pipeline alignment and third potential blending/monitoring station site. Thus, Segment 2, the 2,400-foot ancillary pipeline, and the third potential blending/monitoring station are located within an area that potentially contains subsurface Native American resources.

Resource P-56-150001, also known as the Simmons/Reiman/Scholle farm, is a large historic ranch complex consisting of 14 features and possibly associated with the historic town site of Springville. A previous study concluded that the resources present within P-56-150001 are not CRHR eligible under any criterion (McKenna, 2012). Segment 19 passes through Feature 5 of P-56-150001, which is representative of the historic agricultural uses of the property (McKenna, 2012). The remaining known features are located over 1,000 feet to the east of Segment 19 and would not be impacted by the proposed project. Overall, P-56-150001 has been sufficiently documented that project-related impacts to known features would not be significant. However,

unreported cultural deposits related to the Simmons/Reiman/Scholle Farm or the historic town site of Springville may be encountered during pipeline installation, and may result in significant impacts through the destruction of artifacts and/or loss of important historic physical characteristics.

Human Remains (Significance Threshold d)

Based on the site's land use history, the potential for encountering human remains is remote. In any case, compliance with the California Health and Safety Code §7050.5 and California Public Resources Code §5097.98 would ensure that any unknown human remains discovered during project activities are adequately addressed. No impact would result.

2.5.3.3 No Project Alternative

This alternative would not result in any construction and would not affect cultural resources.

2.5.3.4 Alternative Alignment B

The alternative pipeline alignment shares Segments 2, 18, and 19 with the proposed pipeline alignment, including the Santa Clara River crossing, HDD staging areas, and proposed blending/monitoring station sites. Therefore, this alternative would have the same impacts as the proposed project (see Impacts CR-1 and CR-2).

2.5.4 Mitigation Measures

The following mitigation measures will be implemented and would reduce potential impacts to a less than significant level:

CR MM-1: Prior to the issuance of the construction Notice to Proceed, the City and Calleguas shall each retain an archaeologist that meets the minimum professional qualifications standards (PQS) set forth by the Secretary of the Interior (SOI) to prepare a comprehensive Project Cultural Resources Management Plan (CRMP) for the portion of the project each agency is constructing. The purpose of the CRMP is to document the actions and procedures to be followed to ensure avoidance or minimization of impacts to cultural resources consistent with CEQA Guidelines Section 15126.4(b). The CRMP shall include at a minimum:

- A description of the roles and responsibilities of cultural resources personnel (including Native American project manager, Native American representatives, and archaeologists), and the reporting relationships with project construction management, including lines of communication and notification procedures;
- Description of how the monitoring shall occur;
- Description of frequency of monitoring (e.g., full-time, part time, spot checking);
- Description of what resources are expected to be encountered;
- Description of circumstances that would result in the halting of work;
- Description of procedures for halting work on the site and notification procedures;
- Procedures for the appropriate treatment of human remains;

- Description of potential procedures for the treatment of artifacts encountered during construction. Potential procedures may include leaving the artifact in place, preserving materials within another portion of the site, and/or collecting the artifact for analysis. Description of artifact collection, retention/disposal, and curation policies, including a statement that all cultural materials retained will be curated in accordance with the requirements of an identified, qualified curatorial facility, and that the agency responsible for constructing that portion of the Project shall be responsible for all expenses associated with the curation of the materials at the qualified curatorial facility; and
- A description of monitoring reporting procedures including the requirement that reports resulting from the project be filed with the South Central Coastal Information Center (SCCIC) within one year of project completion.

CR MM-2: A worker cultural resources sensitivity program shall be implemented for the project. Prior to any ground-disturbing activity, the agency responsible for constructing that portion of the project shall provide an initial sensitivity training session to all project employees, contractors, subcontractors, and other workers prior to their involvement in any ground-disturbing activities, with subsequent training sessions to accommodate new personnel becoming involved in the project. The program may be conducted together with other environmental or safety awareness and education programs for the project, provided that the program elements pertaining to cultural resources are provided by a qualified archaeologist. The sensitivity program shall address:

- The cultural sensitivity of the project site and how to identify these types of resources;
- Specific procedures to be followed in the event of an inadvertent discovery;
- Safety procedures when working with monitors; and,
- Consequences in the event of noncompliance.

CR MM-3: A qualified archaeologist and Native American representative shall monitor all excavation and trenching along the 2,400-foot ancillary pipeline along Telephone Road (within Segment 2) and Segments 18 and 19. The monitors shall have the authority to temporarily halt or redirect construction in the event that potentially significant cultural resources are encountered.

CR MM-4: For Segments 6, 10, 13, and 16, where open trench operations will occur, the agency constructing the project shall either perform:

a. An Extended Phase I survey (including Shovel Test Probes) prior to construction with a Native American representative present, OR
b. Monitoring by a qualified archaeologist and Native American representative. The level of monitoring will be determined in consultation with the qualified archaeologist and Native American project manager. At the request of the Native American project manager, if determined necessary to effectively monitor the scope and number of construction operations, an additional Native American representative shall be utilized for monitoring.

CR MM-5: If the third potential blending/monitoring station site is selected, the footprint for the blending/monitoring station shall stay within the existing Saticoy Conditioning Facility and not extend more than ten feet into the Saticoy Regional Golf Course.

CR MM-6: *If CR MM-5 is not feasible then the following becomes necessary.* Prior to the issuance of the construction Notice to Proceed, documentation and evaluation of the Saticoy Regional Golf Course shall be performed by a qualified architectural historian. The golf course opened in 1923 and was designed by George C. Thomas, Jr., a celebrated designer; thus, the golf course could be a historic property of local significance.

CR MM-7: A qualified archaeologist and Native American representative shall monitor all Project related excavation and trenching within the Saticoy Regional Golf Course.

CR MM-8: Prior to the issuance of the construction Notice to Proceed, Phase II subsurface testing and evaluation shall be performed for the portion of CA-VEN-223 to be impacted by Segment 18. The Phase II testing will consist of a combination of Test Excavation Units (TEUs) and Shovel Test Probes (STPs) and will determine the vertical and horizontal extent and composition of prehistoric deposits within Segment 18. A qualified archaeologist shall oversee the Phase II testing and a Native American representative shall monitor all excavation.

a. If the portion of CA-VEN-223 within Segment 18 is determined to be significant after Phase II testing, project redesign or Phase III Data Recovery mitigation will be performed.
b. If the portion of CA-VEN-223 within Segment 18 is determined not to be significant after Phase II testing, the project may proceed as planned with a qualified archaeologist and Native American representative monitoring all ground disturbance.

CR MM-9**:** If human remains are unearthed, 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. The agency constructing that portion of the project shall be immediately notified of any human remains found. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission.

2.5.5 Significance After Mitigation

Implementation of the mitigation measures would reduce cultural resources impacts to a less than significant level.

2.6 Energy

This section evaluates potential impacts to energy resulting from the proposed project and alternatives.

2.6.1 Physical Setting

State Water Project

The SWP uses electricity to lift water from the Delta through the San Joaquin Valley and then to southern California. Currently the City and Casitas sell their available SWP allocations to other SWP users through programs offered by DWR (e.g., "turnback pool," Multi-Year Water Pool Demonstration Program). This means the City and Casitas SWP water, though not delivered to the City of Ventura or Casitas is currently delivered, and pumped through, the SWP system using a similar amount of energy as would be used if the water was delivered to the City of Ventura.

County of Ventura

Electricity in Ventura County is generated at a wide variety of facilities throughout California and beyond and delivered by the Southern California Edison (SCE) Company. SCE is organized into two divisions: distribution and transmission. Both divisions have facilities within the project area.

- **SCE – Distribution:** Underground facilities are present at the intersection of Central Avenue and Santa Clara Avenue and within the Spanish Hills development along Camino Tierra Santa. These are outside of, but adjacent to, the proposed alignment. Segments 11 and 14 of Alternative Alignment B would traverse these facilities.

- **SCE – Transmission:** Overhead transmission power lines are present throughout the project area, except for Segment 2 on Saticoy Avenue, between Telephone Road and North Bank Road, and Segments 19 and 20.

The Southern California Gas Company (SCG) provides natural gas service to all the cities and communities in Ventura County. SCG is organized into two divisions: distribution and transmission. Both divisions have facilities within the project area.

- **SCG – Distribution:** Gas distribution pipelines are located throughout the project area, particularly in areas that are developed, such as within the City of Ventura and City of Camarillo. Distribution pipelines are generally less than 4 inches in diameter.

- **SCG – Transmission:** Both a 22-inch high pressure gas line and an 18-inch high pressure gas line are located in Saticoy Avenue on the north and south sides of the street, respectively (in vicinity of Segment 2). A 4-inch high pressure gas line is located along Highway 232, between Central Avenue and Highway 118 (Segment 6 would cross this). Additional 8-inch and 30-inch high pressure gas lines are located on the south side of Santa Clara Avenue (Segment 13 would cross these). A high pressure gas line, varying in size from 4 to 8 inches, is located along Central Avenue between Highway 232 and Daily Drive (this is in near proximity to Segments 7, 11, 14, and 17 of Alternative Alignment B).

2.6.2 Regulatory Setting

State

As denoted in the Warren-Alquist State Energy Resources Conservation and Development Act, “it is further the policy of the state and the intent of the Legislature to employ a range of measures to reduce wasteful, uneconomical, and unnecessary uses of energy resources.”

Local

City of Ventura

The City of Ventura does not have specific energy policies or regulations.

County of Ventura

It is County of Ventura policy to promote the efficient distribution of public utility facilities and transmission lines to assure that public utilities are adequate to service existing and projected land uses, avoid hazards, and are compatible with the natural environment and human resources. Further, discretionary development shall be conditioned to place utility service lines underground wherever feasible.

City of Camarillo

The City of Camarillo General Plan does not have specific energy policies.

The proposed project would be consistent with local regulations and General Plan policies and actions related to energy as described below.

2.6.3 Impact Analysis

2.6.3.1 Significance Thresholds

City of Ventura and City of Camarillo

Pursuant to CEQA Guidelines, potentially significant impacts would occur if implementation of the project would:

a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation;

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

County of Ventura

The ISAG states that any project that would have a significant impact if it would individually or cumulatively:

c) Cause a disruption or re-routing of an existing utility facility; or

d) Increase demand on a utility that results in expansion of an existing utility facility which has the potential for secondary environmental impacts.

2.6.3.2 Project-Specific Impacts

Wasteful Energy Use (Significance Threshold a)

The proposed project was designed to avoid the need to pump water between the City of Ventura and Calleguas. The proposed project does not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources during project operation.

During construction, equipment and vehicles utilized by construction workers would utilize fuel and other energy resources; however, the contractor and workers are incentivized to not be wasteful or inefficient with energy resources as this increases their cost of doing business and diminishes profits. Therefore, it is anticipated that project construction would not result in wasteful, inefficient, or unnecessary consumption of energy.

Conflict with or Obstruct a State or Local Plan for Renewable Energy or Energy Efficiency (Significance Threshold b)

The proposed project would not prevent or conflict with any statewide or local plans for renewable energy.

Disrupt or Require Re-Routing of Utilities (Significance Threshold c)

Based on information developed during the alignment study report, no re-routing of energy facilities is anticipated. If geological conditions or incorrect data result in project facilities conflicting with utilities, standard procedures would be used to adjust the alignment of either the pipeline or utility. This may result in a temporary disruption of utilities. Any adjustments to utility locations are anticipated to be minor and within the construction corridor of the proposed project. This would be a less than significant impact.

In those instances where the pipeline must cross a utility, this is noted in the contract documents. Prior to excavation, as required by California law, Underground Service Alert would be contacted to mark utility locations in the project area. The contractor would be required to provide appropriate support and protective measures to maintain the utility during construction. This prevents disruption of utility services during construction.

Increase Utility Demand Such that Utility Expansion Needed (Significance Threshold d)

The proposed alignment was selected, in part, so that water could be moved between the City of Ventura and Calleguas without pumping. The proposed project would not be expected to increase utility demands such that utility expansion is needed.

2.6.3.3 No Project Alternative

This alternative would not result in any new construction or new water related facilities. Without the proposed project, the SWP Allocations for the City of Ventura and Casitas would continue to be sold to other SWP contractors or to the DWR Turnback Pool Program. Review of the SWP management records (2007-2016) shows that the majority of water sold to the Turnback Pool Program is purchased by Southern California entities (MWD, Antelope Valley-East Kern Water Agency, Desert Water Agency, San Gorgonio Water Agency, Coachella Water District) or Southern San Joaquin Valley entities (Kern County Water Agency, Tulare Lake Basin Water

Storage District). From 2007-1016, 80 to 90 percent of all water in the Turnback Pool Program was sent to either Southern California or the Southern San Joaquin Valley, which requires a similar amount of energy as delivering the water to Ventura and Casitas.

2.6.3.4 Alternative Alignment B

The impacts related to energy are the same for the proposed project and Alternative Alignment B.

2.6.4 Mitigation Measures

Not applicable. Impacts would be less than significant; therefore, mitigation is not required.

2.6.5 Significance after Mitigation

Not applicable. Impacts would be less than significant without mitigation.

2.7 Geology and Soils

This section addresses potential impacts related to local geology and soils in the project area resulting from the proposed project and alternatives.

2.7.1 Physical Setting

Faults

Ventura County is located in southern California, a seismically active region. The County falls within the Transverse Ranges geomorphic province, which is characterized by west-trending folds, thrust faults, and fault-bounded valleys. The project area lies within the Ventura Basin. The Ventura Basin is considered a large trough that extends east-west, from the San Gabriel Mountains to the Pacific Ocean and whose axis generally coincides with the Santa Clara River valley and Santa Barbara Channel. The Basin is characterized in part by a more than 58,000 foot thick section of marine sedimentary rocks (County of Ventura 2016). The structural framework of the region is considered to be a result of compression and rotation caused by the San Andreas Fault, which is located about 40 miles northeast of the project site (CGS 2003).

The alignment falls within three USGS quadrangles: Saticoy, Santa Paula, and Camarillo. The County is transected mostly by east-west trending faults. Faults within the project area and immediate vicinity include the Oak Ridge Fault, Wright Road Fault, and Springville Fault.

The Oak Ridge Fault System is a steep southerly-dipping reverse fault. Within the County boundary, an inferred part of the fault runs generally in parallel to the Santa Clara River. It has no surface expression in the project area. Due to its poorly-defined character, the Oak Ridge Fault does not meet the criteria required for inclusion within an Earthquake Fault Zone, but it is considered to be a potential seismic source (CGS 2003, County of Ventura 2016).

The Wright Road Fault is a north-west trending fault separating the Oxnard Plain from the western ends of the South Mountain Anticline, Las Posas Valley, and Camarillo Anticline. The fault is expressed at the surface in the alluvium of the Las Posas Valley and in included in an Earthquake Fault Zone (CGS 2002b). The fault does not cross the alignment, but the southern terminus runs parallel to Segment 13, within approximately 0.5 miles.

The Springville Fault is considered the westernmost extension of the Simi-Santa Rosa Fault and runs in easterly direction terminating in the vicinity of the eastern end of the alignment, along the southern base of the Camarillo Hills. The fault is zoned as an active fault (County of Ventura 2013). The alignment intersects the fault at Segments 18 and 19.

Inferred traces of the Country Club Fault have been studied in the Saticoy area, but evidence of the fault's existence has been inconclusive and the fault is not considered a potential seismic source (Oakridge Geoscience, Inc. 2017).

Active faults and potential seismic sources near the project site are listed in Table 2.7-1.

TABLE 2.7-1
FAULTS AND EARTHQUAKE GROUNDSHAKING POTENTIAL IN THE PROJECT VICINITY

Fault Name	Miles from Nearest Proposed Project Component	Maximum Magnitude (Ellsworth)
Simi Santa Rosa	0	6.9
Oakridge (Onshore)	0	7.2
Wright Road	0.3	Unknown
Ventura-Pitas Point	2.5	7
Bailey	4	Unknown
Red Mountain	9	7.4
San Cayetano	11	7.2
Mission Ridge-Arroyo Parrida-Santa Ana	12	6.9
Santa Ynez	17	7.4
Malibu Coast	15	7
Channel Islands Thrust	17	7.3
Sycamore Canyon	9	Unknown
Santa Monica	17	7.4
Anacapa-Dume	17	7.2
Santa Cruz Island	19	7.2

Sources: https://earthquake.usgs.gov/cfusion/hazfaults_2008_search/query_main.cfm ; Ventura County 2015, Figure F7.

Review of ground shaking mapping in Ventura County indicates peak horizontal ground accelerations (pga) of about 0.75g for the majority of the proposed alignment underlain by alluvial sediments and fan deposits. The County's seismic hazard map indicates pgas of 0.65g for the portion of the alignment within the Camarillo Hills from Springville Reservoir to about Central Avenue (Oakridge Geoscience, Inc. 2017).

Earth Materials and Instability

The majority of the project area lies in relatively level topography of granular and finer-grained alluvium and fan deposits consisting of gravel, sand, silt, and clay. Artificial fill materials associated with agriculture, residential/commercial development, roadway, drainage, levees, and culverts are common in the project vicinity (Oakridge Geoscience, Inc. 2017). Geologic units that generally are susceptible to liquefaction include late Quaternary alluvial and fluvial sedimentary deposits and artificial fill. Those areas are mainly found in the alluviated valleys, floodplains, and canyons which cover the majority of the project area. The eastern end of the alignment, particularly Segments 16 and 19, runs adjacent to the Camarillo Hills where weak geological units and/or steep slopes contribute to an earthquake-induced landslide zone (CGS 2002a and 2002b).

Liquefaction hazards may exist in areas where depth to groundwater is 40 feet or less. Shallow groundwater conditions, within about 10 to 20 feet of the ground surface, are widespread in the Oxnard Plain and along the Santa Clara River Valley. As a result, liquefaction zones cover the majority of the project area, starting at the northeastern side of the Santa Clara River and

stretching into the City of Camarillo. Groundwater levels within the Camarillo Hills are typically greater than 50 feet (CGS 2002a and 2002b).

Field exploration (Fugro 2006) has indicated groundwater deeper than 16 feet in borings advanced near the intersection of Central Avenue and Rose Avenue and along Rose Avenue to SR118. Explorations by Caltrans during preparation for the SR118 crossing of the Santa Clara river found that groundwater may be near the ground surface or in excess of 100 feet deep near the river, depending on precipitation and recharge. Groundwater near the Saticoy Wastewater Treatment Plant was encountered at depths of about 45 feet (Fugro 2001). Staal, Gardner, and Dunne, Inc. (SGD 1988) encountered groundwater at a depth of about 12 feet at the Saticoy Water Conditioning Facility near the Brown Barranca. Groundwater was not encountered by Oakridge Geoscience, Inc. (2017) in drill holes advanced at the Saticoy Regional Golf Club to depths of 50 feet. Springs have historically been found to occur north of about the Ventura County Transportation Commission railroad tracks west of Brown Barranca (SGD 1987). Groundwater may occur at shallower depths proximal to drainages, basins, and barrancas or perched on finer-grained, less permeable materials (Oakridge Geoscience, Inc. 2017).

2.7.2 Regulatory Setting

The following regulatory programs and policies are in place to address hazards of fault rupture, landslides, and other ground failure or seismic impacts.

State

- Alquist-Priolo Act. The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The Act requires a geological investigation to be conducted to demonstrate that proposed buildings will not be constructed across active faults before a project can be permitted. Earthquake Fault Zones are required to be delineated by the State Geologist, in this case the California Geological Survey, along faults that are “sufficiently active and well defined” as defined in the Act.

- Seismic Hazards Mapping Act. This Act was passed in 1990 to reduce the threat to public health and safety from seismic hazards, including strong ground shaking, liquefaction, landslides, or other ground failure. Site-specific hazard investigations are required when a development project is located within one of the Seismic Hazard Mapping Zones defined as a zone of required investigation.

- Building Codes. The California Building Code, included in Title 24 of the California Code of Regulations, establishes minimum requirements to safeguard public health, safety, and general welfare through structural strength, egress facilities, building stability, and other requirements for the built environment. The CBC is a compilation of three major sources of building criteria: standards adopted by state agencies based on national model codes, national model codes adopted to meet California conditions, and standards passed by the California legislature that address concerns specific to California. A city or county may establish more restrictive building standards reasonably necessary due to local climatic, geological, or topographical conditions. The CBC has

been adopted and amended by the County of Ventura and the cities of Camarillo and Ventura to address local conditions.

Local

City of Ventura

The City's General Plan (2005) includes various actions under its policy to minimize risks from geologic and flood hazards (Policy 7B):

- Action 7.7. Require project proponents to perform geotechnical evaluations and implement mitigation prior to development of any site:
    - with slopes greater than 10 percent or that otherwise have potential for landsliding,
    - along bluffs, dunes, beaches or other coastal features,
    - in Alquist-Priolo earthquake fault zone or within 100 feet of an identified active or potentially active fault,
    - in areas within 100-year flood zones, in conformance with all Federal Emergency Management Agency regulations.
- Action 7.8: To the extent feasible, require new critical facilities (hospital, police, fire, and emergency service facilities, and utility "lifeline" facilities) to be located outside of fault and tsunami hazard zones, and require critical facilities within hazard zones to incorporate construction principles that resist damage and facilitate evacuation on short notice.

County of Ventura

The Ventura County General Plan includes several policies aimed at minimizing effects of geologic hazards and erosion, including the following:

- Policy 2.1.2.3: Essential facilities shall be designed and constructed to resist forces generated by earthquakes, gravity, precipitation, fire, and winds.
- Policy 2.2.2.3: All development projects involving construction within Earthquake Fault Hazard Zones (as depicted on the State of California, Earthquake Fault Hazards Map for County of Ventura; Figure 2), shall be reviewed by the Public Works Agency Certified Engineering Geologist in accordance with the requirements of the Alquist-Priolo Earthquake Fault Zoning Act and the policies and criteria established by the State pursuant to said Act.
- Policy 2.2.2.5: Roads, streets, highways, utility conduits, and oil and gas pipelines shall be planned to avoid crossing active faults where feasible. When such location is unavoidable, the design shall include measures to reduce the effects of any fault movement as much as possible.
- Policy 2.7.2.1: Development in mapped landslide/mudslide hazard areas shall not be permitted unless adequate geotechnical engineering investigations are performed, and appropriate and sufficient safeguards are incorporated into the project design.

- Policy 2.7.2.2: In landslide/mudslide hazard areas, there shall be no alteration of the land which is likely to increase the hazard, including concentration of water through drainage, irrigation or septic systems; removal of vegetative cover; or undercutting of the bases of slopes or other improper grading methods.
- Policy 2.8.2.1: Construction must conform to established standards of the Ventura County Building Code, adopted from the California Building Code.
- Policy 2.8.2.2: A geotechnical report, prepared by a registered civil engineer and based upon adequate soil testing of the materials to be encountered at the sub-grade elevation, shall be submitted to the County Surveyor, Environmental Health Division, and Building and Safety for every applicable subdivision and Building Permit application (as required by the California Building Code).

City of Camarillo

The Safety Element of the City of Camarillo's General Plan (2013) includes the following policies to ensure safety from geologic and seismic hazards:

Geologic Hazards

- Policy SAF-2.1a. Minimize geologic hazards by identifying and addressing potential hazards during the planning and engineering of proposed development and/or improvement projects.
- Policy SAF-2.1b: Require the preparation of a geologic/geotechnical investigation (performed by a Certified Engineering Geologist and/or a Geotechnical Engineer) for all new development or development projects located in areas of potential hazards. That investigation should include adequate analysis and appropriate mitigation of potential hazards to the satisfaction of the City Engineer or their designee. Special consideration should be given to terrain, soils, slope stability, and erosion issues, where applicable.

Seismic Hazards

- Policy SAF-2.2c. Design roadways, streets, highways, utility conduits, and oil and gas pipelines to avoid crossing active faults where feasible. When such location is unavoidable, the design should include measures to reduce the effects of any fault movement as much as possible.
- Policy SAF-2.2d. Locate new critical facilities, special occupancy structures, or hazardous materials storage facilities outside of active fault zones unless demonstrated that the facility is not subject to fault rupture hazard.
- Policy SAF-2.2g. Require additional analysis for development within areas susceptible to secondary seismic impacts (liquefaction, landsliding, subsidence, etc.) to determine the potential risk to these hazards and identification of mitigation measures, to the satisfaction of the City Engineer or their designee.

The proposed project would be consistent with local regulations, ordinances, and policies related to geology and soils. The project would be designed consistent with City, County, and State building codes (where applicable) and would incorporate safeguards to limit impacts due

to groundshaking, landslide, and liquefaction, and other potential unstable soil conditions. The project, prior to construction, would receive applicable reviews and permits from the City of Ventura, County of Ventura (limited to encroachment permits), and City of Camarillo (limited to encroachment permits).

2.7.3 Impact Analysis

2.7.3.1 Significance Thresholds

City of Ventura and City of Camarillo

Pursuant to CEQA Guidelines, potentially significant impacts would occur if implementation of the project would:

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
    i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;
    ii. Strong seismic ground shaking;
    iii. Seismic-related ground failure, including liquefaction; and/or
    iv. Landslides;
b) Result in substantial soil erosion or the loss of topsoil;
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property;
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

County of Ventura

The County guidelines generally apply the same thresholds of significance as Appendix G for seismic groundshaking and fault rupture, unstable geologic units (landslide laterally spreading, subsidence, and liquefaction), and expansive soils. The Ventura County ISAG does contain unique criteria specific to seiche and tsunami hazards:

f) if the proposed project is located within about 10 to 20 feet of vertical elevation from an enclosed body of water such as a lake or reservoir OR is located in a mapped area of tsunami hazard as shown on the County General Plan maps it is at risk of seiche and tsunami.

2.7.3.2 Project-Specific Impacts

Seismic, Liquefaction and Landslide Risk (Significance Thresholds a, c)

Impact GEO-1: Project facilities are in areas prone to seismic activity – potentially significant, but mitigable.

As described earlier, the project area is located in a seismically active region. The southern end of the proposed alignment intersects and runs along a portion of the Earthquake Fault Zone of the Springville/Santa Rosa-Simi Fault, located within the Camarillo Quadrangle. The alignment also runs within approximately 0.3 miles of the southern end of the Wright Road Fault, which is an official Earthquake Fault Zone. In addition, the alignment crosses the Oak Ridge Fault, which does not meet the criteria for inclusion in an Earthquake Fault Zone, but is considered to be a potential seismic source. The delineated zones encompass active faults that constitute a potential hazard to structures from faulting or fault creep. If a fault or faults within these zones were to rupture during an earthquake, overlying structures could be damaged. Mitigation measures are available to reduce this risk and make this a less than significant impact.

Impact GEO-2: Project facilities are in areas prone to liquefaction – potentially significant, but mitigable.

Strong seismic ground shaking poses a potential hazard throughout the region and ground shaking can be amplified within active fault zones found near the project site. In addition to potentially strong ground shaking, fault movement could result in seismic-induced liquefaction. Liquefaction is the process in which poorly consolidated, sandy soils take on the properties of a liquid when subjected to strong ground shaking. The majority of the project would be located within a liquefaction zone. Mitigation measures are available to reduce this risk and make this a less than significant impact.

Impact GEO-3: Project facilities are in areas prone to seismically induced landslide – potentially significant, but mitigable.

The southern end of the alignment is in the vicinity of small areas of earthquake-induced landslide zones, but overall, landslides are not considered to pose a significant risk to the proposed project. For the small portion of the alignment in the earthquake-induced landslide zone, mitigation is proposed that would make this a less than significant impact.

Soil Erosion and Loss of Topsoil (Significance Threshold b)

Most of the pipeline segments involve excavation activities associated with construction of new pipelines and related appurtenances. Excavated materials would be stockpiled and stabilized during construction. Following construction, the excavated areas would be returned to pre-project conditions. Prior to beginning construction, the agency constructing the pipeline would prepare a Stormwater Pollution Prevention Plan (SWPPP) consistent with the NPDES Construction General Permit. The SWPPP would specify structural stormwater, erosion, and sediment controls; measures to protect receiving waters, good housekeeping measures (site cleanup and trash disposal); and hazardous materials management and disposal practices. This would ensure that impacts due to potential erosion are less than significant.

Expansive Soils (Significance Threshold d)

A geotechnical desktop study was performed as part of the alignment study and did not identify expansive soil in the project area.

Impacts on Septic Systems (Significance Threshold e)

The proposed project does not involve septic tanks or alternative wastewater disposal systems.

Seiche and Tsunami Hazard (Significance Threshold f)

The proposed project would not be located in an area subject to either seiche or tsunami. The proposed project would not be within 20 feet of a lake or reservoir and the proposed project alignment would be located more than 30 feet above sea level.

2.7.3.3 No Project Alternative

The no project alternative would not involve ground disturbing activities and no new structures would be built in areas of geologic or seismic hazards. This alternative would not increase the risk of geologic or seismic hazards above existing conditions.

2.7.3.4 Alternative Alignment B

The impacts related to geology and soils are the same for the proposed project and Alternative Alignment B.

2.7.4 Mitigation Measures

The following mitigation measures will be made part of the project:

GEO MM-1: Implement Recommendations of Site-Specific Geotechnical Report. For those areas where trenchless construction is a site specific geotechnical report prepared by a qualified geotechnical engineer or engineering geologist. The report recommendations will be based on a comprehensive evaluation of slope stability, seismic, and soil conditions that may affect construction of the pipelines and related facilities. Recommendations will be consistent with provisions of California Code of Regulations, Title 8, Construction Safety Orders.

GEO MM-2: Grading and Excavation Monitoring by Qualified Personnel. As indicated by the Geotechnical Report and/or to the extent deemed appropriate by the agency constructing the pipeline, project grading and excavations shall be observed by a geotechnical engineer, engineering geologist, or other qualified representative to verify compliance with recommendations of the geotechnical report.

GEO MM-3: Incorporate Design Features to Prevent Failure in Seismic Event. The pipeline will be designed appropriately for an active seismic environment to limit the risk of pipeline failure due to a seismic event.

2.7.5 Significance After Mitigation

Implementation of the mitigation measures would reduce geology and soils related impacts to a less than significant level.

2.8 Hazards and Hazardous Materials

This section evaluates the potential for impacts related to hazards and the presence and use of hazardous materials resulting from the proposed project and alternatives.

2.8.1 Physical Setting

The project area extends from the City of Ventura, just west of the Santa Clara River, to the western edge of the Camarillo Hills in the City of Camarillo. The majority of the alignment lies within unincorporated County area, which has been historically dominated by agriculture. Urban and residential uses are found at the endpoints of the alignment, within the cities of Ventura and Camarillo.

The alignment would stretch across low-lying areas dominated by agricultural fields, with little natural vegetation. The majority of the pipeline would be installed within existing dirt access roads within farmland. These roads are not major thoroughfares used for emergency evacuation purposes.

The southern edge of the project alignment (Segment 18) is located about 0.5 miles from the Camarillo Airport. The portion from Segment 10 to the Springville Connection is located within the airport Sphere of Influence. The airport is located south of the alignment and is separated from the project area by Highway 101.

The following databases were searched in March 2018 for known hazardous materials contamination at the project site:

- SWRCB GeoTracker database
- Department of Toxic Substances Control EnviroStor database
- Hazardous Waste and Substances Site List (Cortese List)

The pipeline alignment is located in the general vicinity of several known underground storage tank sites (SWRCB GeoTracker database). However, all but one of the identified sites have undergone remediation and the cases are closed with the SWRCB. A Caltrans site (T10000000962), under regulation by the SWRCB as part of its Site Cleanup Program was identified within Daily Drive where Segment 18 is located. The site is currently listed as open and inactive as of January 2015. The potential contaminant of concern related to the site is diesel. No additional details are available for the site.

Neither the EnviroStor database nor the Cortese List identified any hazardous materials sites in the vicinity of the project area.

The California Department of Conservation Division of Oil, Gas, and Geothermal Resources (DOGGR), in its comments on the Notice of Preparation, identified five plugged oil and gas wells in proximity to the proposed project and Alternative Alignment B. The oil and gas wells are identified as plugged but not abandoned. Specifically identified were:

- DOGGR Well API 11105763. This is a dry oil and gas well near Segment 2 (part of the proposed project and Alternative Alignment B). The well is operated by ExxonMobil Corporation and has been plugged, but the plug does not meet current DOGGR standards.
- DOGGR Well API 11105731. This is a dry oil and gas well near Segment 10 of the proposed project. The well is operated by ExxonMobil Corporation and has been plugged, but the plug does not meet current DOGGR standards.
- DOGGR Well API 11120957. This is a dry oil and gas well near Segment 13 of the proposed project. The well is operated by Kenneth H. Hunter, Jr. and has been plugged, but the plug does not meet current DOGGR standards.
- DOGGR Well APO 11105764. This is a dry oil and gas well near Segment 7 (this segment is associated with Alternative Alignment B). The well is operated by ExxonMobil Corporation and has been plugged, but the plug does not meet current DOGGR standards.
- DOGGR Well API 11105741. This is a dry oil and gas well near Segment 17 (this segment is associated with Alternative Alignment B). The well is operated by Rothschild Oil Company and has been plugged, but the plug does not meet current DOGGR standards.

2.8.2 Regulatory Setting

The following section provides an overview of applicable regulatory guidelines relating to the use, storage, and disposal of hazards and hazardous substances.

Federal

- Federal Water Pollution Control Act of 1972 (CWA). The CWA governs water quality protection in the United States. This Act includes the National Pollutant Discharge Elimination System (NPDES) program, which requires that permits be obtained for point source discharges of pollutants to waters of the United States.
- Resource Control and Recovery Act of 1974 (RCRA). RCRA creates the framework for the proper management of hazardous and non-hazardous solid waste, including tracking those wastes from point of origin to ultimate disposal. California EPA's Department of Toxic Substances Control (DTSC) has the responsibility for implementing RCRA statewide.
- Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). The purpose of CERCLA is to identify sites where hazardous materials threaten the environment and/or public health as a result of leakage, spillage, or general mismanagement of hazardous substances and then to identify the responsible party. CERCLA, also known as Superfund, established a fund for the assessment and remediation of the worst hazardous waste sites in the nation. Exceptions are provided for crude oil wastes that are not subject to CERCLA.
- USEPA Chemical Accident Prevention Rule, Clean Air Act (CAA) Section 112(r), Risk Management Program (RMP). Section 112r of the CAA requires the EPA to publish

regulations and guidance specifying the types of actions to be taken by facilities to prevent accidental releases of hazardous chemicals into the atmosphere and reduce their potential impact on the public and the environment.

State

- Porter-Cologne Water Quality Control Act (California Water Code, Division 7). The Porter-Cologne Act is the principal law governing water quality regulation in California and establishes a comprehensive program to protect water quality and beneficial uses of the State's waters. The Porter-Cologne Act also established the SWRCB and nine Regional Water Quality Control Boards (RWQCBs) as the main state agencies responsible for protecting water quality in California. Discharges of wastes (including spills, leaks, or historical disposal sites) where they may impact the waters of the state are prohibited under the Porter-Cologne Act, including the discharge of hazardous wastes and petroleum products. Discharges are regulated by the RWQCBs primarily through the issuance of NPDES permits for point source discharges and waste discharge requirements for nonpoint discharges. The Los Angeles RWQCB is responsible for Region 4, which encompasses the project area.

