DRAFT
ENVIRONMENTAL IMPACT REPORT

CALLEGUAS MUNICIPAL WATER DISTRICT
LAS VIRGENES MUNICIPAL WATER DISTRICT
INTERCONNECTION PROJECT

Project No. 450

SCH NO. 2018111008

Lead Agency:

Calleguas Municipal Water District

2100 Olsen Road

Thousand Oaks, California 91360

Mr. Eric Bergh 805/579-7128

June 2019

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

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Prepared for:

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2100 Olsen Road

Thousand Oaks, California 91360

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June 2019

Project No. 1802-0331

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LIST OF ACRONYMS & SYMBOLS

AQMP	Air Quality Management Plan
BMP	Best Management Practice
BP	Before Present
CAA	Clean Air Act (Federal)
CAAQS	California ambient air quality standards
CARB	California Environmental Protection Agency Air Resources Board
CCAA	California Clean Air Act
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CH_4	Methane
CMWD	Calleguas Municipal Water District
CNDDB	California Natural Diversity Data Base
CNEL	Community Noise Equivalent Level (24 hour)
CNPS	California Native Plant Society
CO	Carbon monoxide
CO_2	Carbon dioxide
CO_2e	Carbon dioxide, equivalent (greenhouse gases)
CWA	Clean Water Act (Federal)
dBA	Decibel: A - weighted
DWR	California Department of Water Resources
EIR	Environmental Impact Report
ESA	Endangered Species Act (Federal)
FHWA	Federal Highway Administration
GHG	Greenhouse Gases
GSA	Groundwater Sustainability Agency
GWP	Global Warming Potential
Hz	Hertz (sound frequency in cycles per second)
LARWQCB	Los Angeles Regional Water Quality Control Board
L_{eq}	Equivalent sound level

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LIST OF ACRONYMS & SYMBOLS

LVMWD	Las Virgenes Municipal Water District
MBTA	Migratory Bird Treaty Act of 1918 (Federal)
$MMCO_2E$	Metric Tons Carbon Dioxide Equivalent (greenhouse gases)
MWD	Metropolitan Water District of Southern California
N_2O	Nitrous oxide
NAAQS	National ambient air quality standards
NAHC	Native American Heritage Commission
NOP	Notice of Preparation
NO_x	Oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
$PM_{2.5}$	Particulate Matter with an aerodynamic diameter of 2.5 microns or less
PM_{10}	Particulate Matter with an aerodynamic diameter of 10 microns or less
PPV	Peak Particle Velocity (vibration)
PRS	Pressure Regulating Station (proposed)
PS	Pump Station (proposed)
ROC	Reactive Organic Compounds
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SO_x	Oxides of sulfur
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TMDL	Total Maximum Daily Load (water quality)
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
VCAPCD	Ventura County Air Pollution Control District
WDR	Waste Discharge Requirement

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1.0 INTRODUCTION

1.1 DOCUMENT PURPOSE AND LEGAL AUTHORITY

The California Environmental Quality Act (CEQA) requires that local, regional, and State agencies and special purpose districts prepare an Environmental Impact Report (EIR) for any discretionary action that may have the potential to significantly affect the quality of the environment. The Calleguas Municipal Water District (CMWD) has prepared this EIR for the Calleguas Municipal Water District-Las Virgenes Municipal Water District Interconnection Project.

In accordance with Section 15121 of the State 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..."*

The subject project would be implemented by both CMWD and the Las Virgenes Municipal Water District (LVMWD), the project proponents. However, CMWD and LVMWD have entered into an Interconnection Agreement which specifies that CMWD will be the lead agency under CEQA. As defined by Section 15367 of the State CEQA Guidelines, the lead agency is "the public agency which has the principal responsibility for carrying out or approving a project which may have a significant impact on the environment."