- Title 22, California Code of Regulations. Title 22, division 4.5 of the California Code of Regulations outlines regulations on the use and disposal of hazardous substances in California, implemented by the California DTSC. It contains regulatory thresholds for hazardous wastes which are more restrictive than the federal hazardous waste regulations.

- California Health and Safety Code Sections 25500 et seq. The California community right-to-know hazardous material law applies to any facility that handles any hazardous material (chemical, chemical-containing products, hazardous wastes, etc.) in a quantity that exceeds reporting thresholds. The most common thresholds that trigger regulation based on that state statute are 500 pounds of solid, 55 gallons of liquid, and 200 cubic feet of compressed gas, but ultimately depend on the substance involved.

- Unified Hazardous Waste and Hazardous Materials Management Regulatory Program. This Program was created to consolidate, coordinate, and make consistent the administrative requirements, permits, inspections, and enforcement activities for environmental and emergency management programs. The Program is implemented at the local government level by Certified Unified Program Agencies (CUPAs). The Ventura County Environmental Health Division (VCEHD) serves locally as a CUPA. The City of Ventura Fire Department implements the Hazardous Materials Business Plan, Aboveground Petroleum Storage, California Accidental Release Prevention Program, and Underground Storage Tank programs within the City's jurisdiction.

- California Accidental Release Prevention Program (CalARP). CalARP is the California state equivalent of the Federal RMP. The program requires facilities that handle regulated substances on the Federal extremely hazardous substances list (or the State list of regulated substances), in quantities greater than Federal or State threshold quantities, to prepare a RMP.

- CalOSHA Process Safety Management Standard. These regulations contain requirements for preventing or minimizing the consequences of catastrophic releases of toxic, reactive, flammable or explosive chemicals. The establishment of process safety management regulations are intended to eliminate to a substantial degree, the risks to which employees are exposed in petroleum refineries, chemical plants, and other facilities.

Local

City of Ventura

The City's General Plan (2005) includes various actions under its policy to minimize exposure to air pollution and hazardous substances (Policy 7B). Those actions applicable to the project related to hazardous substances are listed below. Air pollution is addressed in Section 2.3.

- Action 7.27: Require proponents of projects on or immediately adjacent to lands in industrial, commercial, or agricultural use to perform soil and groundwater contamination assessments in accordance with American Society for Testing and Materials standards, and, if contamination exceeds regulatory action levels, require the proponent to undertake remediation procedures prior to grading and development under the supervision of the County Environmental Health Division, Department of Toxic Substances Control, or RWQCB (depending upon the nature of any identified contamination).

- Action 7.30: Require all users, producers, and transporters of hazardous materials and wastes to clearly identify the materials that they store, use, or transport, and to notify the appropriate City, County, State and Federal agencies in the event of a violation.

County of Ventura

The following County General Plan (2016) policies are applicable to hazardous wastes and materials and to the project:

- Policy 2.15.2-4: Applicants shall provide a statement indicating the presence of any hazardous wastes on a site, prior to development. The applicant must demonstrate that the waste site is properly closed, or will be closed before the project is inaugurated.

City of Camarillo

The Safety Element of the City of Camarillo General Plan (2013) outlines multiple policies with the goal of adequately protecting residents and business from hazardous materials and waste. The following policies are also applicable to the proposed project:

- Policy SAF-5.1b: Coordinate with the Ventura County Fire Protection District on the response procedures associated with a release or threatened release of a hazardous material within the City.

- Policy SAF-5.2e: Designate appropriate transportation routes for the movement and transport of hazardous materials within and through the City.

- Policy SAF-5.2f: Require that new pipelines and other channels carrying hazardous materials avoid residential areas and other sensitive land uses to the greatest extent possible.

These General Plan policies are captured by the significance thresholds used to evaluate the project.

2.8.3 Impact Analysis

2.8.3.1 Significance Thresholds

City of Ventura and City of Camarillo

Pursuant to CEQA Guidelines, potentially significant impacts would occur if implementation of 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 or excessive noise 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 the 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, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

County of Ventura

The County guidelines generally follow the same thresholds of significance as Appendix G related to hazards and hazardous materials.

2.8.3.2 Project-Specific Impacts

Potential project-specific impacts are described in the following.

Transport, Use, Disposal or Accidental Release of Hazardous Materials (Significance Thresholds a, b)

The project would involve temporary use of lubricants, coatings, and other materials that could be considered hazardous during the construction phase. In addition, excavation activities have the potential to expose potentially contaminated soils. Compliance with existing laws and regulations related to hazardous materials would help prevent hazardous conditions and would reduce potential hazards to a less than significant level.

The potential exists for accidental release of hazardous materials during construction of the proposed project. However, such accidental releases of hazardous materials are readily controlled to a less than significant level through control or remediation of the material accidentally released as dictated by existing law, including the Unified Hazardous Waste and Hazardous Materials Management Regulatory Program. Compliance with the law can prevent any significant exposures of hazardous or toxic materials to the public or the environment and is sufficient to control or limit the adverse impact of accidental releases to a less than significant impact level.

Some hazardous materials would be stored on-site at the blending station. The final treatment materials are not yet known, but would likely consist of liquid materials (e.g., orthophosphate or blended phosphates) stored in a small tank, a chemical feed pump, a leak detection system, and an alarm system. Any chemical storage tanks would be located above a concrete containment area with sufficient capacity to contain the full tank contents. Hazardous materials would be delivered periodically to the blending station. Transportation would comply with all Caltrans, EPA, DTSC, California Highway Patrol, and California State Fire Marshal regulations for transporting hazardous materials. Consistent with the USEPA Chemical Accident Prevention Rule, the California Accidental Release Prevention Program, and CalOSHA Process Safety Management Standard, the City's Risk Management Plan would be updated to include safe handling, use, and disposal of any hazardous materials used at the blending station as required by these regulations.

Impact HZD-1: Potential for inadvertent release of drilling lubricants and muds during HDD - potentially significant but mitigable.

Frac-out, or inadvertent return of drilling lubricant, is a potential concern when the HDD is used under sensitive habitats, waterways, and areas of concern for cultural resources. HDD typically uses a non-toxic fine clay material as a drilling lubricant. Benthic invertebrates, aquatic plants, and fish and their eggs can be smothered by the fine particles if the drilling slurry and muds are discharged to waterways. There have been several successful HDD crossings of the Santa Clara River. Standard mitigation measures have been developed to limit potential for frac-out and to quickly respond should frac-out occur. These measures would reduce potential hazards to a less than significant level.

Hazardous Materials in Proximity of School (Significance Threshold c)

There are several schools in the vicinity of the project area, including four that are within one-quarter mile. Three schools are located within one-quarter mile of Segment 2 and include Douglas Penfield School, Saticoy Elementary, and Sacred Heart. In addition, Mary B. Perry High School is located within the Ventura Youth Correctional Facility, which is located within one-quarter mile of Segment 13. As noted above, the project would involve temporary use of lubricants, coatings, and other materials that could be considered hazardous during the construction phase. In addition, excavation activities have the potential to expose potentially contaminated soils. Compliance with existing laws and regulations related to hazardous materials would help prevent hazardous conditions and would reduce potential hazards to nearby schools to a less than significant level.

Location on Hazardous Materials Site (Significance Threshold d)

Impact HZD-2: Project construction would occur near oil and gas wells that have been plugged, but not abandoned to current DOGGR standards, potentially significant, but mitigable.

The oil and gas wells identified near the proposed alignment are identified as “dry holes” meaning they were wells drilled for oil or gas but yielding none. Pipeline construction would cross near three oil and gas wells and construction could limit access to these wells and/or disturb the integrity of the oil and gas well. It is also possible that construction could expose soils containing hydrocarbons, but this is unlikely as these are classified as “dry holes”. Mitigation measures recommended by DOGGR would reduce this impact to a less than significant level.

Impact HZD-3: Project construction would occur in the near vicinity of former Caltans site identified as contaminated with diesel – potentially significant, but mitigable.

Segment 18 would cross near a Caltrans site (T10000000962) which has been identified as having potential diesel contamination. Mitigation measures would reduce this impact to a less than significant level.

Exposure to Airport Impacts (Significance Threshold e, f)

A portion of the project area falls within the Camarillo Airport Sphere of Influence and the alignment comes within approximately 0.5 miles of the airport, although it is separated by Highway 101. Based on the 2000 Airport Comprehensive Land Use Plan for Ventura County, the contour lines of existing and projected noise exposure, down to 60 Community Noise Equivalent Level (CNEL), do not extend into the project area (Ventura County Airport Land Use Commission 2000). Further, the project would not result in new above ground structures within the airport sphere of influence.

There are no private airstrips in the project area. There is a small runway like structure along the eastern bank of the Santa Clara River operated by the Camarillo Flying Circus Radio Controlled Model Airplane Club. The periodic use of this area by the model airplane club should not pose a risk to the construction workers during pipeline installation. Impacts would be less than significant.

Interference with Emergency Response (Significance Threshold g)

Evacuation routes are largely dependent on the hazard being responded to and circumstances of the emergency. Generally, primary evacuation routes are located along major highways and major roads. The majority of the pipeline would be installed within existing dirt access roads within farmland. These roads would generally not be used for emergency evacuation purposes. The alignment crosses some major north-south roads, which include Vineyard Avenue (Highway 232), North Rose Avenue, and Santa Clara Avenue. However, it is expected that 300 feet of the alignment would be in active construction at any time, with advancement of 80-160 feet per day. This approach limits the amount of disturbed roadway that could potentially interfere with evacuation along those roads. Short-term increased truck and car traffic associated with construction is not anticipated to create significant interference to potential emergency evacuation. Construction vehicles have the potential to use the same routes as first response vehicles; however, this impact would be temporary. Once construction is complete, road surfaces would be restored to pre-construction conditions. As a result, the potential is low for interference or impairment of an emergency response plan or emergency evacuation plan. Impacts would be less than significant.

Wildfire Risk (Significance Threshold h)

The proposed project would not require installation or maintenance of fire-related infrastructure that could exacerbate fire risk or could result in temporary or ongoing impacts to the environment. The project area is not located within an area deemed “Very High” or “High” fire hazard.

2.8.3.3 No Project Alternative

This alternative would not result in any physical changes or activities that would have potential to create significant hazards to the public or environment.

2.8.3.4 Alternative Alignment B

Impacts HZD-1 HZD-2, and HZD-3 also apply to Alternative Alignment B.

Like the proposed project, Alternative Alignment B would involve HDD crossing of the Santa Clara River. Like the proposed project, Alternative Alignment B would involve construction near three “dry hole” oil and gas wells that have been plugged, but not abandoned to current DOGGR standards. Alternative Alignment B would also involve construction in the near vicinity of a former Caltans site identified as contaminated with diesel.

2.8.4 Mitigation Measures

The following mitigation measures will reduce impacts to a less than significant level:

***HZD MM-1*.** Prior to beginning HDD the drilling contractor shall prepare a Frac-Out Contingency Plan. The Contingency Plan shall require:

- Documenting and flagging any sensitive resources in and around entry and exit pits
    - If sensitive species are present in the active HDD area, a biological monitor will be provided during HDD activities

- Installation of barriers between excavation areas and sensitive resources to prevent released materials from reaching sensitive resources
- On-site briefings with workers to identify and locate sensitive resources at the site
- Safety meetings to ensure that all field personnel understand their responsibility for timely reporting of frac-outs
- Maintaining necessary response equipment on-site or at a readily accessible location and in good working order
- Stoppage procedures should a frac-out be identified.
- Isolation and clean up procedures (e.g., use of hay bales and vacuum trucks and revegetation) for frac-outs that occur on land
- Isolation and clean up procedures (e.g., monitor for drilling mud congealment, erection of underwater booms and curtains and revegetation) for frac-outs that occur in water
- Necessary consultations should frac-out occur (regulatory agencies, property owners, project owner)

HZD MM-2. During design, oil and gas wells identified by DOGGR will be carefully mapped relative to the project alignment. If mapping indicates that the pipeline will be within 25 feet of a well, the following actions will be taken:

1. The project alignment will be modified within the identified construction corridor to ensure that a minimum 25 foot distance is maintained between the oil well and project facilities.
2. If measure 1 above is not possible, the agency constructing that portion of the pipeline will identify the well owner/responsible party and, per Public Resources Code Section 3208.1, ensure that the responsible party take the necessary actions to "re-abandon" the well to current DOGGR standards prior to construction.

HAZ MM-3*.* Prior to starting construction, the Caltrans site will be carefully mapped relative to the construction area. This mapping will indicate if construction will enter the potentially contaminated area. Based on the mapping:

- Suspect soils or suspect areas of concern will be tested using certified testing laboratories and techniques.
- Should transportation and disposal of any contaminated soils be necessary, these activities will be performed in accordance with the law.
- The contractor will be advised of the potential for hazardous materials to occur within the project area.

2.8.5 Significance After Mitigation

Implementation of the mitigation measures would reduce hazards and hazardous materials impacts to less than significant level.

2.9 Hydrology and Water Quality

This section evaluates potential impacts to hydrology and water quality resulting from the proposed project and alternatives.

2.9.1 Physical Setting

The project area falls within the Santa Clara River Watershed and Calleguas Creek Watershed. The proposed alignment extends from the Harmon Canyon subwatershed at the western end then over the Mugu Lagoon subwatershed and terminates in the Beardsley Wash subwatershed at the western end. The proposed project would cross under the Santa Clara River and Beardsley Channel.

Santa Clara River

The Santa Clara River, at nearly 100 miles, is the largest free-flowing river system remaining in Southern California. The river extends westward from its headwaters in the San Gabriel Mountains, in Los Angeles County, to the Pacific Ocean, in Ventura County. The watershed covers a total area of about 1,600 square miles, with approximately 60 percent of the watershed located within Ventura County. The river is largely defined as an ephemeral stream with highly variable flows, depending on seasonal precipitation. Perennial flows exist in some upstream portions and areas where groundwater surfaces in downstream areas. Major tributaries in Ventura County are Sespe, Piru, and Santa Paula creeks. Land use in the watershed is predominantly open space, with some residential, agricultural, and industrial uses along the mainstem (WCVC 2014, LARWQCB 2014).

The project would cross beneath Reach 2 of the Santa Clara River and would be located within about 0.1 miles of Brown Barranca/Long Canyon, which is a tributary to the Santa Clara River.

Calleguas Creek

Calleguas Creek extends from the Santa Susana Mountains, by Simi Valley, to the Pacific Ocean at Mugu Lagoon, draining an area of 343 square miles. Nearly the entire watershed is located within Ventura County. Major tributaries to Calleguas Creek are Revolon Slough, Conejo Creek, Arroyo Santa Rosa, Arroyo Simi, and Arroyo Las Posas. Calleguas Creek was a historically ephemeral stream but is now primarily perennial due in large part to urban runoff, irrigation return flows, and wastewater discharges.

The Honda Barranca/Beardsley Wash/Revolon Slough system of the Calleguas Creek Watershed drains the western portion of the Las Posas Valley, a portion of Pleasant Valley, and a portion of the Oxnard Plain. Agricultural runoff and stormwater account for the majority of water flows to this system (WCVC 2014). The proposed alignment would cross under Beardsley Channel, which is part of this system.

Groundwater Basins

The project area lies within the Santa Clara-Calleguas Hydrologic Unit, which covers most of Ventura County, along with portions of neighboring counties. The project area falls within the boundaries or direct vicinities of various groundwater basins, which include the Santa Paula,

Mound, and Oxnard Plain Forebay subbasins of the Santa Clara River Valley groundwater basin, and the West Las Posas and Pleasant Valley basins.

2.9.2 Regulatory Setting

The following regulations and regulatory guidelines apply to the project area.

Federal

The purpose of the Federal Water Pollution Control Act of 1972 (CWA) is to restore and maintain the chemical, physical, and biological integrity of the nation's waters in order to achieve a level of water quality suitable for beneficial uses, including water recreation and protection and propagation of fish and wildlife. The CWA requires all states to conduct water quality assessments of their water resources. Water bodies that do not meet water quality standards are placed on a list of impaired waters pursuant to the requirements of Section 303(d) of the CWA. The list identifies the pollutant or stressor causing the impairment and establishes a schedule for developing a related control plan, typically a total maximum daily load (TMDL).

Pursuant to Section 404 of the federal CWA, the USACE regulates discharges of dredged and/or fill material into waters of the United States, which by definition include waters that are navigable in the traditional sense, adjacent wetlands and tributaries to navigable waters of the United States, and other waters, the degradation or destruction of which could affect interstate or foreign commerce.

The CWA prohibits discharge to waters of the United States unless the discharge is in compliance with a NPDES permit. Discharges addressed through the program include wastewater treatment facilities and industrial waste dischargers, in addition to stormwater from municipal separate sewer systems, construction activities, and industrial activities. The regulations require that stormwater and non-stormwater runoff associated with construction activity, which discharges either directly to surface waters or indirectly through municipal separate storm sewer systems, be regulated by an NPDES permit.

State

The Porter-Cologne Act is the principal law governing water quality in California and establishes a comprehensive program to protect water quality and protect beneficial uses of the State's waters. The Porter-Cologne Act also established the SWRCB and nine RWQCBs as the main state agencies responsible for protecting water quality in California. Each RWQCB is directed to develop water quality control plans addressing beneficial uses to be protected, water quality objectives that protect those uses, and a program of implementation needed to achieve the water quality objectives. The Water Quality Control Plan for the Los Angeles Region (Basin Plan) identifies beneficial uses for surface and groundwaters, includes narrative and numerical water quality objectives that must be attained or maintained to protect the designated beneficial uses and conform to the State's anti-degradation policy, and describes implementation programs and other actions necessary to achieve established water quality objectives.

The act applies to surface water, groundwater, wetlands, and both point and nonpoint sources of pollution. Discharges of wastes (including spills, leaks, or historical disposal sites) where they

may impact the waters of the state are prohibited under the Porter-Cologne Act, including the discharge of hazardous wastes and petroleum products. Discharges are regulated by the RWQCB primarily through the issuance of NPDES permits for point source discharges and waste discharge requirements (WDRs) for nonpoint discharges. The Los Angeles RWQCB is responsible for Region 4, which encompasses the project area.

Management of California's NPDES program is delegated to the SWRCB and the nine RWQCBs. The SWRCB administers the NPDES General Permit for Storm Water Discharges associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ; as amended by Order No. 2012-006-DWQ; NPDES General Permit No. CAS000002); projects that disturb one or more acres are required to obtain coverage under the Construction General Permit (CGP). The CGP requires the development of a SWPPP which outlines best management practices (BMPs), such as erosion control measures, proper dewatering procedures, and other practices to reduce overall soil erosion, sediment mobilization, and pollutant runoff.

The Statewide General NPDES Permit for Drinking Water Systems (Order WQ 2014-0194-DWQ, NPDES NO. CAG140001) was adopted by the SWRCB in 2014. The Order sets forth waste discharge requirements applicable to discharges from drinking water systems to surface waters in California, which include, but are not limited to, discharges from supply wells, transmission systems, water treatment facilities, water distribution systems, and storage facilities. Among the discharges authorized under the Order are unplanned discharges due to drinking water system and distribution system failures and repair and water used for hydrostatic testing of water pipelines.

Local

The Fox Canyon Groundwater Management Agency (FCGMA) manages several of the groundwater basins in Ventura County with the objective to preserve groundwater resources for agricultural, municipal, and industrial uses in the best interests of the public for the common benefit of all water users. The FCGMA Groundwater Management Plan (2007) outlines specific, measurable management objectives for each basin and identifies strategies to reach those goals and objectives.

SGMA was enacted in 2014 as comprehensive legislation aimed at strengthening local control and management of groundwater basins throughout California. SGMA requires local groundwater sustainability agencies to be formed and groundwater management plans to be developed for all medium and high priority basins, with exceptions for adjudicated basins (such as the Santa Paula Basin). All basins in the project area, with the exception of the Santa Paula Basin, are considered "high priority" basins. FCGMA is preparing a groundwater sustainability plan that will cover the Oxnard Plain Forebay, West Las Posas, and Pleasant Valley basins. A groundwater sustainability plan is being prepared for the Mound Basin by the Mound Basin Groundwater Sustainability Agency, a joint powers authority comprised of the City of Ventura, the County of Ventura, and United.

City of Ventura

The City of Ventura General Plan contains the following actions related to stormwater:

- Action 5.16: Require new developments to incorporate stormwater treatment practices that allow percolation to the underlying aquifer and minimize offsite surface runoff utilizing methods such as pervious paving material for parking and other paved areas to facilitate rainwater percolation and retention/detention basins that limit runoff to pre-development levels.

County of Ventura

The County of Ventura General Plan contains goals and policies related to effective management of water resources. Specific policies include:

- Maintain and, where feasible, restore the chemical, physical and biological integrity of surface and groundwater resources.
- Protect and, where feasible, enhance watersheds and aquifer recharge areas.

City of Camarillo

The City of Camarillo General Plan includes policies to identify and protect natural drainage beds and water recharge areas to achieve recovery of local water and the preservation of natural plant and animal habitat.

The proposed project would be consistent with local regulations, ordinances, policies and actions related to hydrology and water quality.

2.9.3 Impact Analysis

2.9.3.1 Significance Thresholds

City of Ventura and City of Camarillo

Pursuant to CEQA Guidelines, potentially significant impacts would occur if implementation of the project would:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

   i. result in substantial erosion or siltation on- or off-site;

   ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

iii. 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; or

iv. impede or redirect flood flows.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; and/or

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

County of Ventura

The ISAG states the significance of an impact to groundwater quantity and quality, surface water quantity and quality, water supply quantity and quality, and fire flow requirements:

Groundwater Quantity

f) Any land use or project that will directly or indirectly decrease, either individually or cumulatively, the net quantity of groundwater in a groundwater basin that is overdrafted or creates an overdrafted groundwater basin;

g) In groundwater basins that are not overdrafted, or are not in hydrologic continuity with an overdrafted basin, net groundwater extraction that will individually or cumulatively cause overdrafted basin(s);

h) In areas where the groundwater basin and/or hydrologic unit condition is not well known or documented and there is evidence of overdraft based upon declining water levels in a well or wells, any proposed net increase in groundwater extraction from that groundwater basin and/or hydrologic unit;

Regardless of items above, any land use or project which would result in 1.0 acre-feet or less of net annual increase in groundwater extraction is not considered to have a significant project or cumulative impact on groundwater quantity.

Groundwater Quality

i) Any land use or project proposal that will individually or cumulatively degrade the quality of groundwater and cause groundwater to exceed groundwater quality objectives set by the Basin Plan;

j) A land use or project where there is evidence that the proposed land use or project could cause the quality of groundwater to fail to meet the groundwater quality objectives set by the Basin Plan;

k) Any land use or project that proposes the use of groundwater in any capacity and is located within two miles of the boundary of a former or current test site for rocket engines;

Surface Water Quantity

l) Any project that will increase surface water consumptive use (demand), either individually or cumulatively, in a fully appropriated stream reach as designated by SWRCB or where unappropriated surface water is unavailable;

m) Any project that will increase surface water consumptive use (demand) including, but not limited to, diversion or dewatering downstream reaches, either individually or cumulatively, resulting in an adverse impact to one or more of the beneficial uses listed in the Basin Plan.

Surface Water Quality

n) Any land use or project proposal that is expected to individually or cumulatively degrade the quality of surface water causing it to exceed water quality objectives as contained in Chapter 3 of the applicable Basin Plans;

o) Any land use or project development that directly or indirectly causes stormwater quality to exceed water quality objectives or standards in the applicable MS4 Permit or any other NPDES Permits.

2.9.3.2 Project-Specific Impacts

Potential project-specific impacts are described in the following:

Impacts to Surface Water and Groundwater Quality (Significance Thresholds a, i-k, n-o)

Construction activities could mobilize sediments and other construction related pollutants which could impair surface water or groundwater. Construction activities would result in total ground disturbance of 42 acres, although only portions of the alignment would be in active construction at any particular time. Following trenching activities, ground surfaces would be restored to pre-project conditions. The disturbance and exposure of soils during construction activities creates the potential for sediments and other construction-related pollutants to mobilize from the project site and enter receiving waters where it can result in water quality degradation.

The proposed project would be subject to the CGP, which requires preparation and implementation of a project-specific SWPPP. In compliance with the CGP, the SWPPP would identify potential sources of pollution and specify BMPs to be implemented in order to minimize the discharge of polluted stormwater runoff to local surface waters from construction activities. BMPs would include measures for erosion and sediment control. The SWPPP and related BMPs would be applicable to all construction activities, including trenching and trenchless construction.

BMPs implemented as part of the SWPPP would also help protect groundwater resources by ensuring proper handling of construction-related materials and reducing and preventing polluted runoff which could infiltrate into the ground.

HDD would be used to cross the Santa Clara River. The drilling machine would be staged in the Ventura County Public Works Saticoy yard or United property on the north riverbank and the receiving staging area would be located on United property on the south riverbank, beyond the levee. Trenchless construction would also be used to cross under additional waterways, including the VCWPD drainage along Santa Clara Avenue and Beardsley Channel. Appropriate BMPs would be implemented to address potential risk associated with construction activities adjacent to surface waters, such as streambank stabilization measures.

Groundwater Quantity (Significance Thresholds b, f-h)

No impacts are anticipated on groundwater resources, including those related to supplies, recharge, or sustainable groundwater management. If the City provides water to Calleguas during an outage of imported supplies, Calleguas would provide a like quantity of water back to Ventura after the outage is over. Therefore, there would be no net impact to groundwater supplies. In addition, the project would not substantially increase impervious surfaces within the project area that could interfere with groundwater recharge.

The project has the potential to improve sustainable groundwater management, particularly in the near-term, as it would provide the necessary water to dilute high TDS levels in groundwater for continued use as drinking water.

Surface Water Quantity (Significance Thresholds l-m)

The City's and Casitas' SWP allocations have typically been transferred to other agencies because they don't have the necessary infrastructure to take delivery of the water; United's allocation has been delivered via Piru Creek. Therefore, the entire allocation of SWP water that would be delivered by this project is already delivered and pumped through the existing SWP system to the agencies receiving the transfer. One of the purposes of this project is to make it possible to deliver SWP water to offset losses in existing water supplies. The project would not create a new water demand.

Alteration of Drainage Patterns, Resulting in Erosion, Runoff, Floods (Significance Threshold c)

Project activities would involve staging and trenchless construction adjacent to the Santa Clara River in order to install the pipeline under the river. Both HDD construction staging areas would be located within an area of 0.2% annual chance flood, but outside of the 1% annual chance floodplain boundary for the Santa Clara River. As a result, no impacts are anticipated on the flow pattern of the Santa Clara River.

The project would not result in substantial impacts to drainage patterns in or around the project site due to the addition of impervious surfaces because the project would not substantially increase imperviousness of the project area. A large part of the project area crosses through dirt roads within farmland, which are pervious. A portion of the pipeline would be installed in already paved roads. In both cases, surfaces would be returned to pre-project conditions. Minor areas of impervious surface would be added, including at the blending/monitoring station, air vacuum/release valve locations, blow offs, and manholes. Project implementation is not anticipated to substantially increase surface runoff or contribute to elevated flooding potential.

Risk of Pollutant Release due to Project Inundation (Significance Threshold d)

The project area is not located within a tsunami inundation area, according to maps available for the County of Ventura. There is no record of a seiche occurring in Ventura County and the project area is not located near a water body susceptible to seiches.

Portions of the pipeline cross Special Flood Hazard Areas subject to inundation by 1% annual chance flood (100-year flood), according to available FEMA Flood Insurance Rate Maps (FEMA

2010). The alignment would cross within the 100-year floodplain boundary, where it crosses under the Santa Clara River. However, the actual construction activities related to installing the pipeline underneath the river would be located outside of the 100-year flood zone, and either within the 500-year floodplain boundary or outside of flood zones.

Multiple segments at the southern portion of the alignment are located within flood zones. Segment 16 is located within the 100-year flood zone of the Las Posas Estates Drain area. In addition, Segments 10, 13, and 18 are located in part or fully within 500-year flood zones extending from that drainage.

While there is a chance of flooding within portions of the project area, most of the project components would be located below grade upon installation and therefore unaffected by any future flooding. As discussed in Section 2.8, pollutants could be released during active construction, but the risk of release of pollutants due to project inundation is minimal.

Conflict with Water Quality Control Plan or Sustainable Groundwater Management Plan (Significance Threshold e)

The water quality control plan applicable to the proposed project is the Los Angeles Basin Plan. The proposed project would not substantially contribute to water quality impairments within the project area, which could be in conflict with the Basin Plan. As previously discussed, construction activities have the potential to impact water quality, but BMPs would be implemented to address the risk of increased erosion, siltation, and/or polluted runoff during construction activities. Calleguas Creek Reach 5 (Beardsley Channel), which would be crossed by the alignment, is considered a high-risk receiving water for purposes of the CGP due to the sedimentation/siltation impairment. This elevated risk would be taken into account during preparation and implementation of the SWPPP, in compliance with the CGP.

Groundwater Sustainability Plans, as required under SGMA, have not yet been prepared for applicable groundwater basins in Ventura County. However, the existing 2007 FCGMA Groundwater Management Plan outlines Basin Management Objectives and implementation strategies intended to sustainably manage the groundwater basins in the region. As mentioned previously, the project is not anticipated to have impacts on groundwater resources and would not conflict or hinder implementation of a Groundwater Sustainability Plan or groundwater management plan applicable to the project area. BMPs implemented as part of the SWPPP would contribute to protecting the quality of groundwater resources by ensuring proper handling of construction-related materials and reducing and preventing polluted runoff which could infiltrate into the ground. Further, the project would not result in use of local groundwater that could impact those resources.

2.9.3.3 No Project Alternative

This alternative would not result in any physical changes or project activities that would have potential to affect surface water or groundwater quality, modify existing hydrology, or pose risk of unintended pollutant releases.

2.9.3.4 Alternative Alignment B

This alternative would not result in impacts to hydrology of water quality greater or substantially different than the proposed project. This alternative would not be located in areas of higher risk to inundation. Potential water quality impacts from construction activities would be similar to the proposed project and would be addressed through implementation of a SWPPP. There would be no conflict with water quality standards, or existing requirements or plans related to water quality and water resource management.

2.9.4 Mitigation Measures

Not applicable. Impacts would be less than significant; therefore, mitigation is not required.

2.9.5 Significance After Mitigation

Not applicable. Impacts would be less than significant without mitigation.

2.10 Land Use and Planning

This section evaluates potential impacts to land use in the project area resulting from the proposed project and alternatives.

2.10.1 Physical Setting

The proposed project site is located within portions of the cities of Ventura and Camarillo, and within unincorporated Ventura County. Within the City of Ventura, the alignment is located primarily within public rights of way adjacent to areas zoned as Residential Planned Development (RPD), Neighborhood General (T3), and Civic (City of Ventura 2017). The blending/monitoring station would be located within an area zoned as Civic or Park. From the Ventura City boundary, the alignment extends southeastward through County unincorporated areas crossing through areas zoned as Open Space (OS) at the Santa Clara River and then Agricultural until the alignment reaches the City of Camarillo boundaries. Within the City of Camarillo, the alignment crosses adjacent to and through areas zoned as Rural Exclusive (RE), Residential Planned Development (RPD), and Open Space (OS) (County of Ventura 2016a, City of Camarillo 2018).

2.10.2 Regulatory Setting

The project would be subject to land use policies and programs of the cities of Ventura and Camarillo, and the County of Ventura.

- City of Ventura General Plan. The City of Ventura's General Plan, adopted in 2005, provides goals, policies, and actions developed to guide future development in the City through the 2025 planning horizon.

- Saticoy and Wells Development Code. This Code addresses those areas in the Saticoy and Wells Community Plan Area that are within the incorporated jurisdiction of the City of Ventura and was adopted to protect and promote the public health, safety, comfort, convenience, prosperity, and general welfare of the community. The Blending Station (Segment 2) may be constructed in uses defined as "Civic District" and "Parks & Open Space" per this Code, re: 24S.100.045.

- City of Camarillo General Plan. The Land Use Element of the City's General Plan designates the general distribution and intensity of land uses according to multiple categories with the purpose to guide future development. City areas traversed by the proposed project are within Conservation (Agriculture), Residential, and Circulation categories.

- Save Open Space and Agricultural Resources (SOAR) Initiative. With the intent to protect open space and agricultural land across Ventura County, this initiative blocks the Ventura County Board of Supervisors from rezoning unincorporated open space, agricultural, or rural land for development without a vote of the people. City SOAR initiatives require voter approval before rezoning agricultural land or before allowing urban development beyond a City Urban Restriction Boundary. The initiative is incorporated into the General Plans of the cities of Ventura and Camarillo.

- Ventura County Zoning Ordinance – Non-Coastal Zoning Ordinance. The County's Non-Coastal Zoning Ordinance, last amended in 2018 (County of Ventura), includes comprehensive zoning regulations applicable to the unincorporated area of the County of Ventura, excluding the Coastal Zone. Zones and minimum lot areas are established with the Ordinance to classify, regulate, restrict, and segregate uses of land and buildings; regulate the height and size of buildings; regulate the area of yards and other open spaces around buildings; and regulate the density of population. The Agricultural Exclusive Zone, within which the majority of the proposed project crosses, is intended to preserve and protect agricultural lands as a limited and irreplaceable resource and preserve agriculture. The Open Space Zone is intended to provide for the preservation of natural resources and outdoor recreation and formation and continuation of cohesive communities by preventing urban sprawl.

These local regulations, ordinances, and policies are captured by the significance thresholds used to evaluate the project.

2.10.3 Impact Analysis

2.10.3.1 Significance Thresholds

City of Ventura and City of Camarillo

Pursuant to CEQA Guidelines, potentially significant impacts would occur if implementation of the project would:

a) Physically divide an established community;

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

County of Ventura

The ISAG states the significance to community character is materially impaired when a project:

c) Is inconsistent with any of the policies or development standards relating to community character of the Ventura County General Plan Goals, Policies and Programs or applicable Area Plan;

d) Would introduce physical development that is incompatible with existing land uses, architectural form or style, site design/layout, or density/parcel sizes within the community in which the project site is located.

2.10.3.2 Project-Specific Impacts

Potential project-specific impacts are described in the following.

Division of a Community, Disruption of Community Character (Significance Thresholds a, c-d)

The proposed pipeline would be placed underground, primarily within public rights of way and agricultural dirt access roads. The ground surface would be restored to pre-project conditions

upon installation of the pipeline. The blending/monitoring station and appurtenances are minor installations that would not create a physical disruption to the existing land uses. The blending station would be secured with a fence or block wall and landscaping would be used, as needed, to visually screen the site. The architectural style (color and finishes) of the blending station would be determined during the City's design review phase of the building permit process, and would need to be consistent with the Saticoy and Wells Development Code. Additionally, the proposed project would be consistent with existing zoning and would not result in changes in land use patterns. Overall, the project would not have the potential to physically divide an established community or conflict with an applicable land use plan, policy, or regulation.

Conflict with Land Use Plan, Policy or Regulation (Significance Threshold b)

The proposed project would be consistent with existing zoning and would not result in changes in land use patterns. The Blending Station (Segment 2) may be constructed in uses defined as "Civic District" and "Parks & Open Space" per the Saticoy and Wells Development Code, re: 24S.100.045. Consistency with this Code will be determined during the City's design review phase of the building permit process. Article 24S.200 (Urban Standards) are applicable to the Civic District land use.