1.2 LEAD AGENCY

Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, California 91360

Contact: Eric Bergh (805) 579-7128

1.3 PROJECT BACKGROUND

1.3.1 Summary of Existing CMWD Operations

CMWD is an independent special district that was formed by the voters of southern Ventura County in 1953 for the purpose of providing a safe, reliable water supply. Named for the watershed in which it is located, CMWD is a public agency established under the Municipal Water District Act of 1911. It is governed by a five-member board of directors elected by voters to represent each of the five geographic divisions within the CMWD service area.

In 1960, CMWD became a member agency of the Metropolitan Water District of Southern California (MWD), which provides wholesale water from the Colorado River via the Colorado Aqueduct and from northern California via the California State Water Project (SWP). The SWP is comprised of more than 700 miles of aqueducts, tunnels, siphons, and pipelines as well as 34 storage facilities, 30 dams, 23 pumping plants, and 9 hydroelectric power generation plants, which transport surface water from the Clifton Court Forebay in the Sacramento-San Joaquin Delta down to Lake Perris, the SWP's southernmost reservoir.

Under normal operating conditions, CMWD receives MWD water brought south by the SWP and treated at the Jensen Treatment Plant in Granada Hills. Water from MWD that is not immediately distributed to purveyors is stored either at 10,000 acre-foot Lake Bard located in Thousand Oaks or at CMWD's Las Posas Aquifer Storage and Recovery Wellfield. When water is drawn from Lake Bard it is treated at the Lake Bard Water Filtration Plant. Water pumped from the Las Posas Basin is disinfected at the wellfield before entering the CMWD system.

Approximately three-quarters of Ventura County residents (roughly 660,000 people) rely on CMWD for all or part of their water. CMWD distributes high quality drinking water on a wholesale basis to 19 cities, local water agencies, and investor-owned and mutual water companies throughout southeast Ventura County. These retail purveyors receive water through 140 miles of large-diameter pipelines operated and maintained by CMWD. In turn, these purveyors deliver water to area residents, businesses, and agricultural customers. Only a small portion of the water delivered by CMWD (approximately 5 percent) is used for agricultural purposes. Agricultural demands are generally met by other agencies or private entities using untreated surface water, recycled wastewater, and groundwater from various basins underlying the area.

1.3.2 Summary of Existing LVMWD Operations

Formed in 1958, LVMWD is a municipal water district organized and operating pursuant to California Water Code Sections 71000 *et seq*. A Board of Directors elected by the District for four-year term governs LVMWD. LVMWD provides potable water, wastewater treatment, recycled water and biosolids composting to more than 70,000 people.

The LVMWD service area comprises a 122-square mile area in western Los Angeles County, including the incorporated cities of Agoura Hills, Calabasas, Hidden Hills, and Westlake Village as well as unincorporated portions of Los Angeles County. LVMWD's potable water is provided almost entirely through wholesale purchases from MWD. The SWP water is treated at Jensen Filtration Plant prior to delivery to LVMWD. LVMWD typically serves approximately 25,000 acre-feet of potable water annually. The potable water system includes 25 tanks, 24 pumping stations, 394 miles of main lines, the 10,000 acre-foot Las Virgenes Reservoir, and the Westlake Filtration Plant, capable of producing 18 million gallons of water a day.

LVMWD owns and operates the Las Virgenes Reservoir, located just south of Westlake Village. The Las Virgenes Reservoir is filled with imported water and is withdrawn and replenished as needed. In low demand season, LVMWD puts water into the reservoir, while in high demand season LVMWD draws upon the reservoir to meet demands. In addition to serving as a seasonal storage facility, the reservoir also provides emergency storage capacity that can be used during imported water outages. Following a major earthquake that disrupts imported water delivery from MWD, the Las Virgenes Reservoir would be the only local supply within LVMWD's service area.

LVMWD through a Joint Powers Agreement with Triunfo Water and Sanitation District also operates a municipal wastewater collection system and treatment plant (Tapia Water Reclamation Facility) and distributes recycled water. The system begins at the Tapia Water Reclamation Facility, where wastewater is treated to a high level, allowing it to be distributed for non-potable uses such as landscape irrigation and various commercial uses. The JPA also owns and operates a distribution system, consisting of pipelines, pump stations, tanks and reservoirs, and associated appurtenances to deliver the recycled water to areas of Los Angeles and Ventura counties. The JPA has proposed the Pure Water Project which would take surplus recycled water and process it through an advanced treatment facility; then store it at Las Virgenes Reservoir for subsequent additional treatment and ultimately delivery as drinking water.