2.10.3.3 No Project Alternative

This alternative would not result in any physical changes that would have potential to divide a community or result in any conflict with any land use plan, policy, or regulation applicable to the project area.

2.10.3.4 Alternative Alignment B

This alternative is not substantially different from the proposed project in relation to land use and planning. Alignment B would be placed underground, primarily within public rights of way. The ground surface would be restored to pre-project conditions upon installation of the pipeline. The alignment would cross through mostly the same zones and land use designations as the proposed project, except for a small area along Central Avenue within unincorporated Ventura County, where "Existing Community" designation exists along with "Agricultural".

2.10.4 Mitigation Measures

Not applicable. Impacts would be less than significant; therefore, mitigation is not required.

2.10.5 Significance After Mitigation

Not applicable. Impacts are less than significant without mitigation.

2.11 Mineral Resources

This section evaluates potential impacts to the availability of mineral resources or mineral resource recovery sites with the proposed project and alternatives.

2.11.1 Physical Setting

Ventura County is located within the Transverse Ranges geomorphic province, which is characterized in part by petroleum-rich sedimentary rocks, making the region an important oil and gas-producing area. The highest density of active oil and gas development is found north of the City of Ventura, west of the City of Ojai, and by South Mountain, near the City of Santa Paula. Another principal mineral resource found within the County is aggregate, principally sand and gravel. Most of the extraction sites are located within and adjacent to the Santa Clara River floodplain.

2.11.2 Regulatory Setting

The Surface Mining and Reclamation Act (SMARA) of 1975 has the primary goals of ensuring proper reclamation of surface mining operations, protecting access to mineral resources of regional and Statewide significance, and reducing residual hazards to public health and safety. The County of Ventura is the lead agency for enforcing SMARA regulations on all mining operations within the County.

Ventura County's mechanism for carrying out SMARA's objective of safeguarding access to mineral resources is the designation of appropriate areas as a Mineral Resource Area on the Resource Protection Map (County of Ventura 2010). These areas are subject to the Mineral Resource Protection Overlay Zone for purposes of safeguarding future access to the resource, facilitating long term supply of aggregate, minimizing land use conflicts, and providing notice to landowners and the general public of the presence of the resource. Aggregate resources are classified in the County General Plan by Mineral Resource Zones based on the relative knowledge of the resource's presence and quality of the material. The MRZ-2 areas are where adequate information indicates that significant mineral deposits are present or are likely to be present.

County General Plan (2016) policy 1.4.2-7, states that all discretionary developments shall be evaluated for their individual and cumulative impacts on access to and extraction of recognized mineral resources in compliance with CEQA.

These regulations and General Plan policies are captured by the significance thresholds used to evaluate the project.

2.11.3 Impact Analysis

2.11.3.1 Significance Thresholds

City of Ventura and City of Camarillo

Pursuant to CEQA Guidelines, potentially significant impacts would occur if implementation of the project would:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state;

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

County of Ventura

The ISAG states the significance of a mineral resource is materially impaired when a project:

c) is proposed to be located on or immediately adjacent to land zoned Mineral Resource Protection (MRP) overlay zone, or adjacent to a principal access road to an existing aggregate Conditional Use Permit (CUP), and which has the potential to hamper or preclude extraction of or access to the aggregate resources

2.11.3.2 Project-Specific Impacts

Potential project-specific impacts are described in the following.

Loss of Availability of Known Mineral Resources and/or Recovery Site (Thresholds of Significance a-c)

The majority of the Santa Clara River floodplain is designated as zone MRZ-2, which is an area of regional or statewide significance (Ventura County 2011). Mineral Resource Areas designated on the County's Resource Protection Map (County of Ventura 2010) overlap with approximate areas of designated MRZ-2 areas. The proposed project would be partially located within a Mineral Resource Area, southeast of Saticoy extending from the Santa Clara River to around Rose Avenue. The Lower Santa Clara River is located within the Western Ventura County Production-Consumption Region. However, mining is not permitted downstream of Highway 118 due to "red-line" restrictions imposed by a 1985 joint resolution of the Board of Supervisors of Ventura County and Ventura County Flood Control District (VCWPD and LACDPW 2005). This includes the area through which the project crosses.

As a result, the project would not result in the loss of availability or access to known mineral resources.

2.11.3.3 No Project Alternative

This alternative would not result in any physical changes that would have potential to affect the availability of or access to mineral resources within the project area.

2.11.3.4 Alternative Alignment B

This alternative would be located within the same general area of the proposed project and would not have different impacts on mineral resources than the proposed project.

2.11.4 Mitigation Measures

Not applicable. Impacts would be less than significant; therefore, mitigation is not required.

2.11.5 Significance After Mitigation

Not applicable. Impacts would be less than significant without mitigation.

2.12 Noise and Vibration

The following section provides a description of the potential noise impacts resulting from the proposed project and alternatives.

2.12.1 Background

Sound, Noise, and Acoustics

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a hearing organ, such as a human ear. Noise is defined as loud, unexpected, or annoying sound. In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receiver, and the propagation path between the two. The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receiver determines the sound level and characteristics of the noise perceived by the receiver.

Continuous sound can be described by amplitude (loudness) and frequency (pitch). The amplitude of pressure waves generated by a sound source determines the loudness. A logarithmic scale is used to describe sound pressure level in terms of decibels (dB). The threshold of hearing for young people is about 0 dB. Because decibels are logarithmic units, sound pressure level cannot be added or subtracted through ordinary arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3 dB increase. In other words, when two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be 3 dB higher than one source under the same conditions. For example, if one automobile produces 70 dB when it passes an observer, two cars passing simultaneously would not produce 140 dB; they would combine to produce 73 dB. Under the decibel scale, three sources of equal loudness together produce a sound level 5 dB louder than one source.

The decibel scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. A low-frequency sound is perceived as low in pitch. Frequency is expressed in terms of cycles per second, or Hertz (Hz) (e.g., a frequency of 250 cycles per second is referred to as 250 Hz). The audible frequency range for humans is generally between 20 Hz and 20,000 Hz. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by the characteristics of the human ear. Human hearing is limited in the range of audible frequencies as well as in the way it perceives the sound pressure level (SPL) in that range. In general, people are most sensitive to the frequency range of 1,000–8,000 Hz and perceive sounds within that range better than sounds of the same amplitude in higher or lower frequencies. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, depending on the human sensitivity to those frequencies. Then, an “A-weighted” sound level (expressed in units of dBA) can be computed based on this information.

The A-weighting network approximates the frequency response of the average young ear when listening to most ordinary sounds. When people make judgments of the relative loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those

sounds. Noise levels for impact assessments are typically reported in terms of A-weighted decibels or dBA. Table 2.12-1 describes typical A-weighted noise levels for various noise sources.

TABLE 2.12-1
TYPICAL A-WEIGHTED NOISE LEVELS

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	— 110 —	Rock band
Jet fly-over at 1000 feet		
	— 100 —	
Gas lawn mower at 3 feet		
	— 90 —	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	— 80 —	Garbage disposal at 3 feet
Noisy urban area, daytime		
Gas lawn mower, 100 feet	**— 70 —**	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	**— 60 —**	
		Large business office
Quiet urban daytime	**— 50 —**	Dishwasher next room
Quiet urban nighttime	**— 40 —**	Theater, large conference room (background)
Quiet suburban nighttime		
	— 30 —	Library
Quiet rural nighttime		Bedroom at night, concert
	— 20 —	
		Broadcast/recording studio
	— 10 —	
Lowest threshold of human hearing	**— 0 —**	Lowest threshold of human hearing

Source: Caltrans 2009.

Human Response to Changes in Noise Levels

As discussed above, doubling sound energy results in a 3 dB increase in sound. However, given a sound level change measured with precise instrumentation, the subjective human perception of a doubling of loudness will usually be different than what is measured.

Under controlled conditions in an acoustical laboratory, the trained, healthy human ear is able to discern one dB changes in sound levels, when exposed to steady, single-frequency ("pure-tone") signals in the midfrequency (1,000 Hz–8,000 Hz) range. In typical noisy environments, changes in noise of 1 to 2 dB are generally not perceptible. However, it is widely accepted that people are able to begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5 dB increase is generally perceived as a distinctly noticeable increase, and a 10 dB increase is generally perceived as a doubling of loudness. Therefore, a doubling of sound energy (e.g., doubling the volume of traffic on a highway) that would result in a 3 dB increase in sound would generally be perceived as barely detectable.

Noise Descriptors

Noise fluctuates over time. Some fluctuations are minor, but some are substantial. Some noise levels occur in regular patterns, but others are random. Some noise levels fluctuate rapidly, but others slowly. Some noise levels vary widely, but others are relatively constant. Various noise descriptors have been developed to describe time-varying noise levels. The following are the noise descriptors most commonly used in noise analyses:

- Equivalent Sound Level (Leq) represents an average of the sound energy occurring over a specified period. The one-hour A-weighted equivalent sound level (Leq[h]) is the energy average of A-weighted sound levels occurring during a one-hour period.

- Percentile-Exceeded Sound Level (Lxx) represents the sound level exceeded for a given percentage of a specified period (e.g., L10 is the sound level exceeded 10% of the time, and L90 is the sound level exceeded 90% of the time).

- Maximum Sound Level (Lmax) is the highest instantaneous sound level measured during a specified period.

- Day-Night Level (Ldn) is the energy average of A-weighted sound levels occurring over a 24-hour period, with an additional 10 dB applied to A-weighted sound levels occurring during nighttime hours between 10:00 p.m. and 7:00 a.m.

- Community Noise Equivalent Level (CNEL) is the energy average of the A-weighted sound levels occurring over a 24-hour period, with an additional 10 dB applied to A-weighted sound levels occurring during the nighttime hours between 10:00 p.m. and 7:00 a.m., and an additional 5 dB applied to the A-weighted sound levels occurring during evening hours between 7:00 p.m. and 10:00 p.m.

Sound Propagation

When sound propagates over a distance, it changes in level and frequency. The manner in which noise reduces with distance depends on the following factors:

Geometric Spreading

Sound from a localized source (i.e., a point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source.

Ground Absorption

The propagation path of noise from a source located on the ground to a receiver is usually very close to the ground. Noise attenuation from ground absorption and reflective-wave canceling adds to the attenuation associated with geometric spreading. Traditionally, the excess attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is usually sufficiently accurate for distances of less than 200 feet. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receiver, such as a

parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receiver, such as soft dirt, grass, or scattered bushes and trees), an excess ground-attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the cylindrical spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance.

Atmospheric Effects

Receptors located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound levels can be increased at large distances (e.g., more than 500 feet) from the source due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors, such as air temperature, humidity, and turbulence, can also have significant effects.

Shielding by Natural or Human-Made Features

A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Natural terrain features (e.g., hills and dense woods) and human-made features (e.g., buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receiver specifically to reduce noise. A barrier that breaks the line of sight between a source and a receiver will typically result in at least 5 dB of noise reduction. Taller barriers provide increased noise reduction. Vegetation between the noise source and receiver is rarely effective in reducing noise because it does not create a solid barrier.

Characteristics of Ground-borne Vibration and Noise

In contrast to airborne noise, ground-borne vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of ground-borne vibration are trains, buses on rough roads, and construction activities such as blasting, pile-driving, and operating heavy earth-moving equipment.

The effects of ground-borne vibration include detectable movement of building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. In extreme cases, the vibration can cause damage to buildings. Annoyance from vibration often occurs when the vibration exceeds the threshold of perception by only a small margin. A vibration level that causes annoyance would be well below the damage threshold for normal buildings.

Vibration is an oscillatory motion which can be described in terms of the displacement, velocity, or acceleration. Because the motion is oscillatory, there is no net movement of the vibration element and the average of any of the motion descriptors is zero. Displacement is the easiest descriptor to understand. For a vibrating floor, the displacement is simply the distance that a point on the floor moves away from its static position. The velocity represents the instantaneous speed of the floor movement and acceleration is the rate of change of the speed. The peak particle velocity (PPV) is defined as the maximum instantaneous positive or negative peak of

the vibration. PPV is often used in monitoring of blasting vibration since it is related to the stresses that are experienced by buildings.

2.12.2 Physical Setting

2.12.2.1 Noise Environment

The noise environment of the proposed pipeline alignment and adjacent land uses is dominated by traffic noise generated by County thoroughfares and State highways, including State Route (SR) 126 (near Segment 2 and the blending/monitoring station sites), SR 118 (near Segment 2), Vineyard Avenue/SR 232 (crosses pipeline alignment at the union of Segments 2 and 6), Rose Avenue (crosses the pipeline alignment at the union of Segments 6 and 10), and U.S. Highway 101 (near Segments 18 and 19). Other noise sources include aircraft overflights from the Camarillo Airport (0.7 miles south of the Calleguas Springville Connection and Segment 19) and agricultural equipment (adjacent to Segments 6, 10, 13, and 16).

Noise sensitive land uses in proximity to the proposed pipeline alignment (and the potential blending/monitoring station sites) include:

- Residences on Henderson Road (Segment 2)
- Douglas Penfield School and Sacred Heart School on Henderson Road (Segment 2)
- Residences on Saticoy Avenue and adjacent side streets (Segment 2)
- Rural residences east of Vineyard Avenue (Segment 6)
- Residences along Corte Sol, Corte Viento, and Camino Tierra Santa (Segment 19)

The Saticoy and Wells Community Plan and Code EIR (City of Ventura, 2009) states that the primary noise sources in Community Plan Area (which includes Segment 2) are roadways such as SR 126, Telegraph Road, Telephone Road, and Wells Road. Existing noise levels within this area were measured between 67 and 76.1 dBA Leq. Daily Drive (Segment 18) is estimated to be within the 80 dBA CNEL contour generated by traffic noise on U.S. Highway 101 (City of Camarillo 1996).

2.12.2.2 Projected Noise Environment

The Ventura County General Plan Hazards Appendix provides projected 2020 noise levels (dBA CNEL) for County roads. Noise data for County roads adjacent to pipeline alignment segments are provided in Table 2.12-2. Note that a greater distance to the 60 dBA CNEL contour indicates noise affects a greater area along the roadway.

TABLE 2.12-2
SUMMARY OF YEAR 2020 PROJECTED TRAFFIC NOISE DATA

Roadway Segment	Affected Proposed Pipeline Alignment Segments	Distance to Year 2020 60 dBA CNEL Contour (feet)
Vineyard Avenue: SR 118 to Central Avenue	2, 6	280
Rose Avenue: SR 118 to Central Avenue	6, 10	305
Santa Clara Avenue: SR 118 to Central Avenue	10, 13	405

Results of Project-Specific Noise Measurements

The existing ambient noise level was measured along the proposed pipeline alignment near the closest residence and the Douglas Penfield School along Henderson Road, near the northern HDD staging area at the North Bank Drive/Delphinium Drive intersection, near the closest residence along Camino Tierra Santa (City of Camarillo), and Rio Mesa High School. The measurements were conducted on July 13, 2018 using a Larson-Davis LXT Type 1 Precision Integrating Sound Level Meter. The Meter was calibrated using a Larson-Davis CAL200 Calibrator at 94 dBA. Table 2.12-3 presents a summary of the noise measurement data.

TABLE 2.12-3
SUMMARY OF NOISE MEASUREMENT DATA (DBA LEQ)

Location	Time	Distance to Primary Noise Source (feet)	dBA Leq
10586 Henderson Road (Segment 2)	8:58-9:18 a.m.	130 (SR 126 centerline)	69.1
North Bank Drive at Delphinium Drive (near HDD staging area)	8:18-8:38 a.m.	55 (North Bank Drive centerline)	52.5
716 Camino Tierra Santa (Segment 19)	7:08-7:28 a.m.	20 (Camino Tierra Santa centerline)[1]	64.9
Rio Mesa High School (Segment 7-alternative alignment)	7:42-8:02 a.m.	165 (Central Avenue centerline)	63.2

[1] Traffic on U.S. Highway 101 is also a primary source of noise at this location, located 1,700 feet to the south and lower in elevation.

2.12.3 Regulatory Setting

State

The California Department of Public Health has established noise guidelines to facilitate land use planning, which are summarized in Table 2.12-4.

TABLE 2.12-4
LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENTS

Land Use Category	Community Noise Exposure Ldn or CNEL, dBA						
	55	60	65	70	75	80	
Residential: Low-density Single Family, Duplex, Mobile Homes							
Residential: Multiple Family							
Transient Lodging: Motels, Hotels							
Schools, Libraries, Churches, Hospitals, Nursing Homes							
Sports Arena, Outdoor Spectator Sports							
Playgrounds, Neighborhood Parks							
Golf Courses, Riding Stables, Water Recreation, Cemeteries							
Office Buildings, Business Commercial and Professional							
Industrial, Manufacturing, Utilities, Agriculture							

Source: California Department of Health, Office of Noise Control

INTERPRETATION:

	Normally Acceptable: specified land use is satisfactory, based upon the assumption that any buildings involved are of normal construction without any special noise insulation requirements.
	Conditionally Acceptable: New construction or development should only be undertaken after a detailed analysis of the noise reduction requirements is made and the needed insulation features included in the design.
	Normally Unacceptable: New construction or development should generally be discouraged. If new development is to proceed, a detailed analysis of the noise reduction requirements is made and the needed insulation features included in the design.
	Clearly Unacceptable: New development or construction should not be undertaken.

Local

City of Ventura Municipal Code

For the purposes of this analysis, noise sensitive land uses are defined as residences and noise sensitive properties as indicated in Section 10.650.120 of the City's Municipal Code which include schools, hospitals, convalescent care, boarding and rest homes. Section 10.650.130 of the City's Municipal Code provides exterior noise level restrictions for various land use zones. The daytime/evening (7 a.m. to 10 p.m.) noise level restriction of noise sensitive properties and residential properties is 50 dBA, and 45 dBA at night (10 p.m. to 7 a.m.). However, construction activities conducted between 7 a.m. and 8 p.m. are exempted from these noise level restrictions.

Ventura County Policies

Ventura County noise standards are provided in Section 2.16.2(1) of the Goals, Policies and Programs document of the Ventura County General Plan. Applicable policies include those for noise generating land uses (Policy 2.16.2.1-4) and construction noise (Policy 2.16.2.1-5). Policy 2.16.2.1-4 requires noise control measures to reduce noise measured at the exterior wall of the building to:

- 55 dBA Leq OR ambient noise + 3 dBA, whichever is greater from 6 a.m. to 7 p.m.
- 50 dBA Leq OR ambient noise + 3 dBA, whichever is greater from 7 p.m. to 10 p.m.
- 45 dBA Leq OR ambient noise + 3 dBA, whichever is greater from 10 p.m. to 6 a.m.

Policy 2.16.2.1-5 requires construction noise to be evaluated and mitigated in accordance with the Construction Noise Threshold Criteria and Control Plan prepared by Advanced Engineering Acoustics (amended 2010). Based on this document, noise-sensitive receptors include:

- Hospitals and nursing homes (sensitive 24 hours/day);

- Residences (sensitive during evening and nighttime – 7 p.m. to 7 a.m.);
- Hotels and motels (sensitive during evening and nighttime); and
- Schools, churches and libraries (daytime and evening, when in use).

City of Camarillo Municipal Code

Chapter 10.34 establishes noise standards for land use compatibility but exempts construction activity conducted between 7 a.m. and 7 p.m. Noise generated by construction outside of these hours would be subject to residential exterior noise standards of 55 dBA (daytime, 7 a.m. to 9 p.m.) and 45 dBA (nighttime, 9 p.m. to 7 a.m.).

These local regulations, ordinances, and policies are captured by the significance thresholds used to evaluate the project.

2.12.4 Impact Analysis

Noise Assessment Methodology

The Federal Highway Administration (FHWA) Roadway Construction Noise Model was used to estimate construction noise. A peak day during construction was used to estimate construction noise at sensitive receptors in proximity to project-related construction activities. Construction noise analysis scenarios include:

1. Segment 2: Open Cut Pipeline Installation - Residential Receptor: nearest residence on Henderson Road (10590 Henderson Road)

2. Segment 2: Open Cut Pipeline Installation - School Receptor: Douglas Penfield School on Henderson Road

3. Segment 2: HDD Pipeline Installation - Residential Receptor: nearest residence (10630 Delphinium Drive)

4. Segment 19: Open Cut Pipeline Installation - Residential Receptor: nearest residence on Camino Tierra Santa (716 Camino Tierra Santa)

2.12.4.1 Significance Thresholds

Noise policies and noise ordinances adopted by the relevant jurisdiction and CEQA Guidelines Appendix G criteria are used as significance thresholds.

a) City of Ventura. Construction activities conducted between 7 a.m. and 8 p.m. are exempt from the noise level restrictions of the City's Municipal Code. Construction activities conducted adjacent to noise-sensitive properties between 8 p.m. and 7 a.m. may result in a significant impact. Project-related operational noise would be subject to the City's Municipal Code noise level restrictions of 50 dBA between 7 a.m. and 10 p.m., and 45 dBA between 10 p.m. and 7 a.m.

b) Ventura County. Construction activities generating noise levels at schools (when in use) above 65 dBA Leq (based on 1 to 2-week duration near the school) or 3 dBA Leq above ambient noise levels (whichever is greater) are considered to have a significant impact. Construction activities generating noise levels 3 dBA Leq above ambient noise levels at residences (evening and nighttime only) are considered to have a significant impact. Project-related operational noise would be subject to General Plan policies 2.16.2-1 through 2.16.2-4 as listed in Section 2.12.3.

c) City of Camarillo. Construction activities conducted adjacent to residences between 7 p.m. and 7 a.m. may result in a significant impact. Project-related operational noise would be subject to the City's Municipal Code Chapter 10.34 which sets residential exterior noise standards of 55 dBA between 7 a.m. to 9 p.m. and 45 dBA from 9 p.m. to 7 a.m.

d) CEQA Guidelines Appendix G. Exposure of persons to or generation of excessive groundbourne vibration. Construction-related vibration is considered a significant impact if it would cause damage to adjacent structures or distinctly perceptible a substantial number of residents.

2.12.4.2 Project-Specific Impacts

Construction Noise (Significance Thresholds a-c)

The FHWA Roadway Construction Noise Model was used to estimate noise generated by pipeline installation and construction of related facilities. A peak day during construction was used to estimate construction noise adjacent to noise-sensitive receptors as described in Section 2.12.4. The results of construction noise modeling are provided in Table 2.12-5. Note that construction work conducted during time periods listed in the City of Ventura Municipal Code (7 a.m. to 8 p.m.) or City of Camarillo Municipal Code (7 a.m. to 7 p.m.) would be exempt from noise level restrictions and result in less than significant impacts.

TABLE 2.12-5
PROJECT CONSTRUCTION NOISE MODELING RESULTS

Receptor	Receptor Type	Jurisdiction	Estimated Peak Day Noise Level (dBA Leq)	Worst-case Daily Noise Generation Period
10590 Henderson Road	Residential	City of Ventura	78.3	7 am to 7 pm
Douglas Penfield School	School	City of Ventura	77.0	7 am to 7 pm
10630 Delphinium Drive	Residential	City of Ventura	72.2	7 am to 7 am (24 hrs)
716 Camino Tierra Santa	Residential	City of Camarillo	69.1	7 am to 7 am (24 hrs)

Impact NS-1. Noise generated by the trenchless pipeline installation of the proposed pipeline may occur in the evening and nighttime and adversely affect adjacent residences – potentially significant but mitigable.

Installation of the proposed pipeline using trenchless methods (see Table 1-1) that would occur near residences and may extend into evening and nighttime hours include:

- Railroad crossing on Saticoy Avenue (City of Ventura)
- Santa Clara River crossing (City of Ventura)
- Vineyard Avenue crossing (Ventura County)
- Channel crossing near Avenida de Aprisa (City of Camarillo)
- Camino Tierra Santa crossing (City of Camarillo)

Evening and nighttime pipeline installation work would generate noise exceeding restrictions of Section 10.650.130 of the City of Ventura Municipal Code (50 dBA evening, 45 dBA nighttime), Ventura County significance thresholds (50 dBA evening, 45 dBA nighttime, or ambient noise + 3 dBA) and Section 10.34 of the City of Camarillo Municipal Code (45 dBA nighttime, after 9 p.m.).

Operational Noise (Significance Thresholds a-c)

Noise generated by operation of the proposed project would exacerbate existing high ambient noise levels, but is not anticipated to exceed any adopted significance thresholds

Noise generated by operation of the proposed project would be limited to the proposed blending/monitoring station and air vacuum/release valves. The blending/monitoring station would be located within a masonry building, which would reduce noise generated by valve actuation and related water pressure and flow changes to below ambient conditions. Air vacuum/release valves may generate some noise as air and/or water is released; however, the noise would be occasional and brief, reduced by the cabinet/enclosure, and not exceed any noise thresholds.

Construction-Related Vibration (Significance Threshold d)

The distance between the nearest residential structure and the proposed pipeline alignment is approximately 40 feet, based on pipeline installation on the southern shoulder of Henderson Road. Construction-related vibration was estimated using the Caltrans Transportation and Construction Vibration Guidance Manual. The estimated vibration level is a PPV of 0.045, based on operation of a loaded heavy-duty trucks 40 feet from the nearest structure. This value is slightly greater than the 0.04 PPV needed to be distinctly perceptible by humans; however, only a small number of residents would be exposed to this level of vibration. The estimated construction-related vibration is much less than 0.3 PPV needed to cause damage to older residential structures. Therefore, the project-related increase in vibration associated with pipeline installation would not be significant.

2.12.4.3 Alternative Alignment B

Construction Noise

Noise Assessment Methodology

The FHWA Roadway Construction Noise Model was used to estimate construction noise for the alternative pipeline alignment. A peak day during construction was used to estimate construction noise at sensitive receptors in proximity to project-related construction activities. Construction noise analysis scenarios are the same as for the proposed project, with two noise-sensitive receptors added:

- Segment 7: Open Cut Pipeline Installation - Residential Receptor: residences along Central Avenue east of Joan Way.
- Segment 7: Open Cut Pipeline Installation - School Receptor: Rio Mesa High School on Central Avenue.

Results of the Noise Modeling for Alternative Alignment B are provided in Table 2.12-6.

TABLE 2.12-6
ALTERNATIVE ALIGNMENT CONSTRUCTION NOISE MODELING RESULTS

Receptor	Receptor Type	Jurisdiction	Estimated Peak Day Noise Level (dBA Leq)	Worst-case Noise Generation Period
10590 Henderson Road	Residential	City of Ventura	78.3	7 am to 7 pm
Douglas Penfield School	School	City of Ventura	77.0	7 am to 7 pm
10630 Delphinium Drive	Residential	City of Ventura	72.2	7 am to 7 am (24 hrs)
716 Camino Tierra Santa	Residential	City of Camarillo	69.1	7 am to 7 am (24 hrs)
Central Ave. at Joan Way	Residential	Ventura County	78.3	7 am to 7 pm
Rio Mesa High School	School	Ventura County	70.8	7 am to 7 pm

Impact NS-1. Noise generated by the trenchless pipeline installation of the proposed pipeline may occur in the evening and nighttime and adversely affect adjacent residences – potentially significant but mitigable.

Noise generated by the trenchless pipeline installation of Segments 2 and 19 is the same as for the proposed project and Impact NS-1 would also occur under Alternative Alignment B.

Impact NS-1A. Noise generated by the open-cut pipeline installation of Segment 7 would adversely affect an adjacent school – potentially significant but mitigable.

Based on noise measurements conducted at Rio Mesa High School (see Table 2.12-3) and the results of noise modeling (see Table 2.12-6), pipeline installation adjacent to Rio Mesa High School would exceed the County's threshold (ambient noise level + 3 dBA or 66.2 dBA Leq). Therefore, the alternative alignment would result in greater construction noise impacts as compared to the proposed project.

Operational Noise

The alternative alignment would result in the same operational noise impacts as the proposed project, see the discussion in Section 2.12.4.2.

Construction-related Vibration

The alternative alignment would result in the same construction vibration impacts as the proposed project, see the discussion in Section 2.12.4.2.

2.12.5 Mitigation Measures

Proposed Project

NS MM-1. A Nighttime Construction Noise Impact Reduction Program. A noise reduction program shall be implemented at the northern HDD pipeline installation site and all other pipeline installation sites where work is conducted between 7 p.m. and 7 a.m. within 1,000 feet of residential land uses and will consider the following measures.

- Placement of portable noise barriers of up to 20 feet in height (minimum 15 dBA noise attenuation) between noise sources and residences.
- Enclose or acoustically package all key power units, including the HDD power unit, B&J unit, and generators to reduce noise levels.
- Enclose slurry separation plants, grout pumps and soil cement mixers to the extent feasible or place appropriate noise barriers around equipment to reduce noise levels.
- Enclose or acoustically package light sets to reduce noise levels.
- Place upgraded silencers on all applicable engines.
- Temporarily disable equipment and truck back-up alarms and use signalers for all backup operations.
- Minimize pipe handling operations and materials deliveries to the work site during evening and nighttime hours.

Alternative Alignment B

See mitigation measure NS MM-1.

NS MM-1A. Limit pipeline installation within 300 feet of Rio Mesa High School to times when classes are not in session.

2.12.6 Significance After Mitigation

Implementation of mitigation measures would reduce noise impacts to a level of less than significant.

2.13 Population and Housing

This section evaluates potential impacts on population growth and housing resulting from the proposed project and alternatives.

2.13.1 Physical Setting

The County covers an area of approximately 2,200 square miles and has an estimated population of 849,738 and 286,864 housing units, as of July 1, 2017 (U.S. Census Bureau 2016c). The City of Ventura's population was estimated at 109,592 in 2016 (U.S. Census Bureau 2016b); the City's water system serves an estimated population of 112,500. In 2010, there was a total of 42,827 housing units with a vacancy rate of 5.6% (U.S. Census Bureau 2016d). The City of Camarillo's population was estimated at 67,363 in 2016 (U.S. Census Bureau 2016a). Total housing units were estimated at 25,702 in 2010, with a vacancy rate of 4.7% (U.S. Census Bureau 2016d).

At the northern end, the alignment runs through the Saticoy area, in the City of Ventura. This area is predominantly residential with some civic uses. Within unincorporated County areas, the alignment crosses through primarily agricultural lands and some open space. Within the City of Camarillo, the alignment crosses through a small portion of a residential area known as Spanish Hills.

The County of Ventura is encompassed within the six-county Southern California Association of Governments (SCAG) jurisdiction, along with Los Angeles, Orange, San Bernardino, Riverside, and Imperial counties. Population, housing, and employment forecasts for the project area are captured in the most recent Regional Transportation Plan and are shown in Table 2.13-1.

TABLE 2.13-1
POPULATION, HOUSING, AND EMPLOYMENT STATISTICS

	Population		Households		Employment	
	2020	2035	2020	2035	2020	2035
City of Camarillo	72,200	76,700	27,500	29,700	37,800	40,600
City of Ventura	116,900	128,800	45,200	50,100	70,500	77,400
Unincorporated County of Ventura	100,500	107,200	33,700	35,300	42,800	44,900

Source: SCAG. 2012-2035 Regional Transportation Plan, Growth Forecast Appendix. April 2012. http://rtpscs.scag.ca.gov/Documents/2012/final/SR/2012fRTP_GrowthForecast.pdf

2.13.2 Regulatory Setting

The regulatory guidelines relating to population and housing are the following:

- City of Ventura General Plan Housing Element. Policies for future growth are directed toward 'Infill First' with an emphasis on encouraging more dense development of housing alongside commercial uses.

- County of Ventura General Plan. The primary goal outlined in the County General Plan in relation to housing and population is consistency with Public Facilities and Services Capacity Goal. This goal focuses on ensuring that the rate and distribution of growth within the County does not exceed the capacity of public facilities and services to meet the needs of the County's population and to protect the public health, safety, and welfare.

- City of Camarillo General Plan. The City's Housing Element provides various goals and policies with an emphasis on maintaining a high-quality living environment for the City's residents, population, and housing.

These General Plan policies are captured by the significance thresholds used to evaluate the project.

2.13.3 Impact Analysis

2.13.3.1 Significance Thresholds

City of Ventura and City of Camarillo

Pursuant to CEQA Guidelines, potentially significant impacts would occur if implementation of the project would:

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure); and/or

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

County of Ventura

The ISAG states that impacts to existing housing stock occur when a project:

c) Eliminates existing dwelling units; and

d) Results in 30 or more new full-time-equivalent lower-income[11] employees (as there is potentially insufficient land to develop low-income housing). The ISAG thresholds exclude the impact of construction worker employees as this work is short-term and there is a large pool of construction workers in Ventura County.

2.13.3.2 Project-Specific Impacts

Potential project-specific impacts are described in the following:

[11] The Ventura County General Plan Land Use Appendix (10-22-13 Edition) defines "low-income" as earning 50-80% of a median household income (MHI), assumed to be $86,700.

Population Growth Impacts (Significance Threshold a - d)

The proposed project does not consist of housing or businesses that would have the potential to directly induce substantial planned or unplanned population growth.

The proposed project would provide the infrastructure to enable delivery of SWP water that has been wheeled through the MWD and Calleguas water systems to the City of Ventura. The proposed interconnection would also facilitate direct delivery of SWP water to United and in-lieu delivery of SWP water to Casitas. Water supplies can, in some cases, be an impediment to population growth if insufficient supplies are expected to be available to support that growth. Conversely, an abundance of water supplies and/or the ability to augment existing supplies with new water sources may help sustain and potentially promote growth. However, the water supply to be provided by the project would replace lost supplies and act as an outage supply as follows:

- The City needs to provide a continued reliable water service to City water customers. This involves making up for losses in annual yield from existing supply sources (Lake Casitas, Ventura River, and groundwater), improving water quality, and providing an emergency/backup connection for Ventura Water's potential potable reuse project. If Calleguas provides water to Ventura during an emergency, Ventura would provide a like quantity of water back to Ventura after the emergency is over.
- Calleguas needs to improve its water supply reliability for existing customers in the event of an outage of imported supplies. The project would result in no additional water for Calleguas. If Ventura provides water to Calleguas during an outage of imported supplies, Calleguas would provide a like quantity of water back to Ventura after the outage is over.
- United needs to protect local supplies to ensure a long-term supply for its service area. This involves making up for losses in annual yield from existing supply sources (Santa Clara River diversions and groundwater), enhancing groundwater recharge options while reducing groundwater overdraft, improving basin groundwater quality, and providing an emergency connection for United's O-H Pipeline.
- Casitas needs to extend the ability of Lake Casitas to provide water during a long-term drought and to replace water that otherwise would have been diverted for storage at Lake Casitas but is now released downstream as required by the BO for the Robles Diversion Facility.

Therefore, while the project has the ability to augment existing supplies with new water sources, these water sources will replace lost supplies and will not serve to supply future demand and growth.

2.13.3.3 No Project Alternative

This alternative would not result in changes, including installation of new infrastructure or increased water resources, that would have potential to induce population growth. Under this alternative, the City of Ventura would be challenged with securing supplies to meet current and

projected water demands. However, those conditions are not anticipated to affect population growth or result in displacement of people or housing.

2.13.3.4 Alternative Alignment B

This alternative would not result in impacts to population or housing that are different from the proposed project.

2.13.4 Mitigation Measures

Not applicable. Impacts would be less than significant; therefore, mitigation is not required.

2.13.5 Significance After Mitigation

Not applicable. Impacts would be less than significant without mitigation.

2.14 Public Services

This section evaluates potential impacts to public services, including the potential need for new facilities resulting from the proposed project and alternatives

2.14.1 Physical Setting

The proposed project site is located within portions of the cities of Ventura and Camarillo, and within unincorporated Ventura County. Land uses are primarily urban and agricultural. Within the City of Ventura, the alignment is located primarily within public rights of way adjacent to neighborhoods. Potential locations for the blending station may include City-owned property, such as Huntsinger Park or the Saticoy Conditioning Facility, or currently vacant land, such as the parcel located south of Henderson Road and east of Biedermann Place (see Figure 1-2 for the three potential blending/monitoring station locations). Within the County unincorporated areas, the alignment crosses through open space and agricultural lands. Within the City of Camarillo, the alignment crosses through residential and open space areas.

2.14.2 Regulatory Setting

Regulations and guidance on public services are outlined in general plans and include the following items that may be applicable to the proposed project:

- City of Ventura General Plan
    - Action 5.8: Locate new development in or close to developed areas with adequate public services, where it will not have significant adverse effects, either individually or cumulatively, on coastal resources.
    - Action 7.12: Refer development plans to the Fire Department to assure adequacy of structural fire protection, access for firefighting, water supply, and vegetation clearance.
- Ventura County General Plan
    - Policy 4.1.2.1: Discretionary development shall be conditioned to contribute land, improvements or funds toward the cost of needed public improvements and services related to the proposed development.
    - Policy 4.1.2.2: Development shall only be permitted in those locations where adequate public services are available (functional), under physical construction or will be available in the near future.
- El Rio Del Norte Area Plan
    - Goal 4.7.1: Ensure that the recreational needs of existing and future residents within the El Rio/Del Norte area are adequately provided for.

- City of Camarillo. It is a principle in the City of Camarillo General Plan to locate facilities where they provide maximum service with the greatest efficiency.

The proposed project would be consistent with local regulations, ordinances, and policies related to public services. The project itself is an improvement to public services, does not increase demand for fire, police, school, or recreational facilities. The project, prior to construction, would receive applicable reviews and permits from the City of Ventura, County of Ventura (limited to encroachment permits), and City of Camarillo (limited to encroachment permits).

2.14.3 Impact Analysis

2.14.3.1 Significance Thresholds

City of Ventura and City of Camarillo

Pursuant to CEQA Guidelines, potentially significant impacts would occur if implementation of the project would:

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

   i. Fire protection
   ii. Police protection
   iii. Schools
   iv. Parks
   v. Other public facilities

County of Ventura

The ISAG states the significance to law enforcement, fire protection services, and education:

Law Enforcement/Emergency Services

Certain categories of projects have the potential to increase demand for law enforcement or emergency services, including government buildings. The ISAG state that this category of project should include security measures to address potential increases in theft, vandalism, disturbances, and/or substance abuse that could affect public safety in the surrounding area. Projects that include adequate security measures would have a less than significant project-specific and cumulative impact on law enforcement and emergency services. A significant impact would occur if a project:

b) Does not include adequate security measures

Fire Protection Services – Distance and Response

Distance from fire services is also a County of Ventura concern. A significant impact is considered to occur if:

c) Project distance from a full-time paid fire department is in excess of 5 miles, measured from the apron of the fire station to the structure or pad of the proposed structure.

d) Project would require a new fire facility be built or new equipment acquired.

Educational Facilities

A significant impact on educational facilities is considered to occur if:

e) A project would substantially interfere with the operations of an existing school facility.

f) A project would substantially interfere with operations of an existing public library facility or put additional demands on a public library facility deemed overcrowded, or limit access to the library facility.

2.14.3.2 Project-Specific Impacts

Increase Demand for or Limit Access to Public Services (Significance Thresholds a-e)

Public services are typically required to be augmented as a result of population growth within an area. Overall, the proposed project is not anticipated to change land uses, increase the number of housing units, cause an increase in population, or otherwise create activities that would increase demand for public services beyond that existing and anticipated for the project area. As the project would not induce population growth, this project also has no potential to impact the need or demands for schools, parks, and other public facilities.

In addition, the types of facilities proposed would not create new demand for fire protection or police services. The blending/monitoring station would have appropriate security measures in place to prevent unauthorized entry or tampering.

The project would involve construction in the near vicinity of schools which may result in traffic delays and detours. Construction may also temporarily increase noise in vicinity of schools. However, this inconvenience is temporary and no location is expected to be affected by construction for more than 12 days. Traffic detours and delays do not constitute a “substantial” interference to operations of a school.

2.14.3.3 No Project Alternative

This alternative would not result in any changes to land uses, increase in housing units, population growth, or other activities that would increase demands on public services.

2.14.3.4 Alternative Alignment B

This alternative is not substantially different from the proposed project in relation to public services and would not result in increased demands on public services or other related impacts.

2.14.4 Mitigation Measures

Not applicable. Impacts would be less than significant; therefore, mitigation is not required.

2.14.5 Significance After Mitigation

Not applicable. Impacts would be less than significant without mitigation.

2.15 Recreation

This section evaluates potential impacts to neighborhood and regional parks or other recreational facilities resulting from the proposed project and alternatives.

2.15.1 Physical Setting

The proposed project site is located within portions of the cities of Ventura and Camarillo, and within unincorporated Ventura County. Land uses are primarily urban and agricultural. Within the City of Ventura, the alignment is located primarily within public rights of way adjacent to neighborhoods, as is the blending/monitoring station. Within the County unincorporated areas, the alignment crosses through open space and agricultural lands. Within the City of Camarillo, the alignment crosses through residential and open space areas.

The alignment would run adjacent to the Saticoy Regional Golf Course, along Saticoy Avenue, for one block and one of the sites under consideration for the proposed blending/monitoring station is at Huntsinger Park. The project would not otherwise cross through or be located directly adjacent to any established parks or recreational facilities. However, the Santa Clara River open space, under which the project would be installed, is in part used for recreational purposes.

2.15.2 Regulatory Setting

Regulations and guidance on recreational facilities and resources are outlined in general plans and include the following items that may be applicable to the proposed project:

City of Ventura

The City of Ventura General Plan contains two policies potentially applicable to the proposed project:

- Policy 6B: Ensure equal access to facilities and programs.
- Policy 6C: Provide additional gathering spaces and recreation opportunities.

County of Ventura

The County of Ventura General Plan includes the following policies related to recreation applicable to the proposed project:

- 4.10.2.1: The County shall maintain and enforce the local parkland dedication requirements (Quimby Ordinance) to acquire and develop neighborhood and community recreation facilities. Parkland dedication shall be based on a standard of five acres of local parkland per thousand population, including neighborhood and community parks.
- 4.10.2.2: Discretionary development which would obstruct or adversely impact access to a publicly-used recreation resource shall be conditioned to provide public access as appropriate.

- 4.10.2.3: Developers shall be encouraged to make unused open space available for recreation.

- 4.10.2.4: The County shall require reservation of land for public purchase, pursuant to the County Subdivision Ordinance, where requested by a recreation agency.

- 4.10.2.5: County facilities (e.g., flood control channels and easements) shall be made available for recreational use as appropriate.

- 4.10.2.6: New recreation facilities shall be consistent with the General Plan and Zoning Ordinance.

- El Rio Del Norte Area Plan. The following goals relate to recreation and may be applicable to the proposed project:

    - 3.1.1.2: Provide a socially desirable and economically viable community which includes an appropriate mix of housing, employment, shopping and education/recreation facilities.

    - 4.7.1.1: Ensure that the recreational needs of existing and future residents within the El Rio/Del Norte area are adequately provided for.

    - 4.7.1.2: Promote full use of existing County, city, and school district park and recreational facilities.

    - 4.7.1.4: Ensure that recreational uses in the Santa Clara River preserve natural resources in balance with the provision of opportunities for the use and enjoyment of those resources.

City of Camarillo

- Provide a balanced park and recreation system by locating facilities where they will most adequately serve the needs of residents;

- Provide a full and varying range of recreational and cultural activities for all residents of Camarillo and its environs;

- Wherever possible, coordinate school and park facilities for maximum utilization and efficiency in maintenance and operation;

- Establish a comprehensive program of sequential land acquisition and development for future park and recreation sites as well as expansion of existing sites;

- Provide and sustain high standards of design, improvement and maintenance of all recreation facilities.

The project would be consistent with the policies of the various general plans.

2.15.3 Impact Analysis

2.15.3.1 Significance Thresholds

City of Ventura and City of Camarillo

Pursuant to CEQA Guidelines, potentially significant impacts would occur if implementation of the project would:

a) 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; and/or;

b) Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

County of Ventura

The ISAG states that recreation is materially impaired when a project would:

c) Result in less than 5 acres of developable local park land per 1000 population;

d) Result in less than 5 acres of developable regional park land per 1000 population;

e) Result in less than 2.5 miles trails and recreational corridors per 1000 population; or

f) Impede future development of recreational park facilities or trails and corridors.

2.15.3.2 Project-Specific Impacts

Increased Use or Need for Recreational Facilities (Significance Thresholds a - e)

One of the sites being considered for the proposed blending/monitoring station is at Huntsinger Park. If built at the park, the blending/monitoring station would reduce park area by approximately 3,200 square feet. This is a minor impact and would not cause the ratio of park area to population to fall below acceptable levels.

The proposed project is not anticipated to cause an increase in population or otherwise create activities that would increase use of existing neighborhood or regional parks or other recreational facilities. As a result, the project would not require construction or expansion of recreational facilities nor would it include recreational facilities that could result in adverse impacts on the environment.

Impede Development of Recreational Facilities (Significance Threshold f)

Most project facilities would be built underground and the overlying land returned to the pre-project condition. The underground nature of the project means it is unlikely to impede development of recreational facilities.

2.15.3.3 No Project Alternative

This alternative would not result in any changes or activities that would increase the use or need for recreational facilities, nor does the alternative include recreational facilities.

2.15.3.4 Alternative Alignment B

This alternative is not substantially different from the proposed project in relation to recreation and would not include any additional recreational sites. The alternative would not result in increased use of need for recreational facilities. This alternative would not include recreational facilities.

2.15.4 Mitigation Measures

Not applicable. Impacts would be less than significant; therefore, mitigation is not required.

2.15.5 Significance After Mitigation

Not applicable. Impacts would be less than significant without mitigation.

2.16 Transportation

The following section provides a description of the potential traffic and circulation impacts resulting from the proposed project and alternatives. This section is based on a traffic and circulation study prepared by Associated Transportation Engineers (see Appendix A).

2.16.1 Physical Setting

Street Network

Regional access to the project site is provided by U.S. Highway 101, State Route 126, State Route 118, and a roadway network comprised of local streets. ATE conducted a field review of the study area roadway network; the following text provides a brief discussion of the study area roadways.

U.S. Highway 101 is the principal inter-city route along the Pacific Coast. Although U.S. Highway 101 runs mostly north-south in California, it runs east-west within the Ventura area. It is a 6-lane freeway within this area. U.S. Highway 101 connects to the study area street network via interchanges at Vineyard Avenue, Santa Clara Avenue, Central Avenue, and Springville Road.

State Route 126, which is located northeast of the project site, is a major east-west roadway within the study area. State Route 126 extends as a 4-lane freeway from U.S. Highway 101 in the City of Ventura to the eastside of the City of Santa Paula. State Route 126 continues as a 4-lane major arterial to Interstate 5 in the City of Santa Clarita. The segment of State Route 126 that would be utilized by the construction traffic is in good condition.

State Route 118, which is located northeast of the project site, is a major east-west roadway within the study area. State Route 118 extends as a 4-lane divided arterial from State Route 126 in the City of Ventura to Vineyard Avenue. The intersection is signal controlled. State Route 118 (Los Angeles Avenue) continues through the project study area as a two-lane roadway to Santa Clara Avenue. State Route 118 continues as a 2-lane highway east to State Route 23 in Moorpark. The segment of State Route 118 which would be utilized by construction traffic was determined to be in good condition.

Vineyard Avenue is a 4- to 6-lane roadway from State Route 118 (Los Angeles Avenue) to U.S. Highway 101 in Oxnard. The U.S. Highway 101/Vineyard Avenue partial cloverleaf interchange is signal controlled. The segment of Vineyard Avenue which would be utilized by construction traffic was determined to be in good condition.

Rose Avenue is a 2-lane roadway extending southwesterly from State Route 118 to Central Avenue and a 4-lane divided roadway to U.S. Highway 101. The U.S. Highway 101/Rose Avenue partial cloverleaf interchange is signalized. The segment of Rose Avenue which would be utilized by construction traffic was determined to be in good condition.

Santa Clara Avenue is a 2-lane roadway extending north from U. S. Highway 101 to State Route 118. A partial cloverleaf interchange is provided at U.S. Highway 101. The U.S. Highway 101/Santa Clara Avenue-Rice Avenue interchange is signalized. The segment of Santa Clara Avenue which would be utilized by construction traffic was determined to be in good condition.

Telephone Road is a 4-lane roadway with a median extending north from Olivas Park Drive to State Route 118 (Wells Road). The Wells Road/Telephone Road intersection is controlled by traffic signals. The segment of Telephone Road which would be utilized by construction traffic was determined to be in good condition.

Central Avenue is a 2-lane roadway extending southwesterly from Vineyard Avenue to U. S. Highway 101. A diamond interchange is provided at U.S. Highway 101. The U.S. Highway 101/Central Avenue interchange is controlled by stop signs. The segment of Central Avenue which would be utilized by construction traffic was determined to be in good condition.

In the project area, Saticoy Avenue is a northeasterly-south westerly roadway that extends south from Henderson Road to North Bank Drive. The Saticoy Avenue/Henderson Road intersection is controlled by a stop sign on Saticoy Avenue. The segment of Saticoy Avenue which would be utilized by construction traffic was determined to be in good condition.

Henderson Road is a 2-lane road that extends southwesterly from Wells Road to Thille Street (approximately 500 feet east of Kimball Road). Henderson Road continues southerly, where it terminates in a residential area. Henderson Road would provide access to the project site via Wells Road and Thille Street. The segment of Henderson Road which would be utilized by construction traffic was determined to be in good condition.

West Daily Drive is a 2-lane road for about 150 feet easterly from Central Avenue. The balance of West Daily Drive (approximately 3,000 ± feet) is approximately 18 feet wide to the turn up the hill to the Calleguas connection point. This segment is generally an agricultural area service road. The traffic volume on this segment is quite light.

Roadway Operations

"Level of Service" (LOS) A through F are used to rate roadway operations, with LOS A indicating very good operating conditions and LOS F indicating poor conditions (more complete definitions of level of service are contained in Appendix A for reference). LOS A through LOS C are generally considered acceptable, while LOS D through LOS F indicate poor conditions.

The Average Daily Traffic (ADT) are the 2017 link volumes from the VCTC calibrated Traffic Model. This traffic model is for all of Ventura County and includes most of the roadway segments.

The existing (2017) roadway traffic volumes for the study area roadway segments are summarized in Table 2.16-1. Levels of service for the study area roadways were calculated using the Ventura County roadway capacities.

TABLE 2.16-1
EXISTING ROADWAY LEVELS OF SERVICE

Roadway	Geometry	Class	ADT	Capacity	LOS
State Route 118	4-lanes	Class 1	38,000	58,000	C
State Route 232	4-lanes	Class 1	24,200	58,000	B
Telephone Road	4-lanes	Class 1	25,300	58,000	B
Rose Avenue	2-lanes	Class 1	14,500	27,000	D
Santa Clara Avenue	2-lanes	Class 1	10,000	27,000	C
Central Avenue	2-lanes	Class 1	18,000	27,000	E
Saticoy Avenue	2-lanes	Class 1	2,700	27,000	B

1. LOS based on average delay per vehicle measured in seconds.

The study area roadways operate in the LOS B - E range as shown in Table 2.16-1.

2.16.2 Regulatory Setting

Regulations and guidance for transportation and circulation are outlined in general plans and include the following items applicable to the proposed project:

City of Ventura

City of Ventura General Plan Policy 4A states that it is City policy to "Ensure that the transportation system is safe and easily accessible to all travelers." To this end, the City of Venture requires encroachment permits for any work proposed within the City's public right-of-way or easement. As part of the encroachment permit the applicant is required to:

- Notify the Police Department of construction and provide contact information for a responsible representative.
- Confirm location of existing underground facilities
- Develop a traffic control plan in conformance with the California Manual on Uniform Traffic Control Devices. The traffic control plan is to provide the necessary signage, delineators, barricade, lights, and flagmen to insure traffic flow through and around the construction area. Traffic control plans are subject to review and approval prior to the issuance of the encroachment permit.
- Provide notice to private properties at least 72 hours in advance of starting any work that may affect access to that property.
- Follow BMPs for stormwater management.

County of Ventura

The County of Ventura General Plan Goal 4.2.1.1 is to "Facilitate the safe and efficient movement of persons and goods by encouraging the design, construction, and maintenance of an integrated transportation and circulation system consisting of regional and local roads, bus transit, bike paths, ridesharing, rail transit and freight service, airports and harbors." County of Ventura General Plan Goal 4.2.1.2 is to "Facilitate the safe and efficient movement of persons

and goods by designing, constructing, and maintaining a Regional Road Network and Local Road Network that is consistent with the County road standards and that will function at an acceptable Level of Service (LOS)."

Like the City of Ventura, the County of Ventura requires an encroachment permit for any work proposed within the County's road right-of-way. To obtain a County of Ventura encroachment permit, the applicant must provide a traffic control plan consistent with the California Manual on Uniform Traffic Control Devices to insure safe traffic flow through and around the construction area.

City of Camarillo

It is the City of Camarillo goal (General Plan Circulation Element Goal 2) to promote a well-balanced, connected, economically feasible, and sustainable multimodal transportation system that provides for safe and efficient movement on well-maintained roads while meeting the needs of Camarillo residents, businesses, employees, visitors, special needs populations, and the elderly. Like the City of Ventura and County of Ventura, the City of Camarillo requires an encroachment permit for any work proposed within a City of Camarillo right-of-way. To obtain an encroachment permit the City of Camarillo requires an applicant prepare a traffic control plan consistent with the California Manual on Uniform Traffic Control Devices. The traffic control plan is subject to review and approval by the City of Camarillo and the work-site is subject to inspection to insure the traffic control plan is being followed.

The proposed project would be consistent with local regulations, ordinances, and policies related to transportation. The project, prior to construction, would receive applicable reviews and permits from the City of Ventura, County of Ventura (encroachment permits), and City of Camarillo (encroachment permits) to ensure safe traffic flow in and around the construction area.

2.16.3 Impact Analysis

2.16.3.1 Significance Thresholds

City of Ventura

The City of Ventura does not have an adopted standard for roadways and intersections; for this reason, County of Ventura thresholds are used in this analysis.

City of Camarillo

The City of Camarillo's acceptable level of service for intersections is LOS C or better, with LOS D allowed for short periods of time during peak hour periods. The City of Camarillo considers project impacts significant and requiring mitigation if they exceed the following thresholds:

- 30 per-lane peak-hour critical movement trips for LOS D
- 20 per-lane peak-hour critical movement trips for LOS E
- 10 per-lane peak-hour critical movement trips for LOS F

However, the County of Ventura thresholds are more conservative and are therefore used for this analysis.

County of Ventura

The County of Ventura has established LOS D as the design criteria for all County thoroughfares in the unincorporated areas of the County and LOS C for all County maintained local roads as shown in Table 2.16-2.

TABLE 2.16-2
MINIMUM ACCEPTABLE LEVELS OF SERVICE FOR ROADWAY SEGMENTS

Minimum LOS	County of Ventura Minimum Acceptable LOS
C	All County maintained local roads.
D	All County thoroughfares and state highways within the unincorporated area of the County, except as provided for State Route 33 between the end of the freeway and the City of Ojai.
E	State Route 33 between the end of the freeway and the City of Ojai, Santa Rosa Road, Moorpark Road north of Santa Rosa Road, State Route 34 north of the City of Camarillo and State Route 118 between Santa Clara Avenue and the City of Moorpark.
Varies	The LOS prescribed by the applicable city for all state highways, city thoroughfares, and city maintained local roads located within that city, if the city has formally adopted General Plan policies, ordinances or a reciprocal agreement with the County, pertaining to development in the city that would individually or cumulatively affect the LOS of state highways, county thoroughfares and county-maintained local roads in the unincorporated area of the County.
	County LOS standards are applicable for any City that has not adopted its own standards.
At any intersection between two roads, each of which has a prescribed minimum acceptable LOS, the less stringent LOS of the two shall be the minimum acceptable LOS of that intersection.	

Roadway Segments

A significant adverse traffic impact would occur on any road segment if any one of the following occurs:

a) If the project would cause the existing LOS to fall to an unacceptable level as defined in Table 2.16-2.

b) If the project would add one or more peak hour trips (PHT) to a roadway segment that is currently operating at less-than-acceptable LOS as defined in Table 2.16-2.

c) If the project would add 10 or more average daily trips (ADT) or 1% or more of the total projected ADT, whichever is greater, to a roadway that is currently operating at less-than-acceptable LOS as defined in Table 2.16-2.

Intersections

d) A significant adverse traffic impact would occur at an intersection if the project will exceed the thresholds shown in Table 2.16-3.

TABLE 2.16-3
THRESHOLDS OF SIGNIFICANCE FOR CHANGES IN LEVEL OF SERVICE AT INTERSECTIONS

Intersection LOS (existing)	Increase in Volume/Capacity or Trips Greater than
LOS A	0.20
LOS B	0.15
LOS C	0.10
LOS D	10 Trips *
LOS E	5 Trips *
LOS F	1 Trip *
* To critical movements during the peak hour. The critical movement is that signal phase that requires the most amount of time to clear the traffic que. Commonly this is the signal phase where left-turns and opposing through traffic have a green-light.	

Access

e) Result in inadequate emergency access.

2.16.3.2 Project-Specific Impacts

Methodology

Project Trip Generation

Trip generation estimates are based on the number of anticipated employee and truck trips. Trip generation calculations were completed for weekday daily activity levels. The 87 on-site employees (83 construction and 4 inspectors) would generate up to 174 daily trips. The project would import and export material which would require approximately 104 daily truck trips (52 truckloads) over the construction period. The peak project workday would result in a total of 174 daily employee trips and 104 daily truck trips. Table 2.16-4 summarizes the trip generation calculations.

TABLE 2.16-4
PROJECT PEAK TRIP GENERATION ESTIMATES

Traffic Generator	Per Day	Daily Trips
Employees:		
Construction	83	166
Inspectors	4	8
Total	87	174
Truck Loads:		
Open Cut	48	96
Trenchless	4	8
Total	52	104
	Total Trips	278

Truck Routing

Trucks bringing construction materials to the project site would travel on U.S. Highway 101, State Route 126, and State Route 118. U.S. Highway 101, State Route 126, and State Route 118 are designated as truck routes in the County of Ventura. Project construction traffic would access the project site via Saticoy Avenue, Telephone Road, Vineyard Avenue, Rose Avenue, Santa Clara Avenue, Central Avenue, and Daily Drive. A field review was completed to determine the existing conditions along the routes. The field review determined that all the roadways along the route were in satisfactory condition; photos are provided in Appendix A.

Project Trip Distribution and Assignment

Project-generated truck traffic was distributed and assigned to the study area street network according to the truck route discussed above. Most employees are anticipated to come to work via U.S. Highway 101, State Route 126, and State Route 118. Table 2.16-5 shows the existing plus project levels of service for the study area roadways and identifies the significance of the project-added traffic based on County of Ventura thresholds.

TABLE 2.16-5
POTENTIAL ROADWAY SEGMENT IMPACTS

Roadways	Project-Added ADT	Existing + Project ADT	LOS	
			Existing	*Existing + Project*
State Route 118	102	38,102	LOS C	LOS D
State Route 232	102	24,302	LOS B	LOS B
Telephone Road	102	25,402	LOS B	LOS B
Rose Avenue	75	14,575	LOS D	LOS D
Santa Clara Avenue	102	10,102	LOS C	LOS D
Central Avenue	102	18,802	LOS E	LOS E
Saticoy Avenue	102	2,850	LOS B	LOS B

Impacts to Roadways Currently Operating at Acceptable LOS (Significance Threshold a)

Traffic generated by the project is a result of construction only and is short-term in nature. With the addition of project traffic, no roadway segments currently operating at an acceptable level would fall to an unacceptable level.

Impacts to Roadways Currently Operating at Unacceptable LOS (Significance Threshold b, c)

Impact TR-1. The project would add one or more PHT to Central Avenue, a roadway segment that is currently operating at a less than acceptable LOS - potentially significant, but mitigable.

Central Avenue currently operates at LOS E, meaning that any addition to traffic can exacerbate the poor traffic situation.

Impacts to Intersections Currently Operating at Unacceptable LOS (Significance Threshold d)

Trip generation calculations did not indicate that the project would add trips to the critical peak hour turn movements.

Impacts to Roadway Access (Significance Threshold e)

Project-related construction has the potential to limit access in certain streets when the pipeline is being constructed adjacent to or within a given roadway. Construction is planned to occur over a 30-month period at an average pipeline installation rate of 120 feet per day. Project trips would be distributed along several local roadways as the pipeline construction progresses. Project construction would likely be handled so that multiple segments are under construction at the same time. Each agency that manages the roadway system in their jurisdiction requires encroachment permits where the pipeline crosses a roadway and in areas where the pipeline is within the public right-of-way. Traffic control plans, approved by the respective agency, would provide for the maintenance of the flow of traffic and impacts would be less than significant.

2.16.3.3 No Project Alternative

This alternative would not result in any physical changes or activities that would have potential to create additional traffic or to modify the circulation system.

2.16.3.4 Alternative Alignment B

As with the proposed project, any construction within roadways would require obtaining an encroachment permit and preparing traffic control plans. This would ensure safe access through and around the construction areas. But because Alternative Alignment B has much more work within roadways, it would have greater traffic and circulation impacts than the proposed project.

In Segment 11, a trenchless crossing (B&J) would be required to cross under the channel north of Central Avenue and to cross the Santa Clara Avenue intersection. The bore pit would be positioned on the south side of Central Avenue for this alignment, allowing all traffic to be

diverted to the north side of the road. This may require temporary paving. A flagger would be required to direct vehicles around the staging area. The narrow, two-lane roadway would require significant traffic control measures to avoid conflicts with the staging area and this would cause noticeable traffic delays. In Segments14 and 17, the narrow, two-lane roadway would require traffic control measures creating impacts to traffic and noticeable traffic delays.

Impact TR-1 also applies to Alternative Alignment B. Alternative Alignment B involves installing two pipeline segments in the immediate vicinity of Rio Mesa High School and the length of time construction will occur that affects Central Avenue will be greater than with the proposed project.

2.16.4 Mitigation Measures

The following mitigation measures will reduce potential impacts to a less than significant level.

TR MM-1. Limit construction of Segment 10 (proposed project), Segments 7 and 11 (Alternative Alignment B) to periods when Rio Mesa High School is out of session (generally mid-June to September). The existing congestion and delay on Central Avenue is due in large part by traffic generated by Rio Mesa High School. Performing construction when school is out of session will avoid the significant impact of combined school and construction traffic.

2.16.5 Significance After Mitigation

Implementation of mitigation measures would reduce transportation related impacts to a less than significant level.

2.17 Tribal Cultural Resources

This section evaluates potential impacts to tribal cultural resources resulting from the proposed project and alternatives.

2.17.1 Physical Setting

Tribal cultural resources are sites, places, cultural landscapes, sacred places, and objects with cultural value to tribes that are listed or determined to be eligible for listing in a national, state, or local register of historical resources. For a discussion on these resources, see Section 2.5. In addition, a lead agency may, at its discretion, determine that a given resource is a tribal cultural resource. To ensure that potential tribal cultural resources are considered in this CEQA evaluation, the City contacted Native American entities, including the Santa Ynez Band of Mission Indians, the Coastal Band of the Chumash Nation, and the Barbareño/Ventureño Band of Mission Indians, entities with a presence and interest in the Ventura area.

2.17.2 Regulatory Setting

AB 52, which went into effect on July 1, 2015, established a consultation process with all California Native American Tribes on the Native American Heritage Commission (NAHC) List and required consideration of Tribal Cultural Values in the determination of project impacts and mitigation. AB 52 established a new class of resources, tribal cultural resources.

AB 52 requires lead agencies to consult with California Native American Tribes that request such consultation in writing. The City sent a letter to all the tribes on the NAHC List for the County that have previously requested notification of interest in City Projects pursuant to the requirements of AB 52 in March 2018 (see Appendix B). A summary of the AB 52 outreach is provided in Table 2.17-1. In response, the City received a request to consult from one tribal representative.

2.17.3 Impact Analysis

2.17.3.1 Significance Thresholds

Consistent with CEQA Guidelines, potentially significant impacts would occur if implementation of the project would:

a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

    i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k);

    ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 2024.1. In applying the criteria set forth in

subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

TABLE 2.17-1
AB 52 OUTREACH TO TRIBAL REPRESENTATIVES

Consultation Representative	Tribe	Requested Consultation
Kathleen Pappo	Barbareño/Ventureño Band of Mission Indians	No
Melissa Parra-Hernandez	Chumash	No
Carol Pulido	Chumash	No
Richard Angulo	Chumash	No
Charles Parra	Chumash	No
Michael Cordero	Coastal Band of the Chumash Nation	No
Randy Guzman-Folkes	Chumash, Fernandeno, Tataviam, Shoshone, Paiute, Yaqui	No
Patrick Tumamait	Chumash	No
Julie Lynn Tumamait-Stennslie	Barbareño/Ventureño Band of Mission Indians	Yes
Beverly Salazar Folkes	Chumash, Tataviam, Fernandeno	No
Raudel Joe Banuelos Jr.	Barbareño/Ventureño Band of Mission Indians	No
Janet Barlene Garcia	Coastal Band of the Chumash Nation	No
Crystal Baker	Coastal Band of the Chumash Nation	No
Peu YoKo Perez	Chumash	No
Kenneth Kahn	Santa Ynez Band of Chumash Indians	No
Antonia Flores	Santa Ynez Tribal Elders Council	No
Sam Cohen	Santa Ynez Band of Chumash Indians	No
Fred Collins	Northern Chumash Tribal Council	No
Freddie Romero	Santa Ynez Tribal Elders Council	No
Eleanor Arrellanes	Barbareño/Ventureño Band of Mission Indians	No

2.17.3.2 Project-Specific Impacts

The City completed consultation with all parties that requested consultation and in compliance with the requirements of AB 52. The lead agency agreed with the tribal representative that the mitigation measures proposed by the City (see Section 2.5) were appropriate and feasible for the project. With mitigation measures CR MM-1 through CR MM-9, impacts would be less than significant.

2.17.3.3 No Project Alternative

This alternative would not result in any changes or activities that increase risk of loss or damage to tribal cultural resources.

2.17.3.4 Alternative Alignment B

This alternative is not substantially different from the proposed project in relation to tribal cultural resources.

2.17.4 Mitigation Measures

The applicable mitigation measures, CR MM-1 through CR MM-9 are contained in Section 2.5.

2.17.5 Significance After Mitigation

With full implementation of CR MM-1 through CR MM-9, impacts to tribal cultural resources would be less than significant.

2.18 Utilities and Service Systems

This section evaluates potential impacts to utilities and service systems resulting from the proposed project and alternatives.

2.18.1 Physical Setting

The project constitutes an underground water pipeline along with appurtenances and a small blending/monitoring station.

2.18.1.1 Water

In the project area, there are several water suppliers, including Casitas, the City of Ventura, United, Calleguas, Crestview Mutual Water Company, and the City of Camarillo. Segment 2 of the project, along with the proposed blending station, are within the Ventura Water service area. Segments 6, 10, 13, and 16 of the proposed project are not within a defined retail water service area; water users in these areas rely on private wells. Segments 18 and 19, common to both the proposed project and Alternative Alignment B are within Calleguas (wholesaler), City of Camarillo, and Crestview Mutual Water Company service areas. Segment 7 of Alternative Alignment B is within the Vineyard Mutual Water Company service area; Segments 4, 11, 14, and 17 of Alternative Alignment B are not within a defined retail water service area and water users in these areas rely on private wells.

2.18.1.2 Wastewater

In the project area, there are several wastewater providers including Ojai Valley Sanitary District, the City of Ventura, and Camarillo Sanitary District. Segment 2 of the project, along with the proposed blending station, are within the City of Ventura wastewater service area. Segments 6, 10, 13, and 16 of the proposed project are not within an area with sewer service and wastewater disposal is handled using septic systems. Segments 18 and 19 of the proposed project are within the Camarillo Sanitary District. Segments 4, 7, 11, 14, and 17 of Alternative Alignment B are not within an area with sewer service and wastewater disposal is handled using septic systems.

2.18.1.3 Solid Waste

In the project area, solid waste collection and disposal services are provided by the City of Ventura Public Works Department (which currently contracts with EJ Harrison for solid waste disposal), the County of Ventura Integrated Waste Management Division (Service Area 3), and the City of Camarillo. Segment 2 of the project, along with the proposed blending station, are within the City of Ventura service area. Segments 6, 10, 13, and 16 of the proposed project are within the County's Service Area 3; the County contracts with EJ Harrison for residential waste collection and disposal in Service Area 3. Segments 18 and 19, common to the proposed project and Alternative Alignment B are within the City of Camarillo, which contracts with a disposal service (currently EJ Harrison). Segments 4, 7, 11, 14, and 17 of Alternative Alignment B also within the County's Service Area 3.

2.18.1.4 Electricity and Gas

Electric power and natural gas services in the project area are provided by SCE and SCG. Electricity and gas are assessed in Section 2.6.

2.18.2 Regulatory Setting

The City of Ventura, City of Camarillo, and County of Ventura all have General Plan policies to ensure there is an adequate provision of public services prior to approval of specific projects. Most of these policies relate to projects that create new homes and businesses, rather than infrastructure projects.

The following Action of the City of Ventura General Plan applies directly to this project:

- Action 5.11: Increase emergency water supply capacity through cooperative tie-ins with neighboring suppliers.

The proposed project would be consistent with policies related to provision of adequate public services as it improves and enhances water infrastructure. Further, the proposed project would result in an agreement and water tie-in with Calleguas.

2.18.3 Impact Analysis

2.18.3.1 Significance Thresholds

City of Ventura and City of Camarillo

Pursuant to CEQA Guidelines, potentially significant impacts would occur if implementation of the project would:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals;

e) Negatively impact the provision of solid waste services or impair the attainment of solid waste reduction goals;

f) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

Ventura County

The ISAG states that a potentially significant impact to utilities may occur with:

Utilities

g) Any project that would individually or cumulatively 1) cause a disruption or re-routing of an existing utility facility or 2) increase demand on a utility that results in expansion of an existing utility facility which has the potential for secondary environmental impacts has the potential for significant impacts.

Waste Treatment & Disposal Facilities – Sewage Collection/Treatment Facilities

h) Any project which (individually or cumulatively) may generate sewage effluent which will be discharged to and exceed the capacity of an existing facility or ancillary facilities.

Waste Treatment & Disposal Facilities – Solid Waste Management

i) A project that has a direct or indirect adverse effect on a landfill such that impairs the landfill's disposal capacity in terms of reducing its useful life to less than 15 years.

j) Any project that is not in compliance with solid waste regulations.

Flood Control Facilities/Watercourses – Watershed Protection District

k) Any project that will, either directly or indirectly, impact flood control facilities and watercourses by obstructing, impairing, diverting, impeding, or altering the characteristics of the flow of water, resulting in exposing adjacent property and the community to increased risk for flood hazards shall be considered to have a potentially significant impact. Specific examples of potentially significant impacts include:

    i. Reducing the capacity of flood control facilities and watercourses. This includes the planting of any vegetation within the watercourse or on the banks thereof.
    ii. Eroding watercourse bed and banks due to high velocities, changes in adjacent land use, encroachments into the channel such as bridges, and loading the top of the channel embankment with structures.
    iii. Deposition of any material of any kind in a watercourse.

l) Placement of a structure that encroaches on a flood control facility or that does not have sufficient setback from a watercourse per Ventura County Flood Control District Ordinance No. FC 18 as amended, Ventura County Flood Control District Design Manual, 1968 ed. as amended, and Watershed Protection District Hydrology Manual, 2006 ed. as amended

2.18.3.2 Project-Specific Impacts

Relocation or Construction of Facilities (Significance Thresholds a, c, g, h)

Overall, the proposed project would not result in significant new demands or impacts to utilities or service systems.

The proposed project constitutes a modification to the existing water supply system; however, its implementation would enhance supply reliability in the project area primarily by enabling delivery of SWP water to the City of Ventura via Calleguas' system. The interconnection would also facilitate direct or in-lieu delivery of SWP water to United and Casitas. In addition, the interconnection would allow the City to deliver water to Calleguas during an outage of its imported water supplies. The City's 2016 UWMP concludes that additional water supplies may be necessary to continue to reliably meet water demands. Further the 2018 Ventura Water Comprehensive Water Resources Report indicates that water supplies could be less than demands in some instances. This project would help address these anticipated water supply challenges.

During construction, wastewater needs would be met using portable bathrooms. Operational impacts are discussed under Wastewater Requirements below.

The project would not result in substantial impacts to drainage patterns or increases in surface runoff that could require modification to existing or construction of new stormwater drainage facilities. The pipeline would be installed underground and surfaces would be returned to pre-construction conditions along the alignment. Only minor areas of impervious surfaces would be added within the project area, which is not anticipated to result in significant impacts to stormwater drainage facilities.

The proposed pipeline would have no electrical demand. The blending station would have minimal electrical demands. The three potential blending station locations are within urban areas that already have utility service. Therefore it is expected that the blending station can be accommodated by the existing electrical service or through minor extension of SCE service. There would be no impacts to natural gas facilities.

Water Supplies (Significance Threshold b)

As noted above, the project would not result in increased water demands, but rather would enhance overall water supply reliability by enabling delivery of SWP water supplies to the City and establishing a direct connection between Calleguas' and the City's distribution systems.

Wastewater Requirements (Significance Thresholds c, h)

The blending/monitoring station will generate minor amounts of wastewater related to wash down water and use of analytical equipment. Quantities would be minimal, between 100 to 200 gallons per month. Wastewater production from the facility would not have significant impacts to existing wastewater treatment facilities and would be accommodated by existing City facilities.

Solid Waste (Significance Thresholds d, e, f, i, j)

The proposed project would not produce substantial amounts of solid waste and would not have the potential to exceed existing waste infrastructure capacity. All project implementation activities would occur in compliance with all federal, state, and local management and reduction statutes and regulations related to solid waste.

Stormwater Drainage (Significance Thresholds k-l)

The project would not involve placement of structures in floodways. Project activities would involve staging and trenchless construction adjacent to the Santa Clara River in order to install the pipeline under the river. Both HDD construction staging areas would be located within an area of 0.2% annual chance flood, but outside of the 1% annual chance floodplain boundary for the Santa Clara River. As a result, no impacts are anticipated on the flow pattern of the Santa Clara River.

The project would not result in substantial impacts to drainage patterns in or around the project site due to the addition of impervious surfaces, because the project would not substantially increase imperviousness of the project area. A large part of the project area crosses through dirt roads within farmland, which are pervious. A portion of the pipeline would be installed in already paved roads. In both cases, road surfaces would be returned to pre-project conditions. Minor areas of impervious surface would be added within the project area, including at the blending/monitoring station, air vacuum/release valves, blow offs, and manholes. Project implementation is not anticipated to substantially increase surface runoff or contribute to elevated flooding potential.

2.18.3.3 No Project Alternative

This alternative would not result in any physical changes or promote additional population that would have potential to substantially affect utilities or service systems in the project area. However, the No Project Alternative would require that the City of Ventura seek other ways to provide a continued reliable water service to City water customers and make up for losses in annual yield from existing supply sources. As of October 2018 the City was operating under a Stage 3 Water Shortage and without new water supply sources or a improvement in existing sources, the City will continue with drought surcharges and continue enforcing water use restrictions to limit water demand.

Casitas would also have to seek other ways to provide a continued reliable water service. As of October 2018 Lake Casitas was at 31 percent of capacity and Casitas was operating under Stage 3 of its Water Efficiency and Allocation Program. Casitas has targeted a 30 percent reduction in water demand and customers have been assigned drought allocations, penalties are assessed for going over allocations, and there are restrictions on irrigation. Casitas is continually monitoring lake level and providing updates to their Board in anticipation of a Stage 4 drought declaration. If Stage 4 is declared, additional measures would be put in place to reduce demand by 40 percent.

Under the No Project Alternative, United would continue exploring and implementing other means to bring in additional supplies to its service area.

Calleguas is currently exploring and implementing other ways to deliver water during an imported water shortage as part of its Water Supply Alternatives Study. If the SWP Interconnection is not constructed, Calleguas would have an even larger shortage of water to address during an outage of imported water supplies.

2.18.3.4 Alternative Alignment B

This alternative differs from the proposed project in the location of the alignment. Implementation of this alternative would not result in any impacts to utilities or service systems that differ from the proposed project.

2.18.4 Mitigation Measures

Not applicable. Impacts would be less than significant; therefore, mitigation is not required.

2.18.5 Significance After Mitigation

Not applicable. Impacts would be less than significant without mitigation.

2.19 Wildfire

This section evaluates potential impacts related to wildfire hazards resulting from the proposed project and alternatives.

2.19.1 Physical Setting

The project area extends from the City of Ventura just west of the Santa Clara River to the western edge of the Camarillo Hills in the City of Camarillo. The alignment crosses a relatively flat coastal plain, dominated by agricultural uses, with gentle sloping hillsides in the section within the City of Camarillo. Urban and residential uses are found at the endpoints of the alignment, within the cities of Ventura and Camarillo.

2.19.2 Regulatory Setting

State

The Wildland-Urban Interface Fire Area Building Standards are minimum standards for materials and material assemblies to provide a reasonable level of exterior wildfire exposure protection for buildings in Wildland-Urban Interface Fire Areas. The standards promulgate the use of ignition resistant materials as well as design to decrease risk of flame or embers projected by a vegetation fire from intruding into structures. These State standards supplement local building codes and are enforced at the local level (e.g., City of Ventura, City of Camarillo, County of Ventura building permits).

As part of this program, CalFire has mapped fire risk as very high, high, or moderate with the focus on State Responsibility Areas (SRAs); SRAs are where CalFire has financial responsibility for fire suppression and prevention.

Local

The State Wildland-Urban Interface Fire Area Building standards supplement local building codes and are enforced at the local level (e.g., City of Ventura, City of Camarillo, County of Ventura building permits). Local codes reference the CalFire maps to determine fire risk.

The project area is not located within an area prone to wildfires or of elevated wildfire risk. According to the SRA viewer available from the Board of Forestry and Fire Protection (2012), the project area does not fall within or in the vicinity of a SRA. According to CalFire Fire Hazard Severity Zone Maps (2007), the project area is not located within a fire hazard severity zone. The nearest Fire Hazard Severity Zones in SRAs are moderate Severity Zones and are located about three-quarter miles north of Highway 118 and two miles west of Segment 2.

2.19.3 Impact Analysis

2.19.3.1 Significance Thresholds

City of Ventura and City of Camarillo

Pursuant to CEQA Guidelines, potentially significant impacts would occur if implementation of the project would:

a) Impair an adopted emergency response plan or emergency evacuation plan;

b) Exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to slope, prevailing winds and other factors;

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment;

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

County of Ventura

The ISAG states fire impacts are significant when:

e) a project located in a High Fire Hazard Area/Fire Hazard Severity Zone or Hazardous Watershed Fire Area and is not able to comply with applicable Federal, State regulations, the Ventura County Building Code or the Fire Code due to site specific constraints such as: endangered plants and species, terrain / topography, or located adjacent to lands not subject to local regulations (i.e., Federal or State property).

2.19.3.2 Project-Specific Impacts

Impairment of Emergency Response or Evacuation Plan (Significance Threshold a)

Generally, primary evacuation routes are located along major highways and major roads. These roads would generally not be used for emergency evacuation purposes. The alignment crosses some major north-south roads, which include Vineyard Avenue (Highway 232), North Rose Avenue, and Santa Clara Avenue. However, it is expected that 300 feet of the alignment would be in active construction at any time, with advancement of 80-160 feet per day. This approach limits the amount of disturbed roadway that could potentially interfere with evacuation along those roads. Short-term increased truck and car traffic associated with construction is not anticipated to create significant interference to potential emergency evacuation. Construction vehicles have the potential to use the same routes as first response vehicles; however, this impact would be temporary. Once construction is complete, road surfaces would be restored to pre-construction conditions. As a result, the potential is low for interference or impairment of an emergency response plan or emergency evacuation plan. Impacts would be less than significant.

Exacerbate Wildfire Risks (Significance Threshold b)

The proposed project does not consist of housing, businesses, or other buildings that would have occupants. The project consists of pipeline that would be installed underground, within an existing right-of-way. No occupants would be exposed to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to slope, prevailing winds and other factors as a result of the project.

Infrastructure Impacts (Significance Threshold c)

The proposed project would not require installation or maintenance of fire-related infrastructure that could exacerbate fire risk or could result in temporary or ongoing impacts to the environment.

Exposure to Flooding or Landslides (Significance Threshold d)

The southern end of the alignment is in the vicinity of small areas of earthquake-induced landslide zones, but overall, landslides are not considered to pose a significant risk to the proposed project. The project is not anticipated to result in changes to drainage, runoff or instability that could result in elevated risks of post-fire flooding or landslides. Most of the pipeline would be placed underground and the ground surface restored to its pre-project condition. The majority of the alignment would be located within privately held agricultural land, which is often not directly visible or accessible from public streets or rights of way. Potential sediment transport may occur during construction, but this potential construction-related sedimentation would not pose significant risks related to post-fire flooding or landslides.

Be Located in Very High or "High" Fire Hazard Zone (Significance Threshold e)

The project area is not located within an area deemed "Very High" or "High" fire hazard.

2.19.3.3 No Project Alternative

The no project alternative would not involve ground disturbing activities and no new structures would be built in areas that could contribute to wildfire risk. This alternative would not increase the wildfire risk above existing conditions.

2.19.3.4 Alternative Alignment B

The impacts related to wildfire risk are the same for the proposed project and Alternative Alignment B.

2.19.4 Mitigation Measures

Not applicable. Impacts would be less than significant; therefore, mitigation is not required.

2.19.5 Significance After Mitigation

Not applicable. Impacts would be less than significant without mitigation.

Section 3: Growth Inducing Impacts

3.1 CEQA Requirements

CEQA Guidelines Section 15126.2(d) requires that an EIR evaluate the growth-inducing impacts of a proposed action. Section 15126.2(d) calls for an EIR to:

Discuss the way in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a reclaimed water treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

In general terms, a project could foster spatial, economic, or population growth in a geographic area, if it meets any one of the following criteria:

- Removes an impediment to growth (e.g., establishment of an essential public service and provision of new access to an area);
- Fosters economic expansion or growth (e.g., changes in revenue base and employment expansion);
- Fosters population growth (e.g., construction of additional housing or employment generating land uses), either directly or indirectly;
- Establishes a precedent-setting action (e.g., an innovation, a change in zoning and general plan amendment approval); or
- Develops or encroaches on an isolated or adjacent area of open space (distinct from an in-fill project).

Should a project meet any one of the above-listed criteria, it could be considered growth inducing. The project's potential growth-inducing impacts are evaluated below relative to these criteria.

3.2 Growth Impact Analysis

3.2.1 Removes an Impediment to Growth

The proposed project is not anticipated to provide an increased water supply volume for the City, Calleguas, United, or Casitas. The purpose of this project is to make it possible to:

- Deliver SWP water to the City of Ventura to offset losses in existing water supplies.

- Make in-lieu deliveries to Casitas to offset losses in existing water supplies.
- Provide the infrastructure so that United can take direct delivery of its SWP water to offset decreases in groundwater replenishment and provide an emergency connection for the O-H system.
- Provide water supplies to Calleguas during an outage of imported water.

The project would not create a new water demand, nor provide capacity to meet projected future water demands.

The proposed project does not include any land development or new land uses that establish a new essential public service or utility/service system. The proposed project does not result in increased demands for public services or utility/service systems or reduce or impair any existing or future levels of services, either locally or regionally. Project implementation does not require substantial development of unplanned or unforeseen public services and utility/service systems. Therefore, the proposed project does not remove an impediment to growth, or foster new spatial growth, through establishment of an essential public service or expansion to a new area. Calleguas will not be selling the SWP water, but merely wheeling the water through their system for use by the City, Casitas, and United as these entities are SWP contractors and part of the SWP service area. The water would not be delivered to entities outside the service areas of the City, Casitas and United.

Project implementation does not require the installation and/or construction of transportation improvements to accommodate project traffic, as access is already provided by existing roadways and traffic related impacts are related only to construction and temporary. Therefore, the project does not remove an impediment to growth and/or foster spatial growth through the provision of new access to an area.

3.2.2 Economic Growth

The proposed project is not anticipated to provide any increased water supply volume for the City, Calleguas, Casitas, or United. For the City and Casitas, the project would improve system reliability by providing access to a replacement supply source for the water supplies that have been reduced or otherwise become less available and, in the case of United and potentially Casitas, would facilitate direct delivery of SWP water. For Calleguas, it would provide an alternative supply during an imported water supply outage. This would not result in economic expansion and/or increase in the revenue base through taxation, sales, or other finances.

Construction of the pipeline and blending/monitoring station would generate short-term employment opportunities that would have economic benefits in terms of short-term jobs and local tax revenues. Construction jobs generated by implementation of the proposed project would likely be filled by current residents of Ventura County or other areas in Southern California. Given the temporary nature of project construction, it is unlikely that the project would result in people relocating to the area. It is anticipated that project operation and maintenance can be handled by adding one additional operator to City staff and by using existing Calleguas staff. The project would not result in new long-term employment opportunities.

Therefore, the project is not considered growth inducing with respect to fostering economic expansion.

3.2.3 Population Growth

The proposed project would provide the infrastructure to enable delivery of SWP water that has been wheeled through the MWD and Calleguas water systems to the City. The proposed interconnection would also facilitate direct delivery of SWP water to United and in-lieu delivery of SWP water to Casitas. Water supplies can, in some cases, be an impediment to population growth if insufficient supplies are expected to be available to support that growth. Conversely, an abundance of water supplies and/or the ability to augment existing supplies with new water sources may help sustain and potentially promote growth. However, the water supply to be provided by the project would replace lost supplies and act as an outage supply as follows:

- The City needs to provide a continued reliable water service to City water customers. This involves making up for losses in annual yield from existing supply sources (Lake Casitas, Ventura River, and groundwater), improving water quality, and providing an emergency/backup connection for Ventura Water's potential potable reuse project. If Calleguas provides water to Ventura during an emergency, Ventura would provide a like quantity of water back to Ventura after the emergency is over.
- Calleguas needs to improve its water supply reliability for existing customers in the event of an outage of imported supplies. The project would result in no additional water for Calleguas. If Ventura provides water to Calleguas during an outage of imported supplies, Calleguas would provide a like quantity of water back to Ventura after the outage is over.
- United needs to protect local supplies to ensure a long-term supply for its service area. This involves making up for losses in annual yield from existing supply sources (Santa Clara River diversions and groundwater), enhancing groundwater recharge options while reducing groundwater overdraft, improving basin groundwater quality, and providing an emergency connection for United's O-H Pipeline.
- Casitas needs to extend the ability of Lake Casitas to provide water during a long-term drought and to replace water that otherwise would have been diverted for storage at Lake Casitas but is now released downstream as required by the BO for the Robles Diversion Facility.

Therefore, while the project has the ability to augment existing supplies with new water sources, these water sources will replace lost supplies and will not serve to supply future demand and growth.

3.2.4 Establish a Precedent Setting Action

Precedent-setting actions include, but are not limited to, a change in zoning, a change in general plan designation, a change in general plan text, and approval of exceptions to regulations that could have implications for other properties or actions. None of these actions are necessitated by the proposed project. The proposed project would be consistent with existing zoning and would not result in changes in land use patterns. As discussed in Section

2.10, the project would not have the potential to conflict with an applicable land use plan, policy, or regulation.

Given the nature of the proposed project (water supply infrastructure), and based upon the reasons discussed above, the project would not result in a precedent-setting action that would induce growth.

3.2.5 Develop or Encroach on an Isolated or Adjacent Area of Open Space

Development can be considered growth inducing when it is not contiguous to existing urban development and intervening open space areas occur between developments. The proposed project does not consist of housing or businesses that would encroach into an isolated or adjacent area of open space.

Implementation of the proposed project would not result in a direct or indirect increase in population or employment. The proposed project, therefore, is not growth-inducing and would not induce secondary effects of growth.

Section 4: Cumulative Impacts

4.1 Introduction

CEQA requires that a Draft EIR assess the cumulative impacts of a project with respect to past, current, and probable future projects within the region. CEQA Guidelines Section 15355, *Cumulative Impacts*, provides the following definition of cumulative impacts:

> *""Cumulative impacts" refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.*
>
> *(a) The individual effects may be changes resulting from a single project or a number of separate projects.*
>
> *(b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time."*

CEQA Guidelines Section 15130, *Discussion of Cumulative Impacts*, further addresses the discussion of cumulative impacts, as follows:

"(1) An EIR should not discuss impacts which do not result in part from the project evaluated in the EIR.

(2) If the combined cumulative impact associated with the project's incremental effect and the effects of other projects is not significant, the EIR should briefly indicate why the cumulative impact is not significant and is not discussed in further detail in the EIR.

(3) If the combined cumulative impact associated with the project's incremental effect and the effects of other projects is significant, the EIR must determine whether the project's contribution is cumulatively considerable.

(4) The EIR may conclude the project's contribution to a significant cumulative impact is less than cumulatively considerable and thus is not significant, if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact."

4.2 Cumulative Impact Assessment Approach

Pursuant to CEQA Guidelines Section 15130(b), the discussion of cumulative impacts shall be guided by the standards of practicality and reasonableness, and should include the following elements:

1. "*Either:*

   A. A list of past, present and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the Agency, or

B. A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projects may be supplemented with additional information such as a regional modeling program. Any such document shall be referenced and made available to the public at a location specified by the lead agency.

2. When utilizing a list, as suggested in paragraph (1) of subdivision (b), factors to consider when determining whether to include a related project should include the nature of each environmental resource being examined, the location of the project and its type. Location may be important, for example, when water quality impacts are at issue since projects outside the watershed would probably not contribute to a cumulative effect. Project type may be important, for example, when the impact is specialized, such as a particular air pollutant or mode of traffic.

3. Lead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used.

4. A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available; and

5. A reasonable analysis of the cumulative impacts of the relevant projects, including examination of reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects."

The first step in the cumulative analysis, therefore, is to identify the impact of the proposed project and, in each case, consider whether there are other projects (past, current, future) that could have related impacts, and then to determine whether the project's contribution to the overall impact is "cumulatively considerable." It is possible that even when the cumulative impact of multiple projects is significant, the incremental contribution of the impact for the proposed project may itself not be cumulatively considerable (California Code of Regulations [CCR] section 15064.H4, Communities for Better Environment Case Law). Further, a project's contribution is less than cumulatively considerable if the project implements mitigation measures designed to alleviate the cumulative impact (CEQA Guidelines section 15130 (a)(3)).

4.2.1 Geographic Scope

Cumulative impacts are assessed for related projects within a similar geographic area. This geographic area may vary, depending upon the issue area discussed and the geographic extent of the potential impact. For example, construction noise impacts would be limited to areas directly affected by construction, whereas the area affected by the proposed project's construction-related air emissions generally includes the entire air basin. Construction impacts associated with increased noise, dust, erosion, and access limitations tend to be localized and could be exacerbated if other development or improvement projects are occurring within the same or adjacent locations as the proposed project. Table 4-1 summarizes the geographic

scope of the analyses for cumulative impacts for each environmental resource area discussed in Section 2.

TABLE 4-1
GEOGRAPHIC SCOPE OF CUMULATIVE IMPACT ANALYSES

Environmental Issue	Geographic Scope of Cumulative Impact Analyses
Aesthetics	Foreground views immediately surrounding proposed project components
Agriculture and Forestry Resources	All agricultural lands adjacent to the proposed project components
Air Quality and Greenhouse Gas Emissions	South Central Coast Air Basin
Biological Resources	Open-space areas within the cities of Ventura, Oxnard, and Camarillo, and portions of unincorporated Ventura County and surrounding environs that support native habitats and plant and wildlife species
Cultural Resources	Ventura County (*Ventureño* Chumash)
Energy	The service areas of Southern California Edison, Southern California Gas Company, and the SWP
Geology, Soils, and Seismicity	The proposed project facility locations and the construction corridor
Hazards and Hazardous Materials	The proposed project facility locations, the construction corridor, the immediate area surrounding these locations and the area within 0.25 mile of a school that would also be within 0.25 mile of the proposed project facilities
Hydrology and Water Quality	Proposed project sites, the construction corridor, and downstream receiving waters
Land Use and Planning	Cities of Ventura and Camarillo, and portions of unincorporated Ventura County
Mineral Resources	Ventura County
Noise	Land adjacent to the proposed project components, the construction corridor, and any adjacent or nearby noise sensitive receptors
Population and Housing	Service areas of Ventura Water, Calleguas, Casitas, and United
Public Services	Cities of Ventura and Camarillo, and portions of unincorporated Ventura County
Recreation	Cities of Ventura and Camarillo, and portions of unincorporated Ventura County
Transportation	Cities of Ventura, Oxnard, and Camarillo and portions of unincorporated Ventura County
Tribal Cultural Resources	The proposed project facility locations, the construction corridor, and lands immediately adjacent
Utilities and Service Systems	Service areas of the project area utility providers of water, wastewater, solid waste, electricity and gas
Wildfire	Cities of Ventura, Oxnard, Camarillo, and portions of unincorporated Ventura County

4.2.2 Related Projects

As described in Section 2, impacts associated with implementation of the proposed project are short-term and related to construction, rather than long-term operational impacts. The proposed project could contribute to cumulative effects when considered in combination with other "closely-related" projects; projects that are in the same geographic location, similar in purpose, timing, and effects on the environment.

To identify other "closely-related projects" the following entities were contacted: City of Ventura Community Development Department, Ventura County Watershed Protection District, County of Ventura Long-Range Planning Division, County of Ventura Transportation Department, City of Camarillo Community Development Department, City of Camarillo Public Works Department, United, and Calleguas. Table 4-2 summarizes the projects located within the geographic area of the SWP Interconnection, identified through consultation with respective agencies. Construction of the proposed project and the related projects identified in Table 4-2 may not occur at the same time. In addition, several projects are long-term and are planned to span a number of years. This reduces the likelihood that construction of these projects would occur at the same time as the proposed project.

Of the 10 related projects identified in Table 4-2, five are anticipated to be constructed within the same timeframe as the SWP Interconnection. However, due to the nature of the related project or the geographic location of the related project, their impacts would not be cumulative with impacts of the SWP Interconnection:

- VenturaWaterPure. The VenturaWaterPure project is currently in the CEQA planning stage, with a preliminary construction schedule planned for the 2020-2025 timeframe. Proposed water infrastructure will be located throughout the City and possibly within the unincorporated Ventura County. However, all locations currently being evaluated are located west of Johnson Drive, and will not overlap with any of the proposed project's geographical segments. Therefore, even though the project elements may be constructed at the same time as the proposed project, there is no geographical overlap in potential impacts, and thus no likelihood for a cumulative impact with the proposed project.

- United's Direct Connection to the SWP Interconnection Project. This related project will install the infrastructure necessary to allow United to receive water from the SWP Interconnection. There are two potential turnouts in Segment 2; one at the Noble and/or Ferro groundwater basins, and another at Rose Avenue near the Rose recharge basin connecting to United's main supply pipeline. However, the turnouts are within the construction area and disturbance area considered as part of SWP Interconnection and the potential impacts of ground disturbance/construction of United's connection to the SWP are already accounted for in this EIR and were found to be less than significant or less than significant with mitigation.

- Calleguas's Springville Hydroelectric Generators. The Calleguas Springville Hydroelectric Generator project is located in Segment 19 and there is the potential for it to be constructed at the same time as the SWP Interconnection. However, the improvements proposed by this project would all occur inside of the existing Springville Hydro building. Therefore, it is unlikely that the Springville Hydroelectric Generators

project would add cumulatively to the temporary construction related impacts from the proposed project. For these reasons, cumulative impacts with this project are not anticipated.

The following two projects are assumed to be constructed in the same timeframe and within the same geographical location as the SWP Interconnection. Therefore, these two projects have the potential to contribute cumulatively towards biological, cultural, hazards and hazardous materials, noise, and transportation impacts.

- United's Riverpark to Saticoy Recycled Water Pipeline. United's Recycled Water Pipeline project would be constructed near Segment 2 (proposed project and Alternative Alignment B) and Segment 4 (Alternative Alignment B) of the SWP Interconnection, in the vicinity of the Saticoy groundwater recharge basins. The recycled water distribution line would follow Vineyard Avenue from Riverpark to Saticoy to deliver recycled water to the District's groundwater recharge basins or to the Pleasant Valley Pipeline and Pumping Trough Pipeline. Construction is planned for mid-2020, a similar timeframe as the SWP Interconnection.

- VCWPD's SC-1 Levee Improvements. VCWPD would construct approximately five miles of levee improvements along the east side of the Santa Clara River from approximately Highway 101 to the Freeman Diversion. Segment 2 (proposed project and Alternative Alignment B) runs perpendicular to the levee improvement area. The project is currently being designed, and construction could begin around the same time as the SWP Interconnection, mid-2020s.

The remaining five projects are either planned to be constructed after the SWP Interconnection or are still conceptual and therefore are likely to be implemented after the SWP Interconnection and therefore construction impacts would not be cumulative.

TABLE 4-2
PROJECTS CONSIDERED IN THE CUMULATIVE IMPACT ANALYSIS

Project No.	Lead Agency	Project Name	Project Location	Project Description	Status
1	Ventura Water	VenturaWaterPure	Within portions of the City of Ventura and Unincorporated Ventura County.	Project to divert wastewater flows to supply a new advanced water purification facility with the ultimate goal to produce highly purified water for indirect or direct potable reuse.	CEQA in process. Construction 2020-2025.
2	Ventura Water	Ocean Desalination	Within portions of the City of Ventura or Unincorporated Ventura County.	Ocean water would be collected through intake facilities that conform to the California Ocean Plan requirements for ocean desalination structures. Following treatment the product water would be blended with groundwater prior to delivery to the Ventura Water potable water system.	CEQA in process. Construction 2030 to 2035.
3	United	Riverpark to Saticoy Recycled Water Pipeline	Saticoy groundwater recharge basins (Saticoy, Noble, Rose, Ferro).	A pipeline project running from Riverpark to Saticoy which could deliver recycled water to UWCD's Saticoy Groundwater Recharge Facility for groundwater recharge purposes or to the Pleasant Valley Pipeline and Pumping Trough Pipeline for agricultural use.	Design in progress. Construction in mid-2020.
4	United	Wellhead Energy, LLC Solar Panel Project in Ferro Basin	United's Ferro recharge basin.	Installation of solar photovoltaic, battery, and ancillary electric system reliability equipment.	Conceptual

Project No.	Lead Agency	Project Name	Project Location	Project Description	Status
5	United	Vern Freeman Diversion Conveyance System Improvements	United's Ferro and Noble recharge basins.	Use of the Ferro recharge basin for additional storage to facilitate Santa Clara River diversions when river flows and turbidity are higher than typical, including facilities to improve sediment management in the conveyance and recharge system. Consists of four 48-inch diameter pipes crossing Vineyard Avenue to convey water from the Freeman Diversion to the Ferro Basin.	Conceptual
6	United	Freeman Expansion Project	United's Ferro recharge basin to the Freeman Diversion.	Installation of facilities capable of diverting high Santa Clara River flows with elevated suspended sediment. The project would increase the capacity of United's existing diversion and recharge system and include modification and expansion of existing fish screens, high-capacity conveyance to the Ferro recharge basin, and modifications to the existing desilting basin.	Conceptual
7	United	United's Direct Connection to the SWP Interconnection Project	The intersection of Vineyard and Saticoy Avenue and Rose Avenue between Central Avenue and Hwy 118	The proposed project includes two turnouts from the SWP Interconnection to United's Noble and/or Ferro recharge basins and the Rose recharge basin, including any additional facilities needed to connect to its El Rio and Saticoy facilities.	Future CEQA. Construction in 2022.
8	VCWPD	SC-1 Levee Improvements	Eastern bank Santa Clara River in El Rio Area (Central Avenue to Highway 101)	The project consists of upgrading and partially realigning the SC-1 levee from Highway 101 to the Ferro Recharge Basin. The project consists of bank protection and other improvements intended to provide flood protection for areas along the river.	Design
9	Calleguas	Generator Replacement	Springville Hydroelectric Generators	Replacement of diesel and gas back up generators for the hydroelectric generators to improve operability and reliability and avoid failure of aging components.	Design

Project No.	Lead Agency	Project Name	Project Location	Project Description	Status
10	Calleguas	Springville Reservoir Erosion Repair and Drainage Improvements	Springville Reservoir	Address existing erosion at Springville Reservoir and install stormwater improvements to help prevent future erosion.	Construction December 2018

4.3 Cumulative Impacts and Mitigation Measures

4.3.1 Aesthetics

What is the geographic scope?

The geographic scope for aesthetics is the foreground views immediately surrounding proposed project components.

What is level of significance of the combined impact from the proposed project and related projects?

As discussed in Section 2.1, Aesthetics, construction of the proposed project would result in a less than significant impact to scenic vistas, scenic highways, and visual character and no impact related to lighting and glare. Short-term impacts to the area surrounding the construction corridor would occur; however, the impacted areas would be returned to pre-construction conditions.

In general, the visual resource impacts of the proposed project and the majority of projects listed in Table 4-2 are site-specific, and would not combine with other projects that are not in the same viewshed to create a cumulative impact. Most of the proposed and reasonably foreseeable projects would be underground or otherwise not significantly visible. Projects within the City would be subject to City design and landscaping policies, to ensure that they do not degrade visual character. The appearance of the project vicinity would not substantially change, and the construction of the proposed project would not create significant visual impacts that would contribute to visual resource degradation in the viewshed when assessed in conjunction with other local projects. Therefore, the proposed project, in conjunction with other planned projects, would have a less-than-significant cumulative impact on aesthetic and visual resources.

Is the proposed project's contribution to the combined impact considerable?

The proposed project would not cause a considerable increase in potential aesthetic impacts, given the proposed project facilities would be mostly below ground.

Mitigation Measures: None required.

Significance Determination: Not Cumulatively Considerable.

4.3.2 Agriculture and Forestry Resources

What is the geographic scope?

The geographic scope is all agricultural lands adjacent to the proposed project components.

What is level of significance of the combined impact from the proposed project and related projects?

As described in Section 2.2, Agriculture and Forestry Resources, most of the proposed alignment crosses through privately held agricultural land, which is located within the unincorporated County portion of the project area. Farmland designations within these areas, according to the California Resources Agency Farmland Mapping and Monitoring Program, include Prime Farmland, Unique Farmland, and Farmland of Statewide Importance. The alignment runs along dirt access roads within the agricultural parcels and would be installed underground. The project would not result in the conversion of farmland and would not require re-zoning of existing agricultural land uses. There would be no conflict with existing zoning for agricultural use. The project would neither have a direct effect on the farmland that it crosses, nor would the implementation of the project result in other changes to the existing environment that could result in conversion of farmland to non-agricultural use. The project would not have any impacts to forestry resources, including rezoning, or loss or conversion of forest lands to non-forest uses.

In general, the proposed project and the projects listed in Table 4-2 would not result in a loss of farmland or forest land nor result in conflicts with use of land for agriculture or forestry. Therefore, the proposed project, in conjunction with other planned projects, would have a less-than-significant cumulative impact on agriculture and forestry resources.

Is the proposed project's contribution to the combined impact considerable?

While several segments of the project are proposed to be installed within farmland parcels, the project is not expected to convert or contribute to the conversion of farmland. The pipeline would be placed underground within these parcels and would run along existing access roads. As a result, no changes to the existing land uses along the alignment would be required and, following construction, it is anticipated that all farmland along the project segments can and would return to active agriculture. Therefore, the proposed project would not cause a considerable increase in potential agricultural or forestry resources impacts.

Mitigation Measures: None required.

Significance Determination: Not Cumulatively Considerable.

4.3.3 Air Quality and Greenhouse Gas Emissions

What is the geographic scope?

The geographic scope for the air quality analysis is the South Central Coast Air Basin.

What is level of significance of the combined impact from the proposed project and related projects?

As discussed in Section 2.3, Air Quality, construction activities associated with implementation of the proposed project would result in air pollutant emissions that may affect regional air quality, but this is a less than significant impact. Project maintenance activities would generate motor vehicle trips and the associated air pollutant emissions, but this would be also be a less than significant impact. Construction activities associated with implementation of the proposed

project would result in greenhouse gas emissions that may affect global climate change, but this is a less than significant impact.

Ventura County is in non-attainment with the Federal and State ozone and State particulate matter standards. The collective projects listed in Table 4-2 would result in new air emissions. Therefore, the combined Table 4-2 project impacts relative to these constituents are considered significant.

Is the proposed project's contribution to the combined impact considerable?

The proposed project contribution to air emissions, even on the most intensive construction day, would be relatively small (43.6 pounds/day ROC, 224 pounds/day CO, 316.2 pounds/day NO_x, and 238.2 pounds/day PM10) and temporary (no more than 30 months). Therefore, the project contribution would not be cumulatively considerable.

Project-related operational air pollutant emissions would combine with the long-term emissions of other projects. However, the project contribution would be very minor (0.02 pounds/day NO_x, 0.01 pounds/day ROC). Therefore, the project contribution would not be cumulatively considerable.

Mitigation Measures: None required.

Significance Determination: Not Cumulatively Considerable.

4.3.4 Biological Resources

What is the geographic scope?

The geographic scope for biological resources is open-space areas within the cities of Ventura, Oxnard, and Camarillo, and portions of unincorporated Ventura County and surrounding environments that support native habitats and plant and wildlife species.

What is level of significance of the combined impact from the proposed project and related projects?

As discussed in Section 2.4, Biological Resources, the proposed project is not anticipated to have impacts to special status plant species, sensitive plant communities, or wetlands. However, the installation of the proposed Santa Clara River pipeline crossing may result in take of the endangered least Bell's vireo. The installation of the proposed pipeline crossing would occur adjacent to two least Bell's vireo breeding territories. At least one of these territories appears to have been occupied consistently during the breeding season since at least 2014. Noise, dust, and heavy equipment activity associated with the HDD pipeline installation may result in take of this endangered species through harassment, nest abandonment, and reduced breeding success.

Vegetation removal, noise, dust and heavy equipment activity associated with pipeline installation may result in direct impacts (loss of nests during vegetation removal) and indirect impacts (nest abandonment, alteration of breeding behavior) to breeding migratory birds. These

impacts may result in violation of the Migratory Bird Treaty Act and Sections 3503 and 3513 of the California Fish and Game Code, and are considered potentially significant. Project sites where these impacts may occur include Segments 2, 16, 18, and 19, the HDD staging areas, and potential blending/monitoring station sites.

Noise, dust, and heavy equipment activity associated with the HDD pipeline installation may adversely affect foraging of Cooper's hawk, yellow-breasted chat, Costa's hummingbird, and loggerhead shrike in the Santa Clara River and adjacent areas. However, pipeline installation activities would not be located in close proximity to suitable breeding habitat such that impacts are considered less than significant.

Many of the cumulative projects identified in Table 4-2 would also involve construction in the vicinity of the Santa Clara River near least Bell's vireo breeding territory and areas that support breeding migratory birds. These projects would be subject to CEQA review and permit requirements designed to minimize impacts to biological resources to the extent practicable. However, it is unknown if mitigation would be feasible for all the projects and there could be a cumulatively significant impact to biological resources.

The two projects that have the potential to contribute to a cumulatively considerable biological resources impact due to their project construction timing and geographic location overlapping with the proposed project are discussed below.

United's Riverpark to Saticoy Recycled Water Pipeline. United's Recycled Water Pipeline project would be constructed near Segment 2 (proposed project and Alternative Alignment B) and Segment 4 (Alternative Alignment B) of the SWP Interconnection. Therefore it is possible that United's Riverpark to Saticoy Recycled Water Pipeline project could contribute to further take of the least Bell's vireo and migratory birds identified within these areas. However, each project proponent would be required to comply with the provisions in the Endangered Species Act, as well as the Migratory Bird Treaty Act, and to employ mitigation measures to reduce potential impacts. Therefore, biological resource impacts are not likely to be cumulatively considerable.

VCWPD's SC-1 Levee Improvements. This project would construct approximately five miles of levee improvements along the east side of the Santa Clara River from approximately Highway 101 to the Freeman Diversion, and would cross an area within Segment 2 (proposed project and Alternative Alignment B) of the SWP Interconnection near the HDD sites. It is possible that the levee improvement project could contribute to further take of the least Bell's vireo and migratory birds identified within this area. However, each project proponent would be required to comply with the provisions in the Endangered Species Act, as well as the Migratory Bird Treaty Act, and to employ mitigation measures to reduce potential impacts. Therefore, biological resource impacts are not likely to be cumulatively considerable.

Is the proposed project's contribution to the combined impact considerable?

The proposed project, once construction is complete, would not affect biological resources. Mitigation measures BIO MM-1 and BIO MM-2 would reduce the proposed project impacts to a less than significant level. Thus, the project is anticipated to have an incremental effect relative

to the cumulative projects, but, with mitigation, project impacts would not be cumulatively considerable.

Mitigation Measures: Implement Mitigation Measures BIO MM-1 and BIO MM-2.

Significance Determination: Not Cumulatively Considerable.

4.3.5 Cultural Resources

What is the geographic scope?

The geographic scope for cultural resources is Ventura County (*Ventureño* Chumash). The proposed project may impact cultural resources in Segment 2 or within the HDD staging areas, and within Segment 18 where CA-VEN-223 is located.

What is level of significance of the combined impact from the proposed project and related projects?

Many of the cumulative projects identified in Table 4-2 would also involve construction within Ventura County, potentially in areas that may contain cultural resources. These projects would be subject to CEQA review and would be designed to minimize impacts to cultural resources to the extent practicable. However, it is unknown if mitigation would be feasible for all the projects and there could be a cumulatively significant impact to cultural resources.

The two projects that have the potential to contribute to a cumulatively considerable cultural resources impacts due to their project construction timing and geographic location overlapping with the SWP Interconnection are discussed below.

United's Riverpark to Saticoy Recycled Water Pipeline would be constructed near Segment 2 (proposed project and Alternative Alignment B) and Segment 4 (Alternative Alignment B) of the SWP Interconnection. Segment 2, the 2,400-foot ancillary pipeline, and the third potential blending/monitoring station are located within an area that potentially contains subsurface Native American resources. However, United's recycled water pipeline project is on the east side of the Santa Clara River (along Vineyard Avenue). While the United project would cross Segment 2, it is not in close proximity to where the potential exists for cultural resources. Therefore, cultural resource impacts are not likely to be cumulatively considerable.

VCWPD's SC-1 Levee Improvements project would install approximately five miles of levee improvements along the east side of the Santa Clara River from approximately Highway 101 to the Freeman Diversion. The levee improvements will be implemented on the east side of the Santa Clara River (along Vineyard Avenue). While levee improvements will cross SWP Interconnection Segment 2, it is not in close proximity to where the potential exists for cultural resources. Therefore, cultural resource impacts are not likely to be cumulatively considerable.

Is the proposed project's contribution to the combined impact considerable?

Implementation of Mitigation Measures CR MM-1 through CR MM-9, would reduce the proposed project impacts to a less than significant level and make the project's contribution to cumulative impacts less than considerable.

Mitigation Measures: Implement Mitigation Measures CR MM-1 through CR MM-9.

Significance Determination: Not Cumulatively Considerable.

4.3.6 Energy

What is the geographic scope?

The geographic scope is the service areas of SCE and SCG, and the SWP system.

What is level of significance of the combined impact from the proposed project and related projects?

As discussed in Section 2.6, Energy, the proposed project was designed to avoid the need to pump water between Calleguas and the City of Ventura. Currently the City and Casitas sell their available SWP allocations to other SWP users directly or through programs offered by DWR (e.g., "turnback pool," Multi-Year Water Pool Demonstration Program). This means the City and Casitas SWP water is currently delivered, and pumped through, the SWP system using a similar amount of energy as would be used if the water was delivered to the City. The proposed project is not expected to increase utility demands such that utility expansion is needed. The proposed project does not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources during project operation. During construction, equipment and vehicles utilized by construction workers would utilize fuel and other energy resources. However, the contractor and workers are incentivized to not be wasteful or inefficient with energy resources as this increases their cost of doing business and diminishes profits. Therefore, it is anticipated that the project construction would not result in wasteful, inefficient, or unnecessary consumption of energy. The proposed project would not prevent or conflict with any statewide or local plans for renewable energy. Any adjustments to utility locations are anticipated to be minor and within the construction corridor of the proposed project.

Many of the cumulative projects identified in Table 4-2 would also use energy during construction and operation. It is speculative whether or not these projects would use energy wastefully or if these projects would conflict with plans for renewable resources or require alterations to existing utilities. There is a potentially significant cumulative impact related to energy resources.

Is the proposed project's contribution to the combined impact considerable?

The proposed project's use of energy would primarily occur during construction; because project operations would not require pumping, energy use during operations would be minor. Therefore, the proposed project's contribution is not cumulatively considerable.

Mitigation Measures: None required.

Significance Determination: Not Cumulatively Considerable.

4.3.7 Geology and Soils

What is the geographic scope?

The geographic scope is the proposed project facility locations and the construction corridor.

What is level of significance of the combined impact from the proposed project and related projects?

As discussed in Section 2.7, Geology and Soils, project facilities would be located in areas prone to seismic activity due to the proximity to the Alquist-Priolo Earthquake Fault Zone and the Springville/Santa Rosa-Simi Fault. The majority of the project would be located within a liquefaction zone and in areas prone to seismically induced landslides. Mitigation measures are available to reduce this risk and make this a less than significant impact. These impacts are mitigable to less than significant impacts (Mitigation Measures GEO MM-1 through GEO MM-3). The project may result in soil erosion and loss of topsoil; however, standard best management practices would be used to avoid scour and erosion impacts.

Related projects would be subject to varying risks associated with geotechnical hazards. Due to the site-specific nature of geological conditions, geotechnical impacts are typically assessed on a project by-project basis in accordance with CEQA. Related projects would be subject to mitigation measures similar to those required for the proposed project. In most cases, cumulative impacts would be reduced to less than significant levels through compliance with site-specific recommendations from applicable geotechnical studies and the requirements of the CGP.

The two projects that have the potential to contribute to a cumulatively considerable geological resources impact due to their project construction timing and geographic location overlapping with the SWP Interconnection are discussed below.

United's Riverpark to Saticoy Recycled Water Pipeline. United's Recycled Water Pipeline project would be constructed near Segments 2 and 4 of the proposed project, in the vicinity of the Saticoy groundwater recharge basins. Construction in this region would be subject to the same varying risks associated with geotechnical hazards of the SWP Interconnection. United's recycled water project will likely include a site-specific geological investigation to identify such risks as well as compliance with the construction general permit (CGP). It is also assumed that any identified impacts would be reduced to less than significant levels through compliance with site-specific recommendations from applicable geotechnical studies and the requirements of the CGP. Therefore, geology and soils impacts are not likely to be cumulatively considerable.

VCWPD's SC-1 Levee Improvements. VCWPD would install approximately five miles of levee improvements along the east side of the Santa Clara River from approximately Highway 101 to

the Freeman Diversion in the vicinity of SWP Interconnection Segment 2. Construction in this region would be subject to the same varying risks associated with geotechnical hazards of the SWP Interconnection. The levee improvement project will likely include a site-specific geological investigation to identify such risks as well as compliance with the construction general permit (CGP). It is also assumed that any identified impacts would be reduced to less than significant levels through compliance with site-specific recommendations from applicable geotechnical studies and the requirements of the CGP. Therefore, geology and soils impacts are not likely to be cumulatively considerable.

Is the proposed project's contribution to the combined impact considerable?

As described above, geology and soils impacts are site specific and generally do not "combine". With mitigation, the proposed project would not have a considerable contribution to cumulative impacts.

Mitigation Measures: Implement Mitigation Measures GEO MM-1 through GEO MM-3.

Significance Determination: Not Cumulatively Considerable.

4.3.8 Hazards and Hazardous Materials

What is the geographic scope?

The geographic scope is the proposed project facility locations, the construction corridor, the immediate area surrounding these locations, and the area within 0.25 mile of a school that would also be within 0.25 mile of the proposed project facilities.

What is level of significance of the combined impact from the proposed project and related projects?

As discussed in Section 2.8, Hazards and Hazardous Materials, during construction, the SWP Interconnection Segment 2 there is the potential for inadvertent release of drilling lubricants and muds during HDD. Project construction would involve handling hazardous materials in the vicinity of schools (Segments 2 and 13), near a former Caltrans site identified as contaminated with diesel (Segment 18), and near oil and gas wells that have not been abandoned to current DOGGR standards (Segments 2, 7, 10, 13, 17). All of these impacts, with implementation of mitigation (HAZ MM-1 through HAZ MM-3), would be reduced to less than significant levels.

Impacts from the two projects related in time and geography to the SWP Interconnection, the United Riverpark to Saticoy Recycled Water Pipeline and VCWPD's SC-1 Levee Improvements, do not have similar hazard related impacts and no cumulative hazard/hazardous materials impact is anticipated.

Is the proposed project's contribution to the combined impact considerable?

The proposed project, once construction is complete, would not involve the routine transport or use of hazardous materials. Because hazardous materials impacts are generally site-specific

and limited to the duration of the construction activity, the project would not have a considerable contribution to a cumulative impact.

Mitigation Measures: Implement Mitigation Measures HAZ MM-1 through HAZ MM-3.

Significance Determination: Not Cumulatively Considerable.

4.3.9 Hydrology and Water Quality

What is the geographic scope?

Proposed project sites, the construction corridor, and downstream receiving waters.

What is level of significance of the combined impact from the proposed project and related projects?

As discussed in Section 2.9, Hydrology and Water Quality, construction activities could mobilize sediments and other construction related pollutants which could impair surface water or groundwater quality. No impacts are anticipated from the proposed project on groundwater resources, including those related to supplies, recharge, or sustainable management. Project implementation does not involve the use of groundwater sources. In addition, the project would not substantially increase impervious surfaces within the project area that could interfere with groundwater recharge. The project also would not result in substantial impacts to drainage patterns in or around the project site due to the addition of impervious surfaces because the project would not substantially increase imperviousness of the project area. There is a chance of flooding within portions of the project area; however, most of the project components would be located below grade upon installation. Pollutants could be released during active construction, but the risk of release of pollutants due to project inundation is minimal. The proposed project is not anticipated to substantially contribute to water quality impairments within the project area, which could be in conflict with the Basin Plan. The project is also not anticipated to have impacts on groundwater resources and would not conflict or hinder implementation of a groundwater sustainability plan or groundwater management plan applicable to the project area.

As with the proposed project, all related projects are subject to the same federal CWA, State Porter Cologne Water Quality Control Act, and local regulations that protect water quality and water resources. These regulations include implementation of SWPPPs for construction that outline BMPs, such as erosion control measures, proper dewatering procedures, and other practices, to reduce overall soil erosion, sediment mobilization, and pollutant runoff. All of these regulations are designed to address the incremental effects of individual projects such that they do not cause a cumulatively considerable impact. Adherence to regulations would minimize the potential for cumulatively considerable impacts related to sedimentation, flooding, water quality, drainage system capacity, flood hazard areas, failure of a levee or dam, seiche, tsunami, or mudflows; however, the potential remains for a significant cumulative impact related to hydrology and water quality.

Is the proposed project's contribution to the combined impact considerable?

As required by the CGP, a SWPPP would be prepared to minimize pollution to surface water resulting from construction activities, which would reduce the proposed project impacts to a less than significant level. The proposed project, once construction is complete, would not involve activities that mobilize sediments or release pollutants to waterways. The incremental effect on cumulative hydrology and water quality during construction and operation of the proposed project would be less than significant. Therefore, the contribution is not cumulatively considerable and would not result in a cumulative impact on hydrology and water quality.

Mitigation Measures: None required.

Significance Determination: Not Cumulatively Considerable.

4.3.10 Land Use and Planning

What is the geographic scope?

The geographic scope is the cities of Ventura and Camarillo, and portions of unincorporated Ventura County.

What is level of significance of the combined impact from the proposed project and related projects?

As discussed in Section 2.10, Land Use and Planning, the proposed pipeline would be placed underground, within public rights of way and agricultural dirt access roads. The ground surface would be restored to pre-project conditions upon installation of the pipeline. The blending/monitoring station and appurtenances are minor installations that would not create a physical disruption to the existing land uses. Additionally, the proposed project would be consistent with existing zoning and would not result in changes in land use patterns. Overall, the project would not have the potential to physically divide an established community or conflict with an applicable land use plan, policy, or regulation. The proposed project would be consistent with existing zoning and would not result in changes in land use patterns.

Per California Government Code Section 53096 zoning is not applicable to the storage or transmission of water; however the City of Ventura will follow its own policies and procedures (including zoning) when evaluating, designing, and constructing that portion of the proposed project within the City of Ventura.

Therefore, the proposed project, in conjunction with other planned projects, would have a less-than-significant cumulative impact on land use and planning.

Is the proposed project's contribution to the combined impact considerable?

The proposed project would have neither project specific impacts to land use and planning nor contribute to cumulatively considerable impacts to land use and planning.

Mitigation Measures: None required.

Significance Determination: Not Cumulatively Considerable.

4.3.11 Mineral Resources

What is the geographic scope?

Ventura County is the geographic scope for mineral resources.

What is level of significance of the combined impact from the proposed project and related projects?

As described in Section 2.11, Mineral Resources, the proposed project would not result in the loss of availability of, or access to, known mineral resources. The related projects listed in Table 4-2 are either (a) in an area where mining is not permitted (downstream of Highway 118), (b) in an area already used for groundwater recharge, or (c) limited to improvements to existing facilities. Therefore, the proposed project, in conjunction with other planned projects, would have a less-than-significant cumulative impact on mineral resources.

Is the proposed project's contribution to the combined impact considerable?

The proposed project would have neither project specific impacts related to mineral resources nor contribute to cumulatively considerable impacts to mineral resources.

Mitigation Measures: None required.

Significance Determination: Not Cumulatively Considerable.

4.3.12 Noise

What is the geographic scope?

The geographic scope is the land adjacent to the proposed project components, the construction corridor, and any adjacent or nearby noise sensitive receptors.

What is level of significance of the combined impact from the proposed project and related projects?

As described in Section 2.12, Noise, the proposed project would not result in a substantial permanent increase in ambient noise levels and impacts would be less than significant. However, noise generated by the installation of the proposed pipeline during construction may occur in the evening and nighttime and adversely affect adjacent residences, which, when mitigated, would be less than significant. Noise generated by the trenchless pipeline installation occurs during construction of Segments 2 and 19 (common to the proposed project and Alternative Alignment B) . Noise generated by the open-cut pipeline installation of Segment 7 (Alternative Alignment B) could adversely affect an adjacent school, but with mitigation would be less than significant. Vibration generated by the installation of the proposed pipeline and associated facilities is not likely to have a significant impact with regard to damaging older structures.

The two projects that have the potential to contribute to a cumulatively considerable noise impact due to their project construction timing and geographic location overlapping with the SWP Interconnection are discussed below.

United's Riverpark to Saticoy Recycled Water Pipeline. United's Recycled Water Pipeline project would be constructed near Segments 2 and 4 of the SWP Interconnection, in the vicinity of the Saticoy groundwater recharge basins. Construction is planned for mid-2020, a similar timeframe as the SWP Interconnection. No sensitive receptors were identified within Segment 4. Construction hours of the two projects would be subject to Ventura County noise standards as identified in the Ventura General Plan which requires construction noise to be evaluated and mitigated in accordance with the Construction Noise Threshold Criteria and Control Plan prepared by Advanced Engineering Acoustics (amended 2010). In addition, because noise impacts are construction related, and temporary in nature (any given location along the pipeline alignment would not be in or adjacent to the construction zone for more than approximately 12 days), the noise increases are not likely to be cumulatively considerable.

VCWPD's SC-1 Levee Improvements. This project would construct approximately five miles of levee improvements along the east side of the Santa Clara River from approximately Highway 101 to the Freeman Diversion near Segment 2 of the SWP Interconnection. The levee project is currently being designed, and construction could begin around the same time as the SWP Interconnection, mid-2020s. Sensitive receptors near Segment 2 include residences on Henderson Road, Douglas Penfield School and Sacred Heart School on Henderson Road, and residences on Saticoy Avenue. However, the location of these receptors is on the northern side of the Santa Clara River; while the Recycled Water Pipeline project would be on the southern side of the river. Construction hours of the two projects would be subject to Ventura County noise standards as identified in the Ventura General Plan which requires construction noise to be evaluated and mitigated in accordance with the Construction Noise Threshold Criteria and Control Plan prepared by Advanced Engineering Acoustics (amended 2010). In addition, because noise impacts are construction related, and temporary in nature (any given location along the pipeline alignment would not be in or adjacent to the construction zone for more than approximately 12 days), noise increases are not likely to be cumulatively considerable.

Is the proposed project's contribution to the combined impact considerable?

The proposed project would have project-specific impacts related to noise and these are mitigated by NS MM-1 and NS MM-1A. No cumulative impact is anticipated.

Mitigation Measures: Implement Mitigation Measures NS MM-1 and NS MM-1A.

Significance Determination: Not Cumulatively Considerable.

4.3.13 Population and Housing

What is the geographic scope?

The geographic scope is the service areas of Ventura Water, Calleguas, Casitas, and United.

What is level of significance of the combined impact from the proposed project and related projects?

As described in Section 2.13, Population and Housing, the proposed project does not consist of housing or businesses that would have the potential to directly induce substantial planned or unplanned population growth. The proposed project would provide the infrastructure to enable delivery of SWP water that has been wheeled through the MWD and Calleguas water systems to the City of Ventura. The proposed interconnection could also facilitate direct or in-lieu delivery of SWP water to United and Casitas. For all three agencies, the SWP water would replace reduced water supplies. For Calleguas, the project would provide an alternative water supply that would be available during an outage of imported water but would not increase overall water supplies.

The proposed project, along with most of the related projects, improve water supply reliability but do not promote growth beyond that of applicable general plans, and cumulative impacts related to population and housing are not anticipated.

Is the proposed project's contribution to the combined impact considerable?

The proposed project would replace losses in annual yield from water supplies and would not contribute to cumulatively considerable impacts to population and housing.

Mitigation Measures: None required.

Significance Determination: Not Cumulatively Considerable.

4.3.14 Public Services

What is the geographic scope?

The geographic scope is the cities of Ventura and Camarillo, and portions of unincorporated Ventura County.

What is level of significance of the combined impact from the proposed project and related projects?

As described in Section 2.14, Pubic Services, the proposed project is not anticipated to change land uses, increase the number of housing units, cause an increase in population, or otherwise create activities that would increase demand for public services beyond that existing and anticipated for the project area. The proposed project, along with most of the related projects, improve water supply reliability and these types of projects are unlikely to increase demand for law enforcement, increase demand for fire protection services, or interfere with educational facilities. Cumulative impacts to public services are not anticipated.

Is the proposed project's contribution to the combined impact considerable?

The proposed project would have neither project specific impacts related to public services nor contribute to cumulatively considerable impacts to public services.

Mitigation Measures: None required.

Significance Determination: Not Cumulatively Considerable.

4.3.15 Recreation

What is the geographic scope?

The geographic scope is the cities of Ventura and Camarillo, and portions of unincorporated Ventura County.

What is level of significance of the combined impact from the proposed project and related projects?

As described in Section 2.15, Recreation, the proposed project is not anticipated to cause an increase in population or otherwise create activities that would increase use of existing neighborhood or regional parks or other recreational facilities. As a result, the project would also not require construction or expansion of recreational facilities nor would it include recreational facilities that could result in adverse impacts on the environment. Most project facilities would be built underground and the overlying land returned to pre-project conditions. The underground nature of the project means it's unlikely to impede development of recreational facilities.

The proposed project, along with most of the related projects, improve water supply reliability and these types of projects are unlikely to increase demand for recreational facilities or impede development of recreational park facilities or trails. Cumulative impacts related to recreation are not anticipated.

Is the proposed project's contribution to the combined impact considerable?

The proposed project would have a less than significant impact to recreational facilities in the City of Ventura (use of approximately 3,200 square feet of park land for the proposed blending/monitoring station). This is a minor impact and not cumulatively considerable.

Mitigation Measures: None required.

Significance Determination: Not Cumulatively Considerable.

4.3.16 Transportation

What is the geographic scope?

The geographic scope is the cities of Ventura, Oxnard, and Camarillo and portions of unincorporated Ventura County.

What is level of significance of the combined impact from the proposed project and related projects?

As described in Section 2.16, Traffic and Transportation, project-related construction has the potential to exacerbate traffic on Central Avenue. Implementation of mitigation measure TR MM-1, which calls for performing construction when Rio Mesa High School is out of session, would reduce impacts to roadway level of service to a less than significant level.

Construction of the SWP Interconnection also has the potential to limit access in certain streets when the pipeline is being constructed adjacent to or within a given roadway. The preparation of traffic control plan(s), as required by respective agencies to obtain encroachment permits, would ensure that impacts are less than significant.

The proposed project, along with most of the related projects, would improve water supply reliability and the only anticipated impacts to traffic and transportation would be during construction. Because impacts would be short-term cumulative impacts related to traffic and transportation are not anticipated.

Is the proposed project's contribution to the combined impact considerable?

The proposed project would temporarily generate additional truck and vehicle trips within the regional and local circulation systems during construction of the proposed project. Traffic levels would not substantially increase and would be temporary in nature, as traffic levels would return to pre-construction conditions once construction is complete. Although operational activities would generate additional truck trips on the surrounding local and regional circulation system, the number of truck trips during operation would be minimal and would occur on a limited number of days throughout the year. Since the number of truck trips would be minimal during operation of the proposed project, the effects on the surrounding circulation system would be negligible and would not cause existing roadway levels of operation to decrease. Therefore, the proposed project's contribution to cumulative impacts to traffic and transportation would not be cumulatively considerable.

Mitigation Measures: Implement Mitigation Measure TR MM-1.

Significance Determination: Not Cumulatively Considerable.

4.3.17 Tribal Cultural Resources

What is the geographic scope?

The geographic scope is the proposed project facility locations, the construction corridor, and lands immediately adjacent.

What is level of significance of the combined impact from the proposed project and related projects?

Impacts upon tribal cultural resources tend to be site-specific and are assessed on a site-by-site basis. As discussed in Section 2.17, Tribal Cultural Resources, the City completed consultation with all parties that requested consultation and, in compliance with the requirements of AB 52, the lead agency agreed with the tribal representative that the mitigation measures regarding cultural resources proposed by the City were appropriate and feasible for the project.

Simultaneous construction of projects in the project area could potentially result in significant impacts on tribal cultural resources, should they be present. All the projects listed in Table 4-2 have or will be required to complete CEQA environmental assessments, by law, which an evaluation of cultural resource impacts, as well as consultation with any tribes located in the area. These cultural resource studies and tribal consultations should minimize the potential for impacts to tribal cultural resources; however, the potential remains for a significant cumulative impact related to tribal cultural resources.

Is the proposed project's contribution to the combined impact considerable?

Implementation of the Mitigation Measures CR MM-1 through CR MM-9, would reduce the proposed project impacts to tribal cultural resources to a less than significant level. The incremental effect on cumulative tribal cultural resources during construction of the proposed project would be less than significant. Therefore, the contribution is not cumulatively considerable and would not result in a cumulative tribal cultural resource impact.

Mitigation Measures: Implement Mitigation Measures CR MM-1 through CR MM-9.

Significance Determination: Not Cumulatively Considerable.

4.3.18 Utilities and Service Systems

What is the geographic scope?

The geographic scope includes several water suppliers including Casitas Municipal Water District, City of Ventura, United, Calleguas, Crestview Mutual Water Company, and the City of Camarillo. Wastewater service providers include the Ojai Valley Sanitary District, the City of Ventura, and the Camarillo Sanitary District. Solid waste collection and disposal services are provided by the City of Ventura Public Works Department, the County of Ventura Integrated Waste Management Division, and under contract to the City of Camarillo. Electric power and natural gas services in the project area are provided by SCE and SCG.

What is level of significance of the combined impact from the proposed project and related projects?

As discussed in Section 2.18, Utilities and Service Systems, the proposed project would not result in significant new demands or impacts to utilities or service systems. During construction, wastewater needs would be met using portable toilets. Once in operation, the project would not generate significant volumes of wastewater (a minor amount may be generated by operation of the blending station). The project would not result in substantial impacts to drainage patterns or increases in surface runoff that could require modification to existing or construction of new stormwater drainage facilities.

The proposed pipeline would have no electrical demand. The blending station would have minimal electrical demands. The three potential blending station locations are within urban areas that already have utility service. Therefore, it is expected that the blending station can be accommodated by the existing electrical service or through a minor extension of SCE service. There would be no impacts to natural gas facilities.

The project would not result in increased water demands or supplies but would rather enhance overall water supply reliability for the City, Calleguas, Casitas, and United.

The potential for the related projects combined with the proposed project to cumulatively trigger new or larger demand for water, wastewater, stormwater facilities, or solid waste facilities is considered less than significant. The proposed projects listed in Table 4-2 are primarily water reliability projects that help better manage water supplies (including stormwater). The construction and operation of these facilities do no generate large volumes of wastewater nor solid waste. Some of the projects in Table 4-2 involve intensive water treatment which have high-energy demands and may require expansion or extension of power facilities. For this reason, there is a potentially significant cumulative impact related to energy utilities.

Is the proposed project's contribution to the combined impact considerable?

Once in operation, the proposed project would have only minor energy demands. The proposed project would move water between Calleguas and the City of Ventura using gravity flow; the only electrical and gas demand would come from operations of the proposed blending/monitoring station and these demands are within the capacity of existing utilities. Therefore, the proposed project's incremental contribution to utilities and service system impacts would not be cumulatively considerable.

Mitigation Measures: None Required.

Significance Determination: Not Cumulatively Considerable.

4.3.19 Wildfire

What is the geographic scope?

The geographic scope includes the cities of Ventura, Oxnard, Camarillo, and portions of unincorporated Ventura County

What is level of significance of the combined impact from the proposed project and related projects?

As discussed in Section 2.19, Wildfire, the potential is low for interference or impairment of an emergency response plan or emergency evacuation plan due to the temporary nature of construction and the return of disturbed ground to pre-construction conditions. The SWP Interconnection does not consist of housing, businesses, or other buildings that would house occupants, nor does it require installation or maintenance of fire-related infrastructure that would exacerbate the potential for wildfire risk. The potential construction-related sedimentation would not pose significant risks related to post-fire flooding or landslides. Lastly, the project area is not located within an area deemed "Very High" or "High" fire hazard, nor would project construction or operation place facilities within or near these areas.

Is the proposed project's contribution to the combined impact considerable?

The proposed project would have neither project specific impacts related to wildfire nor contribute to cumulatively considerable impacts related to wildfire.

Mitigation Measures: None required.

Significance Determination: Not Cumulatively Considerable.

Section 5: Significant Irreversible Effects on the Environment

This section discusses other issues for which CEQA requires analysis in addition to the specific issue areas discussed in Section 2, Environmental Impact Analysis; Section 3, Growth Inducing Impacts; and Section 4, Cumulative Impact Analysis. These additional issues are significant and irreversible impacts on the environment.

5.1 Significant Environmental Effects Which Cannot be Avoided

According to CEQA Guidelines Sections15126.2(b), an EIR is required to address any significant irreversible environmental changes that would occur, should a proposed project be implemented. As stated in CEQA Guidelines Section 15126.2(b):

> *"…Describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described…."*

Sections 2.1 through 2.19 provide a comprehensive identification and assessment of the environmental effects of the proposed project, including the level of significance both before and after mitigation. No impacts have been identified that cannot be mitigated to a less than significant level.

5.2 Significant Irreversible Environmental Changes

According to CEQA Guidelines Sections15126.2(c), an EIR is required to address any significant irreversible environmental changes that would occur, should a proposed project be implemented. As stated in CEQA Guidelines Section 15126.2(c):

> *"…Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified. (See Public Resources Code section 21100.1 and Title 14, California Code of Regulations, section 15127 for limitations to applicability of this requirement.)…"*

The CEQA Guidelines refer to the need to evaluate and justify the consumption of nonrenewable resources and the extent to which the project commits future generations to similar uses of nonrenewable resources. In addition, CEQA requires that irreversible damage that could result from an environmental accident associated with the proposed project be evaluated.

Implementation of the proposed project would result in the commitment of nonrenewable natural resources used in the construction process, including gravel, petroleum products, steel, asphalt, and concrete. Most of these resources would be committed during the construction phase and to a negligible degree during operation for the periodic maintenance of the pipeline system. As such, the project would not involve a large commitment of nonrenewable resources, and resource use is well within the realm of reasonable use, non-excessive, and typical for an infrastructure project of this nature and size.

As discussed in Section 2.6, Energy, the proposed project was designed to avoid the need to pump water between Calleguas and the City of Ventura. The proposed project is not expected to increase utility demands such that utility expansion is needed. The proposed project does not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources during project operation. During construction, equipment and vehicles utilized by construction workers would utilize fuel and other energy resources; however, the contractor and workers are incentivized to not be wasteful or inefficient with energy resources as this increases their cost of doing business and diminishes profits. Therefore, it is anticipated that the project construction would not result in wasteful, inefficient, or unnecessary consumption of energy.

As discussed in Section 2.8, Hazards and Hazardous Materials, during construction, the proposed project may involve the transport and use of hazardous materials, which has the potential for accidental release. There is also the potential for inadvertent release of drilling lubricants and muds during HDD. Construction would involve handling hazardous materials in the vicinity of schools, near a former Caltrans site identified as contaminated with diesel, and near oil and gas wells that have not been abandoned to current DOGGR standards. Implementation of mitigation measures (HZD MM-1 through HZD MM-3) and compliance with applicable state, federal, and local laws related to hazardous materials would prevent a significant and irreversible environmental change resulting from the accidental release of such chemicals.

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- Personal Communication, Kristine McCaffrey, July 26, 2018.

United Water Conservation District:

- Personal Communication, James Grisham, Engineering Manager, September 17, 2018.
    - Recycled Water Pipeline (RiverPark to Saticoy)
    - Wellhead Energy, LLC Solar Panel Facility in Ferro Basin
    - Ferro Basin to Noble Basin Connection

Section 7: Persons and Agencies Consulted

This EIR was prepared by Ventura Water with significant input from the Joint Agencies (Casitas and United) and Calleguas. Assistance was provided by the City of Ventura Planning Department, Kennedy/Jenks Consultants, Padre Associates, and Associated Transportation Engineers.

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County of Ventura Resource Management Agency

County of Ventura Long-Range Planning Division

County of Ventura Public Works Agency – Transportation

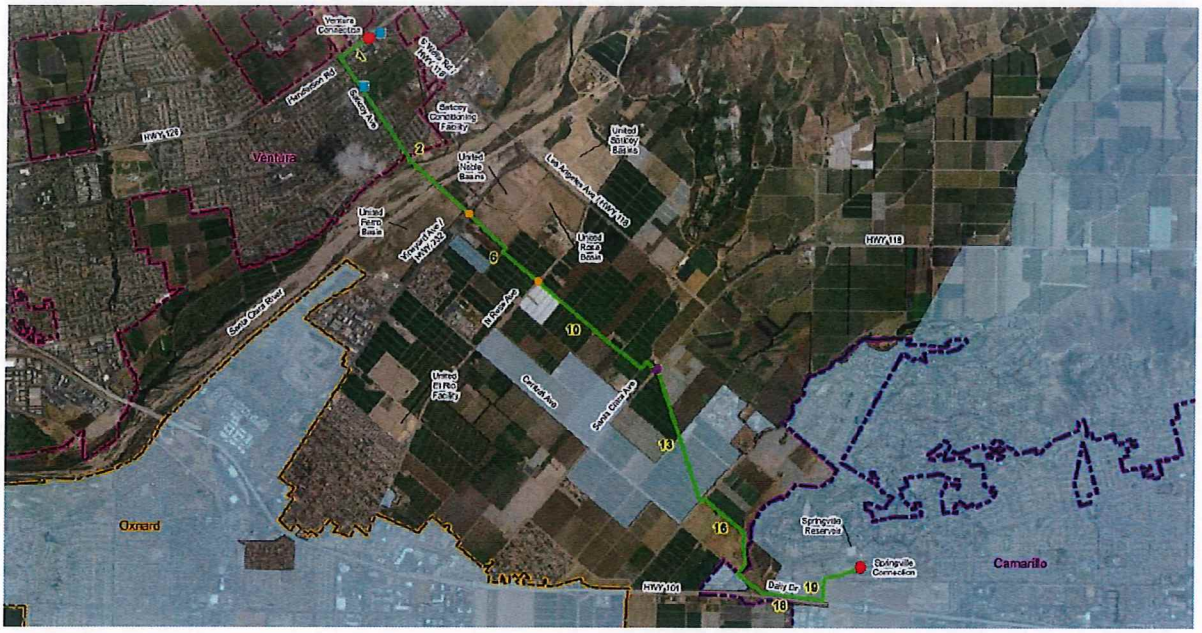
Metropolitan Water District of Southern California

Ventura County Transportation Commission

Appendix A: Traffic and Circulation Study

VENTURA STATE WATER INTERCONNECT PROJECT

TRAFFIC AND CIRCULATION STUDY



November 30, 2018

ATE Project #17021

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TRAFFIC AND CIRCULATION STUDY
FOR THE VENTURA STATE WATER INTERCONNECT PROJECT -EIR

Associated Transportation Engineers (ATE) is pleased to submit the following traffic and circulation study for the Ventura State Water Interconnect Project EIR. The traffic, related to the project is due to the construction workers and the import/export of material via trucks on the local area street network. The staff trips to operate the waterline after construction will be minimal.

It is understood that the traffic study will be included as part of the EIR being prepared for the project. We appreciate the opportunity to assist you with the project.

Associated Transportation Engineers

Richard L. Pool

Richard L. Pool, P.E.
President

CONTENTS

TABLES

FIGURES

INTRODUCTION

The following study contains an analysis of the potential traffic impacts associated with the State Water Interconnection Project. The Project is in Ventura County from a City of Ventura Connection point on Henderson Road between Wells Road and Saticoy Avenue to a connection point near the Calleguas Municipal Water District's Springville Reservoir (near the intersection of Camino Tierra Santa and Via Zamora) in the City of Camarillo. The Proposed Project Location is shown on Figure 1. The approximate 7-mile pipeline construction will be a combination of "Open Cut" and "Trenchless" methods.

A significant portion of the project will be along dirt roads and on private land. Most of the pipeline would be installed using open cut construction/trenching. It is assumed that there would be three open cut work areas at a time. Staging areas would be near the pipeline corridor.

Trenchless construction will used for crossing the Santa Clara River, railroad crossing, drainage channels and crossing of roadways. Depending on the trenchless length and geologic complexity, the duration of the operation would up to 12 weeks crossing the Santa Clara River and 3 to 6 weeks at other locations. Staging areas would be in the vicinity of the launch and receiving pits.

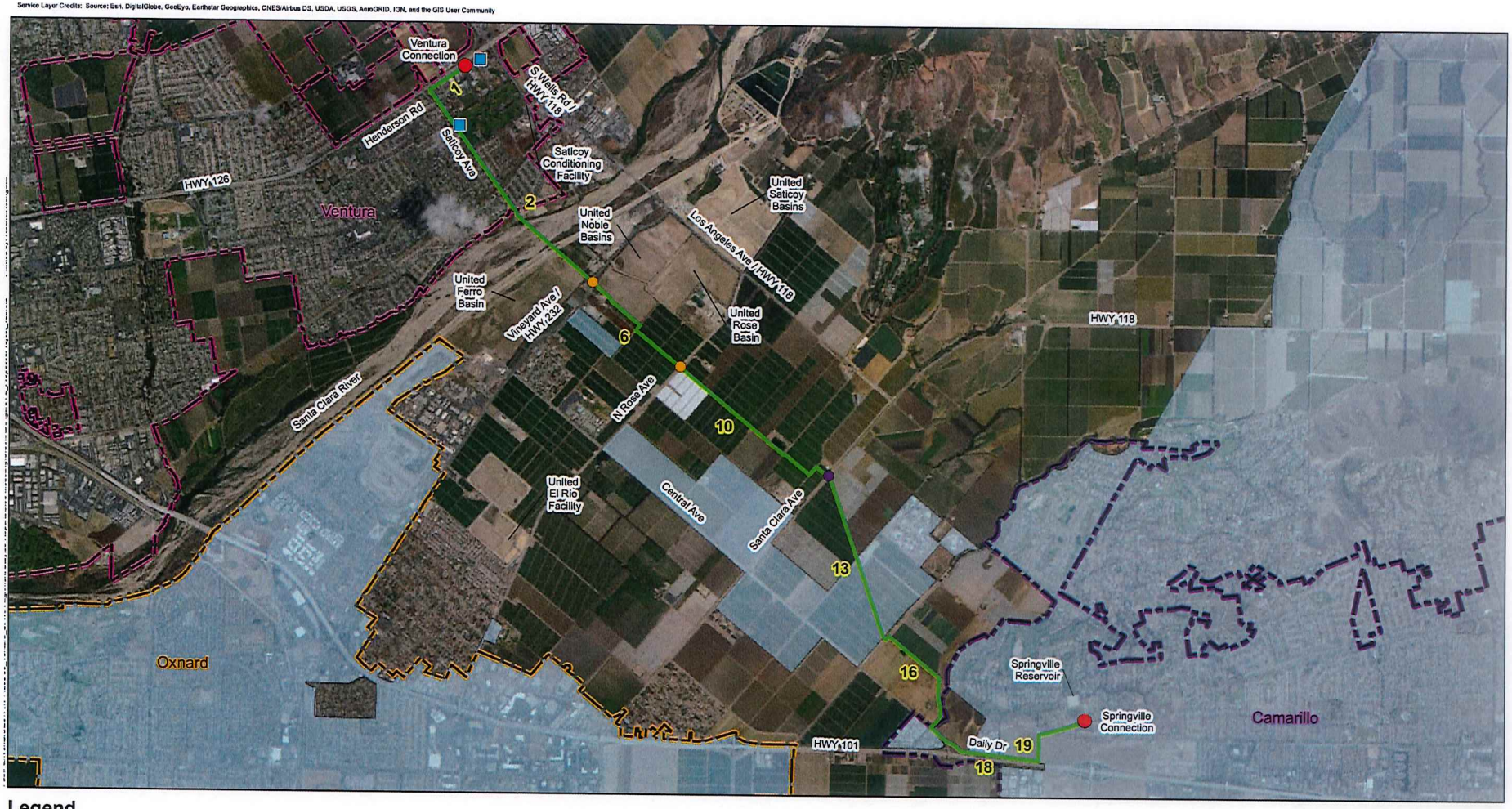
The study also addresses potential site access issues. Mitigation measures are recommended where necessary. The traffic study does not provide a long-term cumulative traffic analysis since the project proposes no operational or staffing increases that would increase traffic in the long-term.

PROJECT DESCRIPTION

The Project is a combined effort between the City of Ventura and the Calleguas Municipal Water District. The pipeline would be approximately 7 miles in length originating in the City of Ventura (Henderson Road south of Wells Road) and traversing southerly and easterly through unincorporated Ventura County terminating in the City of Camarillo (near the intersection of Camino Tierra Santa and Via Zamora). The interconnection is a pipeline to convey water between Calleguas Municipal Water District and the City of Ventura's distribution system. Figure 1 shows the Proposed Project Location. The construction is projected to be short-term (approximately 30 months). The Major Construction Activities and work force summary are shown on Table 1.

The operation at each of the open cut work site is projected as 19 workers and 2 inspectors. Each site is projected to make 16 truckloads (32 one-way trips) per day. The 3 open cut crews would result in 57 workers, 4 inspectors and 48 truckloads (96 one-way trips) per day

The operation at each trenchless work site is projected as 13 workers and 2 inspectors. Each site is projected to make 2 truckloads (4 one-way trips) per day. The 2 trenchless crews would result in 26 workers, 2 inspectors and 4 truckloads (8 one-way trips) per day.



Legend

- Potential Blending/Monitoring Station
- Potential United Turnout
- Proposed Metering Facility
- Point of Connection
- Alternative Alignment A

City Boundary

- Camarillo
- Oxnard
- Ventura

- Calleguas Municipal Water District Service Area
- 7 Pipeline Segment Designation

N

0 0.5 1 Miles

Kennedy/Jenks Consultants
City of Ventura
State Water Interconnection Alignment Study

Preferred Alignment

K/J 1744205*00
January 2018
Figure 2

ASSOCIATED TRANSPORTATION ENGINEERS

PROJECT LOCATION

FIGURE 1

EKM - ATE#17021

Table 1
Summary of Major Construction Activities Proposed Project

Construction Activity	*Quantity*
GROUND DISTURBANCE	42 acres
Estimated Excavation	73,000 cubic yards
Material Disposal	52,000 cubic yards
Maximum Daily Construction Personnel	93 persons [1]
External Vehicle Trips per Day	104 truck trips [2]
	174 worker vehicle trips [3]

1. Open cut assumptions: 3 crews of *19 workers plus 2 inspectors shared across crews = 59*
   Trenchless assumptions: 2 crews of *13 workers plus 2 inspectors = 28*
   Total maximum daily construction personnel: *59+28 = 87 construction personnel*
2. Open cut assumptions: *32 truck trips per day x 3 crews = 96 truck trips*
   Trenchless assumptions: *4 truck trips per day x 2 crews = 8 truck trips*
   Total truck hauls: *96+8=104 truck trips*
3. Open cut assumptions: 3 crews X *19 workers per day x 2 trips (AM and PM) + 2 inspectors (each make 1 roundtrip) for additional 4 trips = 3*19*2+4 = 118 worker vehicle trips*
   Trenchless assumptions: 2 crews X *13 workers per day x 2 trips (AM and PM) + 2 inspectors (each make 1 roundtrip) for additional 4 trips = 2*13*2+4 + 56 worker vehicle trips*
   Total worker vehicle trips: *118+56= 174 worker vehicle trips*

Trucks will haul import and export material to and from the work sites. Construction is planned to occur between the hours of 7:00 A.M. and 6:00 P.M., Monday through Friday. The traffic generated during the construction project would include truck traffic hauling material to/from the site and employee trips to/from the site. Access to the Project site will be via local City and County streets. The construction would occur on both public and private property. Most of the material will be hauled to/from the Project site from via U.S. Highway 101, State Route 126 and State Route 118. Local residential streets would be avoided.

EXISTING CONDITIONS

Street Network

Regional access to the project site is provided by U.S. Highway 101, State Route 126, State Route 118 and a roadway network comprised of local streets. ATE conducted a field review of the study-area roadway network. The Figure 2 shows the Proposed Project Location and the study-area street network. The following text provides a brief discussion of the study-area roadways.

U.S. Highway 101 is the principal inter-city route along the Pacific Coast. Although U.S. Highway 101 runs mostly north-south in California, it runs east-west within the Ventura area. It is a 6-lane freeway within this area. U.S. Highway 101 connects to the study-area street network via interchanges at Vineyard Avenue, Santa Clara Avenue, Central Avenue and Springville Road.

State Route 126 which is located northeast of the project site, is a major east-west roadway within the study-area. State Route 126 extends as a 4-lane freeway from U.S. Highway 101 in the City of Ventura to the eastside of the City of Santa Paula. State Route 126 continues as a 4-lane major arterial to Interstate 5 in the City of Santa Clarita. The segment of State Route 126 that would be utilized by the construction traffic is in good condition.

State Route 118 which is located northeast of the project site, is a major east-west roadway within the study-area. State Route 118 extends as a 4-lane divided arterial from State Route 126 in the City of Ventura to Vineyard Avenue. The intersection is signal controlled. State Route 118 (Los Angeles Avenue) continues through the project study area as a two-lane roadway to Santa Clara Avenue. State Route 118 continues as a 2-lane highway east to State Route 23 in Moorpark. The segment of State Route 118 which would be utilized by the construction traffic was determined to be in good condition.

Vineyard Avenue is a 4-to 6-lane roadway from State Route 118 (Los Angeles Avenue) to U.S. Highway 101 in Oxnard. The U.S. Highway 101/Vineyard Avenue partial cloverleaf interchange is signal controlled. The segment of Vineyard Avenue which would be utilized by the construction traffic was determined to be in good condition.

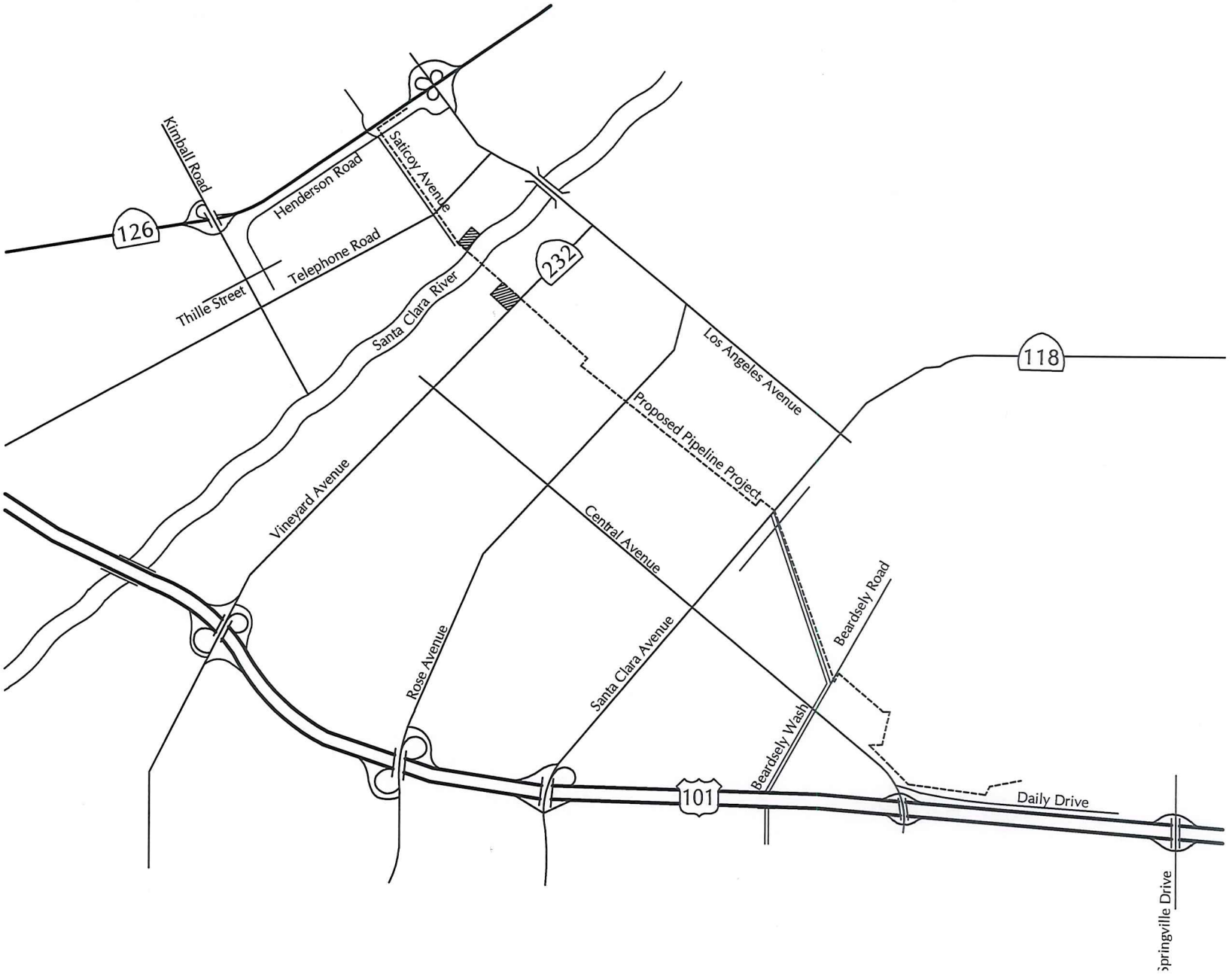
Rose Avenue is a 2-lane roadway extending southwesterly from State Route 118 to Central Avenue and as a 4-lane divided roadway to U.S. Highway 101. The U.S. Highway101/Rose Avenue partial cloverleaf interchange is signalized. The segment of Rose Avenue which would be utilized by the construction traffic was determined to be in good condition.

Santa Clara Avenue is a 2-lane roadway extending north from U. S. Highway 101 to State Route 118. A partial cloverleaf interchange is provided at U.S. Highway 101. The U.S. Highway 101/Santa Clara Avenue-Rice Avenue interchange is signalized. The segment of Santa Clara Avenue which would be utilized by the construction traffic was determined to be in good condition.

Telephone Road is a 4-lane with median roadway extending north from Olivas Park Drive to State Route 118 (Wells Road). The Wells Road/Telephone Road intersection is controlled by traffic signals. The segment of Telephone Road which would be utilized by the construction traffic was determined to be in good condition.

Central Avenue is a 2-lane roadway extending southwesterly from Vineyard Avenue to U. S. Highway 101. A diamond interchange is provided at U.S. Highway 101. The U.S. Highway 101/Central Avenue interchange is controlled by STOP-Signs. The segment of Central Avenue which would be utilized by the construction traffic was determined to be in good condition.

Saticoy Avenue, in the project area, is a northeasterly-south westerly roadway that extends south from Henderson Road to North Bank Drive. The Saticoy Avenue/Henderson Road intersection is controlled by a STOP-Sign on Saticoy Avenue. The segment of Saticoy Avenue which would be utilized by construction traffic was determined to be in good condition.



ASSOCIATED TRANSPORTATION ENGINEERS

EXISTING STREET NETWORK AND PROJECT LOCATION

FIGURE 2

EKM - ATE#17021

Henderson Road, is a 2-lane road that extends southwesterly from Wells Road to Thille Street (approximately 500 feet east of Kimball Road. Henderson Road continues southerly direction, where it terminates in a residential area. Henderson Road would provide access to the project site via Wells Road and Thille Street. The segment of Henderson Road which would be utilized by construction equipment was determined to be in good condition.

West Daily Drive, is a 2-lane road for about 150 feet easterly from Central Avenue. The balance of West Daily Drive (approximately 3,000± feet is approximately 18 feet wide to the turn up the hill to the Calleguas Connection point. This segment is generally an agricultural area service road and will be impacted by the project. The traffic volume on this is quite light and with traffic control it will accommodate the existing users and the construction use.

Roadway Operations

"Level of Service" (LOS) A through F are used to rate roadway operations, with LOS A indicating very good operating conditions and LOS F indicating poor conditions (more complete definitions of level of service are contained in the Technical Appendix for reference). LOS A through LOS C is generally considered acceptable, while LOS D through LOS F indicate poor conditions.

The Average Daily Traffic (ADT) are the 2017 link volumes from the Ventura County Transportation Commission (VCTC) calibrated Traffic Model. This traffic model is for all of Ventura County and includes most of the roadway segments.

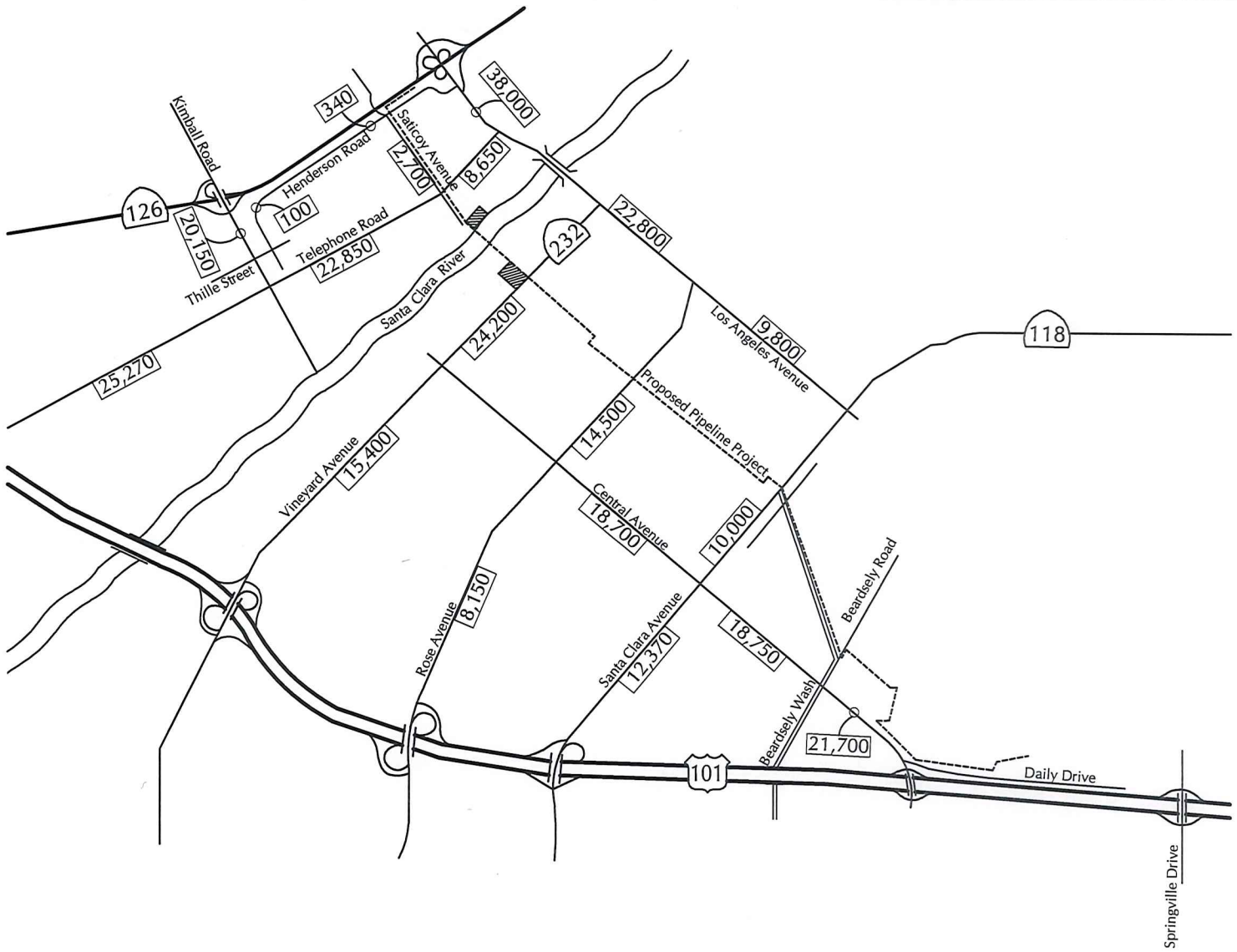
The existing (2017) roadway traffic volumes for the study-area roadway segments are illustrated in Figure 3 and summarize on Table 2. Levels of service for the study-area roadways were calculated using the Ventura County roadway capacities contained in the Technical Appendix.

Table 2
Existing Roadway Levels of Service

Roadways	Geometry	Class	ADT	Capacity	LOS
State Route 118	4-lanes	Class I	38,000	58,000	LOS C
State Route 232	4-lanes	Class I	24,200	58,000	LOS B
Telephone Road	4-Lanes	Class I	25,300	58,000	LOS B
Rose Avenue	2-lanes	Class I	14,500	27,000	LOS D
Santa Clara Avenue	2-lanes	Class I	10,000	27,000	LOS C
Central Avenue	2-lanes	Class I	18,700	27,000	LOS E
Saticoy Avenue	2-Lanes	Class I	2,700	27,000	LOS B

[a] *LOS based on average delay per vehicle measured in seconds.*

The study-area roadway segments currently operate in the LOS "B" – "E" range as shown in Table 2.



LEGEND

X - Average Daily Traffic Volume

N
NOT TO SCALE

ASSOCIATED TRANSPORTATION ENGINEERS

EXISTING AVERAGE DAILY TRAFFIC VOLUMES

FIGURE 3

EKM - ATE#17021

IMPACT THRESHOLDS

Roadways: The thresholds established by Ventura County that are outlined in Table 3 were used to assess the significance of roadway and intersection impacts associated with project generated traffic.

Table 3
Minimum Acceptable Level of Service For Roadway Segments and Intersections

Minimum LOS	County of Ventura - Description
C	All County maintained local roads.
D	All County thoroughfares and state highways within the unincorporated area of the County, except as provided below
E	1. State Route 33 between the end of the Ojai freeway and the City of Ojai. 2. State Route 118 between Santa Clara Avenue and the City of Moorpark. 3. State Route 34 (Somis Road) north of the City of Camarillo. 4. Santa Rosa Road between Camarillo city limit line and Thousand Oaks city limit line. 5. Moorpark Road north of Santa Rosa Road to Moorpark city limit line.
Varies	The LOS prescribed by the applicable city for all state highways, city thoroughfares, and city maintained local roads located within that city, if the city has formerly adopted General Plan policies, ordinances or a reciprocal agreement with the County, pertaining to development in the city that would individually or cumulatively affect the LOS of state highways, county thoroughfares and county-maintained local roads in the unincorporated area of the County.
	County LOS standards are applicable for any city that has not adopted its own standards or has not executed a reciprocal agreement with the County pertaining to impacts to County roads.
At any intersection between two roads, each of which has a prescribed minimum acceptable LOS, the less stringent LOS of the two shall be the minimum acceptable LOS of that intersection.	

Project-Specific Impacts - A significant adverse project specific traffic impact is assumed to occur on any road segment if any one of the following results from the project:

a. If the project would cause the existing LOS on a roadway segment to fall to an unacceptable level as defined in Table 3.

b. If the project will add one or more PHT to a roadway segment that is currently operating at an unacceptable LOS as defined in Table 3.

Cumulative Impacts - A potentially significant adverse cumulative traffic impact is assumed to occur on any road segment if any one of the following results from the project:

a. If the project will add one or more PHT to a roadway segment that is part of the regional road network and the roadway segment is currently operating at an unacceptable LOS as defined in Table 3.

b. If the project will add 10 or more PHT to a roadway segment which is part of the regional road network and is projected to reach an unacceptable LOS as defined in Table 3 by the Year 2020.

All projects that generate traffic contribute to cumulative traffic impacts. The analysis of cumulative traffic impacts, as contained in the Final Subsequent EIR prepared for the County General Plan Update (2005) and subsequent addendum (2007), would normally be considered sufficient analysis of traffic impacts. In such cases, payment of County's Traffic Impact Mitigation Fees (TIMF) is intended to mitigate the project=s contribution to the cumulative traffic impacts for road segments outside of the Ojai Valley.

The County of Ventura's traffic impact thresholds for the Ojai area also focus on the segment of State Route 33 in the Casitas Springs community, located south of the City of Ojai. The threshold states that a project would contribute to significant cumulative impacts if it adds one or more southbound trips during the A.M. peak period or adds one or more northbound trips during the P.M. peak period to State Route 33 in Casitas Springs.

Intersections: A potentially significant adverse project-specific traffic impact is assumed to occur at any intersection on the Regional Road Network if the project will exceed the thresholds established in Table 4.

Table 4
Threshold of Significance For Changes in Level of Service at Intersections

Significant Changes in LOS	
Intersection Level of Service (Existing)	Increase in V/C or Trips Greater Than
LOS A	0.20
LOS B	0.15
LOS C	0.10
LOS D	10 Trips*
LOS E	5 Trips*
LOS F	1 Trip*
*To critical movements. These are the highest combination of left and opposing through/right-turn PHTM.	

If the project involves County General Plan land use designation changes, zone changes or intensification of use, such that the projects impacts could not have been anticipated and were not included in either analysis for the current General plan or TIMF Program, or the project is located within the boundaries of the Ojai Area Plan, additional cumulative impact analysis and

mitigation measures may be required at the discretion of the Director, County PWA - Transportation Department.

POTENTIAL IMPACTS

Project Trip Generation

Trip generation estimates calculated for the project are based on the number of anticipated employee and truck trips. Trip generation calculations were completed for weekday daily activity levels. The 87 on site employees (83 construction and 4 inspectors) would generate 174 daily trips over the entire construction period. The project will import, and export material which will require approximately 104 daily truck trips (52 truckloads) over the construction period. The peak project workday would result in a total of 174 daily employee trips and 104 daily truck trips. Table 4 summarizes the trip generation calculations completed for the project.

Table 4
Project Peak Trip Generation Estimates

Traffic Generator	Per Day	Daily Trips
Employees: Construction Inspectors Total	 83 Construction 4 Inspectors 87 Employees	 166 Trips 8 Trips 174 Trips
Truck Loads(a): Cut Trenchless Total	 48 Loads 4 Loads 52 Loads	 96 Trips 8 Trips 104 Trips
	Total Trips:	278

Truck Routing

Trucks bringing import construction materials to the project site will travel on U.S. Highway 101, State Route 126 and State Route 118. U.S. Highway 101, State Route 126 and State Route 118 are designated as truck routes in the County of Ventura. Project construction traffic will access the project site via Saticoy Avenue, Telephone Road, Vineyard Avenue, Rose Avenue, Santa Clara Avenue, Central Avenue and Daily Drive. A field review was completed to determine the existing conditions along the routes. The field review determined that all the roadways along the route were in satisfactory condition. Photos are provided in the Technical Appendix.

Project Trip Distribution and Assignment

Figure 4 illustrates the assignment of the construction project's daily traffic volumes. Project-generated truck traffic was distributed and assigned to the study-area street network according to the truck route discussed above. Most employees are anticipated to come to work via U.S. Highway 101, State Route 126 and State Route 118. The Project-Added roadway volumes represent the estimated maximum volume assuming open cut and trenchless (5 work crews and inspectors) construction activity occurs at the same time.

Potential Roadway Segment Impacts

Figure 5 illustrates the Existing + Project traffic volumes at the study-area roadways. Table 5 shows the Existing + Project levels of service for the study-area roadways and identifies the significance of the project-added traffic based on County of Ventura thresholds.

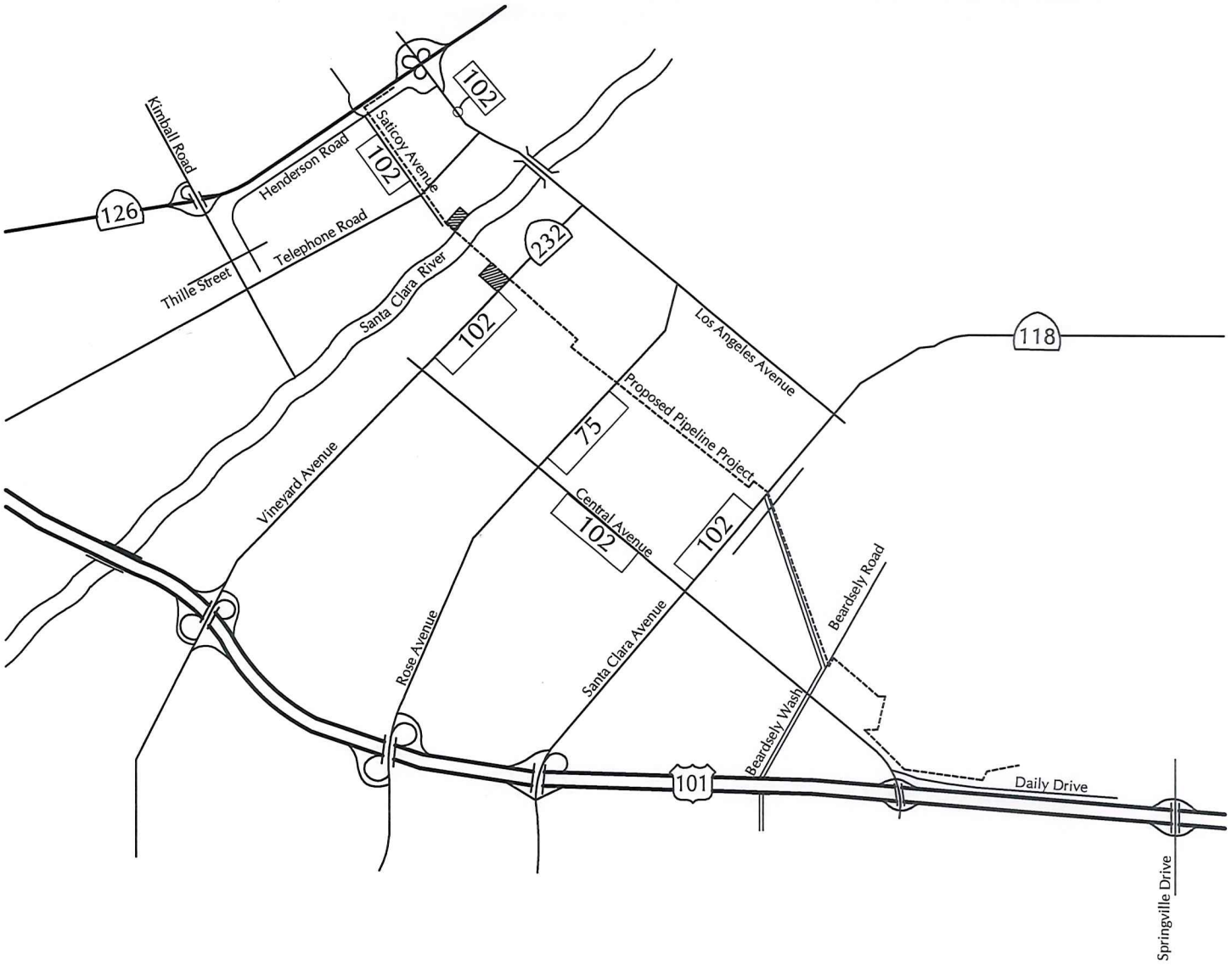
Table 5
Potential Roadway Segment Impacts

Roadways	Project-Added ADT	Existing + Project ADT	LOS	
			Existing	Existing + Project
State Route 118	102	38,102	LOS C	LOS D
State Route 232	102	24,302	LOS B	LOS B
Telephone Road	102	25,402	LOS B	LOS B
Rose Avenue	75	14,575	LOS D	LOS D
Santa Clara Avenue	102	10,102	LOS C	LOS D
Central Avenue	102	18,802	LOS E	LOS E
Saticoy Avenue	102	2,802	LOS B	LOS B

Project Access

Project construction traffic will access the project site via Saticoy Avenue, Telephone Road, Vineyard Avenue, Rose Avenue, Santa Clara Avenue, Central Avenue and Daily Drive. Recommendations to mitigate potential project access impact are provided in the Mitigation Measures section of the report.

Construction is planned to occur over a 30-month period at an average pipeline installation rate of 120 feet per day. Project trips will be distributed along several local roadways as the pipeline construction progresses. As shown in Table 5, the Project would not cause roadways currently operating at acceptable levels to fall to an unacceptable level. However, during the temporary construction window, the Project could add one or more peak hour trips to Central Avenue which is operating at less than acceptable level as define in Table 3.



LEGEND

X - Average Daily Traffic Volume

N

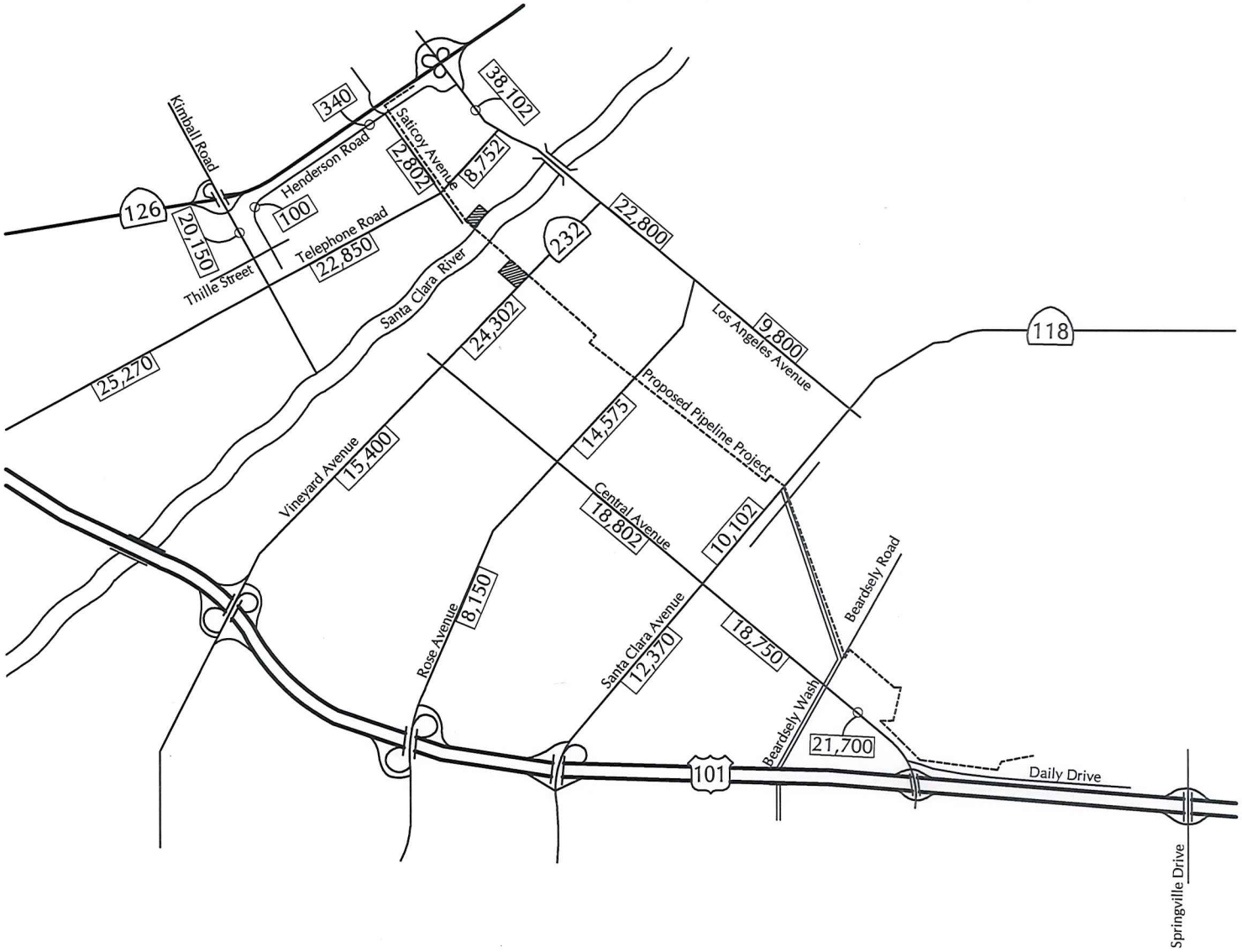
NOT TO SCALE

ASSOCIATED TRANSPORTATION ENGINEERS

PROJECT-ADDED AVERAGE DAILY TRAFFIC VOLUMES

FIGURE 4

EKM - ATE#17021



LEGEND

X - Average Daily Traffic Volume

N
NOT TO SCALE

ASSOCIATED TRANSPORTATION ENGINEERS

EXISTING + PROJECT AVERAGE DAILY TRAFFIC VOLUMES

FIGURE 5

EKM - ATE#17021

CUMULATIVE IMPACTS

Traffic generated by the project is a result of construction only and is short-term in nature. No substantial increase in traffic would result from the project over the long term because the proposed infrastructure would require only occasional maintenance and no new employees would be hired for on-going operations. Therefore, the project would not contribute to cumulative traffic impacts.

MITIGATION MEASURES

Construction is planned to occur over a 30-month period at an average pipeline installation rate of 120 feet per day. Project trips will be distributed along several local roadways as the pipeline construction progresses. The City of Ventura segment will start at the City of Ventura Connection and the Calleguas Municipal Water District's segment would start at their connection point at the Springville Reservoir. Progress on the two parts of the project will proceed to the point where they meet. Each agency that manages the roadway system in their jurisdiction require encroachment permits where the pipeline crosses a roadway and in areas where the pipeline is within the roadway right-of-way. Traffic control plans, approved by the respective agency, will provide for the maintenance of the flow of traffic. These measures would mitigate project impacts where the project construction crosses and/or runs parallels to local Caltrans, City of Ventura, Ventura County and City of Camarillo roadways.

The existing congestion and delay within Central Avenue is in large part due to traffic generated by Rio Mesa High School. Limiting construction of Segment 10 (Proposed Project) and Segments 7 and 11 (Alternative Alignment B) to periods when school is out of session (generally mid-June to early September) would avoid the impact of the combined school and construction traffic.

The Contractor shall coordinate with emergency service providers (Police, Fire, Ambulance and Paramedic Services) to provide advance notice of any lane closures, construction hours and changes to local access and identify alternative route where appropriate.

■■■

STUDY PARTICIPANTS AND REFERENCES

Associated Transportation Engineers

Richard L. Pool, P.E., Principal Engineer
Darryl F. Nelson, Senior Transportation Planner
Erika K. Monson, Transportation Planner

References

Highway Capacity Manual, Transportation Research Board, National Research Council, 2000.

Highway Design Manual, California Department of Transportation, 4th Edition, March 1994.

Ventura County Roadway Design Standards, Ventura County.

VCTC 2017 Traffic Model, Ventura County Transportation Commission.

Persons Contacted

William Yates, Kennedy/Jenks Consultants
Meredith Clement, Kennedy/Jenks Consultants
Steve DeGeorge, Ventura County Transportation Commission
Andrew Kent, Ventura County Transportation Commission

TECHNICAL APPENDIX

CONTENTS:

LEVEL OF SERVICE DEFINITIONS

The ability of a roadway system to carry traffic is most often expressed in terms of "Levels of Service" (LOS). LOS A through F are used, with LOS A indicating very good operations and LOS F indicating poor operations. More complete level of service definitions are listed in the following table.

LOS	Definition
A	Conditions of free unobstructed flow, no delays and all signal phases sufficient in duration to clear all approaching vehicles.
B	Conditions of stable flow, very little delay, a few phases are unable to handle all approaching vehicles.
C	Conditions of stable flow, delays are low to moderate, full use of peak direction signal phases is experienced.
D	Conditions approaching unstable flow, delays are moderate to heavy, significant signal time deficiencies are experienced for short durations during the peak traffic period.
E	Conditions of unstable flow, delays are significant, signal phase timing is generally insufficient, congestion exists for extended duration throughout the peak period.
F	Conditions of forced flow, travel speeds are low and volumes are well above capacity. This condition is often caused when vehicles released by an upstream signal are unable to proceed because of back-ups from a downstream signal.

Source: Highway Capacity Manual, December 2000.

STANDARD ENGINEERING ROADWAY DESIGN CAPACITIES

Roadway Type	# of Lanes	LOS A		LOS B		LOS C		LOS D		LOS E	
		Low	High	Low	High	Low	High	Low	High	Low	High
Arterial	2 Lanes	8,100	12,000	9,400	14,000	10,800	16,000	12,100	18,000	13,500	20,000
Arterial	4 Lanes	16,100	23,900	18,900	27,900	21,600	31,900	24,300	35,900	27,000	39,900
Major	2 Lanes	6,500	9,600	7,500	11,200	8,600	12,800	9,700	14,400	10,800	16,000
Major	4 Lanes	12,900	19,200	15,100	22,300	17,200	25,500	19,400	28,700	21,600	31,900
Collector	2 Lanes	4,600	7,100	5,400	8,200	6,200	9,400	6,900	10,600	7,700	11,800

The roadway capacities listed above are "rule of thumb" figures only. Some factors which affect these capacities are intersections (numbers and configuration), degrees of access control, roadway grades, design geometries (horizontal and vertical alignment standards), sight distance, level of truck and bus traffic and level of pedestrian and bicycle traffic.

ROADWAY PICTURES

ASSOCIATED
TRANSPORTATION
ENGINEERS

SANTA CLARA SOUTH OF SR 118 (LOS ANGELES)

FIGURE A

EKM - ATE#17021

Associated
Transportation
Engineers

SR 118 @ SANTA CLARA (LOS ANGELES)

FIGURE B

EKM - ATE#17021

ASSOCIATED
TRANSPORTATION
ENGINEERS

ROSE AVENUE @ SR 118

FIGURE C

EKM - ATE#17021

ASSOCIATED
TRANSPORTATION
ENGINEERS

ROSE AVENUE BETWEEN SENTRAL AND SR 118

FIGURE D

EKM - ATE#17021

Associated
Transportation
Engineers

CENTRAL @ RIO MESA HIGH SCHOOL

FIGURE E

EKM - ATE#17021

ASSOCIATED
TRANSPORTATION
ENGINEERS

VINEYARD APPROACHING CENTRAL

FIGURE F

EKM - ATE#17021

ASSOCIATED
TRANSPORTATION
ENGINEERS

WELLS @ HENDERSON ROAD

FIGURE G

EKM - ATE#17021

ASSOCIATED
TRANSPORTATION
ENGINEERS

HENDERSON ROAD WEST WELLS

FIGURE H

EKM - ATE#17021

Associated
Transportation
Engineers

SATICOY AT TELEPHONE LOOKING NORTH AT PARK

FIGURE 1

EKM - ATE#17021

Appendix B: AB 52 Outreach Letters

CITY OF VENTURA

March 6, 2018

Chumash, Tataviam, Fernandeno
Beverly Salazar Folkes
1931 Shadybrook Drive
Thousand Oaks, CA 91362

Subject: 30-Day Notice: Tribal Consultation per Assembly Bill 52
State Water Interconnection Project

Dear Beverly Salazar Folkes:

The City of Ventura is preparing an Environmental Impact Report (EIR) for the State Water Interconnection Project. The interconnection would include a pipeline used to transport water between Calleguas Muncipal Water District's (Calleguas') and the City's distribution systems. The preferred pipeline alignment is shown on the attached figure. The EIR will evaluate the environmental impacts associated with the construction and operation of the pipeline and related facilities.

The project would enable delivery of State Water Project (SWP) water by wheeling water through the Metropolitan Water District of Southern California and Calleguas water systems to the City of Ventura. The connection would also facilitate delivery of SWP water to United Water Conservation District and Casitas Municipal Water District. In addition, the interconnection would allow the City to deliver water to Calleguas during an outage of its imported water supplies.

The proposed project must comply with California Public Resources Code § 21080.3.1 (Assembly Bill [AB] 52 of 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified by lead agencies of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated.

Your tribe's input is important to the City's planning process. We request that you advise us as early as possible if you wish to consult on the proposed project. The Chumash, Tataviam, Fernandeno has 30 days from the date of receipt of this notice to advise the City if you are interested in further consultation. If you require any additional information or have any questions, please contact Betsy Cooper, Senior Civil Engineer, at (805) 654-7848 or via e-mail at bcooper@cityofventura.ca.gov. Thank you for your assistance.

Sincerely,

Dave Ward
City of Ventura Planning Manager

cc: Iain Holt, Principal Planner

Enclosed: Project Location Map, Preferred Alignment

CITY OF
VENTURA

March 6, 2018

Barbareno/Ventureno Band of Mission Indians
Julie Lynn Tumamait-Stennslie
365 North Poli Ave
Ojai, CA 93023

Subject: 30-Day Notice: Tribal Consultation per Assembly Bill 52
State Water Interconnection Project

Dear Julie Lynn Tumamait-Stennslie:

The City of Ventura is preparing an Environmental Impact Report (EIR) for the State Water Interconnection Project. The interconnection would include a pipeline used to transport water between Calleguas Muncipal Water District's (Calleguas') and the City's distribution systems. The preferred pipeline alignment is shown on the attached figure. The EIR will evaluate the environmental impacts associated with the construction and operation of the pipeline and related facilities.

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Your tribe's input is important to the City's planning process. We request that you advise us as early as possible if you wish to consult on the proposed project. The Barbareno/Ventureno Band of Mission Indians has 30 days from the date of receipt of this notice to advise the City if you are interested in further consultation. If you require any additional information or have any questions, please contact Betsy Cooper, Senior Civil Engineer, at (805) 654-7848 or via e-mail at bcooper@cityofventura.ca.gov. Thank you for your assistance.

Sincerely,

Dave Ward
City of Ventura Planning Manager

cc: Iain Holt, Principal Planner

Enclosed: Project Location Map, Preferred Alignment

CITY OF VENTURA

March 6, 2018

Chumash
Patrick Tumamait
992 El Camino Corto
Ojai, CA 93023

Subject: 30-Day Notice: Tribal Consultation per Assembly Bill 52
State Water Interconnection Project

Dear Patrick Tumamait:

The City of Ventura is preparing an Environmental Impact Report (EIR) for the State Water Interconnection Project. The interconnection would include a pipeline used to transport water between Calleguas Muncipal Water District's (Calleguas') and the City's distribution systems. The preferred pipeline alignment is shown on the attached figure. The EIR will evaluate the environmental impacts associated with the construction and operation of the pipeline and related facilities.

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Your tribe's input is important to the City's planning process. We request that you advise us as early as possible if you wish to consult on the proposed project. The Chumash has 30 days from the date of receipt of this notice to advise the City if you are interested in further consultation. If you require any additional information or have any questions, please contact Betsy Cooper, Senior Civil Engineer, at (805) 654-7848 or via e-mail at bcooper@cityofventura.ca.gov. Thank you for your assistance.

Sincerely,

Dave Ward
City of Ventura Planning Manager

cc: Iain Holt, Principal Planner

Enclosed: Project Location Map, Preferred Alignment

CITY OF VENTURA

March 6, 2018

Chumash, Fernandeno, Tataviam, Shoshone, Paiute, Yaqui
Randy Guzman-Folkes
4676 Walnut Ave
Simi Valley, CA 93063

Subject: 30-Day Notice: Tribal Consultation per Assembly Bill 52
State Water Interconnection Project

Dear Randy Guzman-Folkes:

The City of Ventura is preparing an Environmental Impact Report (EIR) for the State Water Interconnection Project. The interconnection would include a pipeline used to transport water between Calleguas Muncipal Water District's (Calleguas') and the City's distribution systems. The preferred pipeline alignment is shown on the attached figure. The EIR will evaluate the environmental impacts associated with the construction and operation of the pipeline and related facilities.

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Your tribe's input is important to the City's planning process. We request that you advise us as early as possible if you wish to consult on the proposed project. The Chumash, Fernandeno, Tataviam, Shoshone, Paiute, Yaqui has 30 days from the date of receipt of this notice to advise the City if you are interested in further consultation. If you require any additional information or have any questions, please contact Betsy Cooper, Senior Civil Engineer, at (805) 654-7848 or via e-mail at bcooper@cityofventura.ca.gov. Thank you for your assistance.

Sincerely,

Dave Ward
City of Ventura Planning Manager

cc: Iain Holt, Principal Planner

Enclosed: Project Location Map, Preferred Alignment

CITY OF VENTURA

March 6, 2018

Coastal Band of the Chumash Nation
Michael Cordero
P.O. Box 4464
Santa Barbara, CA 93140

Subject: 30-Day Notice: Tribal Consultation per Assembly Bill 52
State Water Interconnection Project

Dear Michael Cordero:

The City of Ventura is preparing an Environmental Impact Report (EIR) for the State Water Interconnection Project. The interconnection would include a pipeline used to transport water between Calleguas Muncipal Water District's (Calleguas') and the City's distribution systems. The preferred pipeline alignment is shown on the attached figure. The EIR will evaluate the environmental impacts associated with the construction and operation of the pipeline and related facilities.

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Your tribe's input is important to the City's planning process. We request that you advise us as early as possible if you wish to consult on the proposed project. The Coastal Band of the Chumash Nation has 30 days from the date of receipt of this notice to advise the City if you are interested in further consultation. If you require any additional information or have any questions, please contact Betsy Cooper, Senior Civil Engineer, at (805) 654-7848 or via e-mail at bcooper@cityofventura.ca.gov. Thank you for your assistance.

Sincerely,

Dave Ward
City of Ventura Planning Manager

cc: Iain Holt, Principal Planner

Enclosed: Project Location Map, Preferred Alignment

CITY OF VENTURA

March 6, 2018

Chumash
Charles S. Parra
P.O. Box 6612
Oxnard, CA 93031

Subject: 30-Day Notice: Tribal Consultation per Assembly Bill 52
State Water Interconnection Project

Dear Charles S. Parra:

The City of Ventura is preparing an Environmental Impact Report (EIR) for the State Water Interconnection Project. The interconnection would include a pipeline used to transport water between Calleguas Muncipal Water District's (Calleguas') and the City's distribution systems. The preferred pipeline alignment is shown on the attached figure. The EIR will evaluate the environmental impacts associated with the construction and operation of the pipeline and related facilities.

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Your tribe's input is important to the City's planning process. We request that you advise us as early as possible if you wish to consult on the proposed project. The Chumash has 30 days from the date of receipt of this notice to advise the City if you are interested in further consultation. If you require any additional information or have any questions, please contact Betsy Cooper, Senior Civil Engineer, at (805) 654-7848 or via e-mail at bcooper@cityofventura.ca.gov. Thank you for your assistance.

Sincerely,

Dave Ward
City of Ventura Planning Manager

cc: Iain Holt, Principal Planner

Enclosed: Project Location Map, Preferred Alignment

CITY OF VENTURA

March 6, 2018

Chumash
Richard Angulo
P.O. Box 935
Salome, AZ 85348

Subject: 30-Day Notice: Tribal Consultation per Assembly Bill 52
State Water Interconnection Project

Dear Richard Angulo:

The City of Ventura is preparing an Environmental Impact Report (EIR) for the State Water Interconnection Project. The interconnection would include a pipeline used to transport water between Calleguas Muncipal Water District's (Calleguas') and the City's distribution systems. The preferred pipeline alignment is shown on the attached figure. The EIR will evaluate the environmental impacts associated with the construction and operation of the pipeline and related facilities.

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Sincerely,

Dave Ward
City of Ventura Planning Manager

cc: Iain Holt, Principal Planner

Enclosed: Project Location Map, Preferred Alignment

CITY OF VENTURA

March 6, 2018

Chumash
Carol A. Pulido
165 Mountainview Street
Oakview, CA 93022

Subject: 30-Day Notice: Tribal Consultation per Assembly Bill 52
State Water Interconnection Project

Dear Carol A. Pulido:

The City of Ventura is preparing an Environmental Impact Report (EIR) for the State Water Interconnection Project. The interconnection would include a pipeline used to transport water between Calleguas Muncipal Water District's (Calleguas') and the City's distribution systems. The preferred pipeline alignment is shown on the attached figure. The EIR will evaluate the environmental impacts associated with the construction and operation of the pipeline and related facilities.

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Sincerely,

Dave Ward
City of Ventura Planning Manager

cc: Iain Holt, Principal Planner

Enclosed: Project Location Map, Preferred Alignment

CITY OF VENTURA

March 6, 2018

Chumash
Melissa M. Parra-Hernandez
119 North Balsam Street
Oxnard, CA 93030

Subject: 30-Day Notice: Tribal Consultation per Assembly Bill 52
State Water Interconnection Project

Dear Melissa M. Parra-Hernandez:

The City of Ventura is preparing an Environmental Impact Report (EIR) for the State Water Interconnection Project. The interconnection would include a pipeline used to transport water between Calleguas Muncipal Water District's (Calleguas') and the City's distribution systems. The preferred pipeline alignment is shown on the attached figure. The EIR will evaluate the environmental impacts associated with the construction and operation of the pipeline and related facilities.

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Sincerely,

Dave Ward
City of Ventura Planning Manager

cc: Iain Holt, Principal Planner

Enclosed: Project Location Map, Preferred Alignment

CITY OF VENTURA

March 6, 2018

Barbareno/Ventureno Band of Mission Indians
Kathleen Pappo
2762 Vista Mesa Drive
Rancho Palos Verdes, CA 90275

Subject: 30-Day Notice: Tribal Consultation per Assembly Bill 52
State Water Interconnection Project

Dear Kathleen Pappo:

The City of Ventura is preparing an Environmental Impact Report (EIR) for the State Water Interconnection Project. The interconnection would include a pipeline used to transport water between Calleguas Muncipal Water District's (Calleguas') and the City's distribution systems. The preferred pipeline alignment is shown on the attached figure. The EIR will evaluate the environmental impacts associated with the construction and operation of the pipeline and related facilities.

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Your tribe's input is important to the City's planning process. We request that you advise us as early as possible if you wish to consult on the proposed project. The Barbareno/Ventureno Band of Mission Indians has 30 days from the date of receipt of this notice to advise the City if you are interested in further consultation. If you require any additional information or have any questions, please contact Betsy Cooper, Senior Civil Engineer, at (805) 654-7848 or via e-mail at bcooper@cityofventura.ca.gov. Thank you for your assistance.

Sincerely,

Dave Ward
City of Ventura Planning Manager

cc: Iain Holt, Principal Planner

Enclosed: Project Location Map, Preferred Alignment

CITY OF VENTURA

March 6, 2018

Barbareno/Ventureno Band of Mission Indians
Raudel Joe Banuelos Jr.
331 Mira Flores Court
Camarillo, CA 93012

Subject: 30-Day Notice: Tribal Consultation per Assembly Bill 52
State Water Interconnection Project

Dear Raudel Joe Banuelos Jr.:

The City of Ventura is preparing an Environmental Impact Report (EIR) for the State Water Interconnection Project. The interconnection would include a pipeline used to transport water between Calleguas Muncipal Water District's (Calleguas') and the City's distribution systems. The preferred pipeline alignment is shown on the attached figure. The EIR will evaluate the environmental impacts associated with the construction and operation of the pipeline and related facilities.

The project would enable delivery of State Water Project (SWP) water by wheeling water through the Metropolitan Water District of Southern California and Calleguas water systems to the City of Ventura. The connection would also facilitate delivery of SWP water to United Water Conservation District and Casitas Municipal Water District. In addition, the interconnection would allow the City to deliver water to Calleguas during an outage of its imported water supplies.

The proposed project must comply with California Public Resources Code § 21080.3.1 (Assembly Bill [AB] 52 of 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified by lead agencies of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated.

Your tribe's input is important to the City's planning process. We request that you advise us as early as possible if you wish to consult on the proposed project. The Barbareno/Ventureno Band of Mission Indians has 30 days from the date of receipt of this notice to advise the City if you are interested in further consultation. If you require any additional information or have any questions, please contact Betsy Cooper, Senior Civil Engineer, at (805) 654-7848 or via e-mail at bcooper@cityofventura.ca.gov. Thank you for your assistance.

Sincerely,

Dave Ward
City of Ventura Planning Manager

cc: Iain Holt, Principal Planner

Enclosed: Project Location Map, Preferred Alignment

CITY OF VENTURA

March 6, 2018

Coastal Band of the Chumash Nation
Janet Darlene Garcia
P.O. Box 4464
Santa Barbara, CA 93140

Subject: 30-Day Notice: Tribal Consultation per Assembly Bill 52
State Water Interconnection Project

Dear Janet Darlene Garcia:

The City of Ventura is preparing an Environmental Impact Report (EIR) for the State Water Interconnection Project. The interconnection would include a pipeline used to transport water between Calleguas Muncipal Water District's (Calleguas') and the City's distribution systems. The preferred pipeline alignment is shown on the attached figure. The EIR will evaluate the environmental impacts associated with the construction and operation of the pipeline and related facilities.

The project would enable delivery of State Water Project (SWP) water by wheeling water through the Metropolitan Water District of Southern California and Calleguas water systems to the City of Ventura. The connection would also facilitate delivery of SWP water to United Water Conservation District and Casitas Municipal Water District. In addition, the interconnection would allow the City to deliver water to Calleguas during an outage of its imported water supplies.

The proposed project must comply with California Public Resources Code § 21080.3.1 (Assembly Bill [AB] 52 of 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified by lead agencies of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated.

Your tribe's input is important to the City's planning process. We request that you advise us as early as possible if you wish to consult on the proposed project. The Coastal Band of the Chumash Nation has 30 days from the date of receipt of this notice to advise the City if you are interested in further consultation. If you require any additional information or have any questions, please contact Betsy Cooper, Senior Civil Engineer, at (805) 654-7848 or via e-mail at bcooper@cityofventura.ca.gov. Thank you for your assistance.

Sincerely,

Dave Ward
City of Ventura Planning Manager

cc: Iain Holt, Principal Planner

Enclosed: Project Location Map, Preferred Alignment

CITY OF VENTURA

March 6, 2018

Coastal Band of the Chumash Nation
Crystal Baker
P.O. Box 723
Atascadero, CA 93423

Subject: 30-Day Notice: Tribal Consultation per Assembly Bill 52
State Water Interconnection Project

Dear Crystal Baker:

The City of Ventura is preparing an Environmental Impact Report (EIR) for the State Water Interconnection Project. The interconnection would include a pipeline used to transport water between Calleguas Muncipal Water District's (Calleguas') and the City's distribution systems. The preferred pipeline alignment is shown on the attached figure. The EIR will evaluate the environmental impacts associated with the construction and operation of the pipeline and related facilities.

The project would enable delivery of State Water Project (SWP) water by wheeling water through the Metropolitan Water District of Southern California and Calleguas water systems to the City of Ventura. The connection would also facilitate delivery of SWP water to United Water Conservation District and Casitas Municipal Water District. In addition, the interconnection would allow the City to deliver water to Calleguas during an outage of its imported water supplies.

The proposed project must comply with California Public Resources Code § 21080.3.1 (Assembly Bill [AB] 52 of 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified by lead agencies of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated.

Your tribe's input is important to the City's planning process. We request that you advise us as early as possible if you wish to consult on the proposed project. The Coastal Band of the Chumash Nation has 30 days from the date of receipt of this notice to advise the City if you are interested in further consultation. If you require any additional information or have any questions, please contact Betsy Cooper, Senior Civil Engineer, at (805) 654-7848 or via e-mail at bcooper@cityofventura.ca.gov. Thank you for your assistance.

Sincerely,

Dave Ward
City of Ventura Planning Manager

cc: Iain Holt, Principal Planner

Enclosed: Project Location Map, Preferred Alignment

CITY OF VENTURA

March 6, 2018

Chumash
PeuYoKo Perez
2419 Harbor Blvd, #149
Ventura, CA 93003

Subject: 30-Day Notice: Tribal Consultation per Assembly Bill 52
State Water Interconnection Project

Dear PeuYoKo Perez:

The City of Ventura is preparing an Environmental Impact Report (EIR) for the State Water Interconnection Project. The interconnection would include a pipeline used to transport water between Calleguas Muncipal Water District's (Calleguas') and the City's distribution systems. The preferred pipeline alignment is shown on the attached figure. The EIR will evaluate the environmental impacts associated with the construction and operation of the pipeline and related facilities.

The project would enable delivery of State Water Project (SWP) water by wheeling water through the Metropolitan Water District of Southern California and Calleguas water systems to the City of Ventura. The connection would also facilitate delivery of SWP water to United Water Conservation District and Casitas Municipal Water District. In addition, the interconnection would allow the City to deliver water to Calleguas during an outage of its imported water supplies.

The proposed project must comply with California Public Resources Code § 21080.3.1 (Assembly Bill [AB] 52 of 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified by lead agencies of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated.

Your tribe's input is important to the City's planning process. We request that you advise us as early as possible if you wish to consult on the proposed project. The Chumash has 30 days from the date of receipt of this notice to advise the City if you are interested in further consultation. If you require any additional information or have any questions, please contact Betsy Cooper, Senior Civil Engineer, at (805) 654-7848 or via e-mail at bcooper@cityofventura.ca.gov. Thank you for your assistance.

Sincerely,

DBWard

Dave Ward
City of Ventura Planning Manager

cc: Iain Holt, Principal Planner

Enclosed: Project Location Map, Preferred Alignment

CITY OF VENTURA

March 6, 2018

Santa Ynez Band of Chumash Indians
Kenneth Kahn
P.O. Box 517
Santa Ynez, CA 93460

Subject: 30-Day Notice: Tribal Consultation per Assembly Bill 52
State Water Interconnection Project

Dear Kenneth Kahn:

The City of Ventura is preparing an Environmental Impact Report (EIR) for the State Water Interconnection Project. The interconnection would include a pipeline used to transport water between Calleguas Muncipal Water District's (Calleguas') and the City's distribution systems. The preferred pipeline alignment is shown on the attached figure. The EIR will evaluate the environmental impacts associated with the construction and operation of the pipeline and related facilities.

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The proposed project must comply with California Public Resources Code § 21080.3.1 (Assembly Bill [AB] 52 of 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified by lead agencies of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated.

Your tribe's input is important to the City's planning process. We request that you advise us as early as possible if you wish to consult on the proposed project. The Santa Ynez Band of Chumash Indians has 30 days from the date of receipt of this notice to advise the City if you are interested in further consultation. If you require any additional information or have any questions, please contact Betsy Cooper, Senior Civil Engineer, at (805) 654-7848 or via e-mail at bcooper@cityofventura.ca.gov. Thank you for your assistance.

Sincerely,

Dave Ward
City of Ventura Planning Manager

cc: Iain Holt, Principal Planner

Enclosed: Project Location Map, Preferred Alignment

CITY OF VENTURA

March 6, 2018

Santa Ynez Tribal Elders Council
Antonia Flores
P.O. Box 365
Santa Ynez, CA 93460

Subject: 30-Day Notice: Tribal Consultation per Assembly Bill 52
State Water Interconnection Project

Dear Antonia Flores:

The City of Ventura is preparing an Environmental Impact Report (EIR) for the State Water Interconnection Project. The interconnection would include a pipeline used to transport water between Calleguas Muncipal Water District's (Calleguas') and the City's distribution systems. The preferred pipeline alignment is shown on the attached figure. The EIR will evaluate the environmental impacts associated with the construction and operation of the pipeline and related facilities.

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The proposed project must comply with California Public Resources Code § 21080.3.1 (Assembly Bill [AB] 52 of 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified by lead agencies of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated.

Your tribe's input is important to the City's planning process. We request that you advise us as early as possible if you wish to consult on the proposed project. The Santa Ynez Tribal Elders Council has 30 days from the date of receipt of this notice to advise the City if you are interested in further consultation. If you require any additional information or have any questions, please contact Betsy Cooper, Senior Civil Engineer, at (805) 654-7848 or via e-mail at bcooper@cityofventura.ca.gov. Thank you for your assistance.

Sincerely,

Dave Ward
City of Ventura Planning Manager

cc: Iain Holt, Principal Planner

Enclosed: Project Location Map, Preferred Alignment

CITY OF VENTURA

March 6, 2018

Santa Ynez Band of Chumash Indians
Sam Cohen
P.O. Box 517
Santa Ynez, CA 93460

Subject: 30-Day Notice: Tribal Consultation per Assembly Bill 52
State Water Interconnection Project

Dear Sam Cohen:

The City of Ventura is preparing an Environmental Impact Report (EIR) for the State Water Interconnection Project. The interconnection would include a pipeline used to transport water between Calleguas Muncipal Water District's (Calleguas') and the City's distribution systems. The preferred pipeline alignment is shown on the attached figure. The EIR will evaluate the environmental impacts associated with the construction and operation of the pipeline and related facilities.

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Your tribe's input is important to the City's planning process. We request that you advise us as early as possible if you wish to consult on the proposed project. The Santa Ynez Band of Chumash Indians has 30 days from the date of receipt of this notice to advise the City if you are interested in further consultation. If you require any additional information or have any questions, please contact Betsy Cooper, Senior Civil Engineer, at (805) 654-7848 or via e-mail at bcooper@cityofventura.ca.gov. Thank you for your assistance.

Sincerely,

Dave Ward
City of Ventura Planning Manager

cc: Iain Holt, Principal Planner

Enclosed: Project Location Map, Preferred Alignment

CITY OF
VENTURA

March 6, 2018

Northern Chumash Tribal Council
Fred Collins
P.O. Box 5533
Los Osos, CA 93412

Subject: 30-Day Notice: Tribal Consultation per Assembly Bill 52
State Water Interconnection Project

Dear Fred Collins:

The City of Ventura is preparing an Environmental Impact Report (EIR) for the State Water Interconnection Project. The interconnection would include a pipeline used to transport water between Calleguas Muncipal Water District's (Calleguas') and the City's distribution systems. The preferred pipeline alignment is shown on the attached figure. The EIR will evaluate the environmental impacts associated with the construction and operation of the pipeline and related facilities.

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The proposed project must comply with California Public Resources Code § 21080.3.1 (Assembly Bill [AB] 52 of 2014), which requires local governments to conduct meaningful consultation with California Native American tribes that have requested to be notified by lead agencies of proposed projects in the geographic area with which the tribe is traditionally and culturally affiliated.

Your tribe's input is important to the City's planning process. We request that you advise us as early as possible if you wish to consult on the proposed project. The Northern Chumash Tribal Council has 30 days from the date of receipt of this notice to advise the City if you are interested in further consultation. If you require any additional information or have any questions, please contact Betsy Cooper, Senior Civil Engineer, at (805) 654-7848 or via e-mail at bcooper@cityofventura.ca.gov. Thank you for your assistance.

Sincerely,

Dave Ward
City of Ventura Planning Manager

cc: Iain Holt, Principal Planner

Enclosed: Project Location Map, Preferred Alignment

CITY OF VENTURA

March 6, 2018

Santa Ynez Tribal Elders Council
Freddie Romero
P.O. Box 365
Santa Ynez, CA 93460

Subject: 30-Day Notice: Tribal Consultation per Assembly Bill 52
State Water Interconnection Project

Dear Freddie Romero:

The City of Ventura is preparing an Environmental Impact Report (EIR) for the State Water Interconnection Project. The interconnection would include a pipeline used to transport water between Calleguas Muncipal Water District's (Calleguas') and the City's distribution systems. The preferred pipeline alignment is shown on the attached figure. The EIR will evaluate the environmental impacts associated with the construction and operation of the pipeline and related facilities.

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Your tribe's input is important to the City's planning process. We request that you advise us as early as possible if you wish to consult on the proposed project. The Santa Ynez Tribal Elders Council has 30 days from the date of receipt of this notice to advise the City if you are interested in further consultation. If you require any additional information or have any questions, please contact Betsy Cooper, Senior Civil Engineer, at (805) 654-7848 or via e-mail at bcooper@cityofventura.ca.gov. Thank you for your assistance.

Sincerely,

Dave Ward
City of Ventura Planning Manager

cc: Iain Holt, Principal Planner

Enclosed: Project Location Map, Preferred Alignment

CITY OF VENTURA

March 6, 2018

Barbareno/Ventureno Band of Mission Indians
Eleanor Arrellanes
P.O. Box 5687
Ventura, CA 93005

Subject: 30-Day Notice: Tribal Consultation per Assembly Bill 52
State Water Interconnection Project

Dear Eleanor Arrellanes:

The City of Ventura is preparing an Environmental Impact Report (EIR) for the State Water Interconnection Project. The interconnection would include a pipeline used to transport water between Calleguas Muncipal Water District's (Calleguas') and the City's distribution systems. The preferred pipeline alignment is shown on the attached figure. The EIR will evaluate the environmental impacts associated with the construction and operation of the pipeline and related facilities.

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Your tribe's input is important to the City's planning process. We request that you advise us as early as possible if you wish to consult on the proposed project. The Barbareno/Ventureno Band of Mission Indians has 30 days from the date of receipt of this notice to advise the City if you are interested in further consultation. If you require any additional information or have any questions, please contact Betsy Cooper, Senior Civil Engineer, at (805) 654-7848 or via e-mail at bcooper@cityofventura.ca.gov. Thank you for your assistance.

Sincerely,

Dave Ward
City of Ventura Planning Manager

cc: Iain Holt, Principal Planner

Enclosed: Project Location Map, Preferred Alignment