1.3.3 Project Purpose and Need

Both CMWD and LVMWD own and operate potable water systems largely dependent on imported water supply from MWD. Both agencies are also vulnerable to supply outages that can adversely impact their ability to deliver potable water to their respective customers. To improve water reliability, CMWD and LVMWD propose to interconnect their systems.

The project is of mutual benefit and would improve system reliability. For both agencies, the interconnection is considered a cost-effective means of receiving potable water for their customers, if either agency experiences either a complete or partial supply outage not significantly affecting the supply of the other agency. Additionally, the interconnection would facilitate LVMWD's filling of their Westlake Reservoir during the winter months. The project would also enable LVMWD to expand recycled water service within its service area through construction of new pipeline laterals and service connections.

1.4 PROJECT OBJECTIVES

Section 15124(b) of the State CEQA Guidelines states that the project description shall contain "a statement of the objectives sought by the proposed project" and that "the statement of objectives should include the underlying purpose of the project." The objectives of the project proponent facilitate development and evaluation of alternatives, and preparation of findings. The objectives of the proposed project are:

- Improve the reliability and flexibility of both CMWD and LVMWD potable water storage and distribution systems.
- Improve the ability of both CMWD and LVMWD to provide potable water to existing customers during periods of reduced imported water supply.
- Reduce the risk for potential water shortages associated with natural disasters and required system maintenance.

1.5 SCOPE AND CONTENT

1.5.1 Notice of Preparation

Based on an Initial Study prepared for the proposed project (see Appendix A), an EIR was deemed necessary. A Notice of Preparation (NOP) was prepared and distributed with the Initial Study to responsible and trustee agencies, interested members of the public, and the State Clearinghouse on October 31, 2018. Seven response letters to the NOP were received (see Appendix B):

- **Katy Sanchez, Native American Heritage Commission**. In a letter dated November 20, 2018, Ms. Sanchez described the process and requirements for tribal consultation and provided recommendations for cultural resources assessments.
- **Pete Cooke, California Department of Toxic Substances Control**. In a letter dated November 27, 2018, Mr. Cooke identified requirements for the Draft EIR, including identifying any current or past releases of hazardous wastes/substances at the project site, identifying and assessing any contaminated sites in the project area, identifying the mechanism to initiate investigation and/or remediation of contaminated sites, and addressing the potential for discovery of soil contamination during construction.
- **Jeffrey Specter, City of Thousand Oaks**. In a letter dated November 28, 2018, Mr. Specter requested that jurisdictional and land use information regarding project components within the City be corrected.
- **Ping Chang, Southern California Association of Governments (SCAG)**. In a letter dated November 30, 2018, Ping Chang indicated the proposed project should demonstrate consistency with the Regional Transportation Plan/Sustainable Community Strategies which was adopted by SCAG in 2016.
- **Miya Edmonson, California Department of Transportation (Caltrans)**. In a letter dated November 30, 2018, Ms. Edmonson indicated that transportation of heavy construction equipment may require Caltrans transportation permits, and the proposed project should be designed to discharge clean run-off water, and elements to capture storm water should be considered including permeable pavement, landscaping, and trees.
- **Erinn Wilson, California Department of Fish and Wildlife (CDFW)**. In a letter dated December 7, 2018, Ms. Wilson provided recommendations to assess and mitigate impacts to biological resources, including oak trees, least Bell's vireo, State-listed species, wetlands, sensitive plant communities, nesting birds, and wildlife movement.
- **Toan Duong, Los Angeles County Public Works (LACPW)**. In an e-mail dated December 12, 2018, Toan Duong indicated the proposed pipeline would cross several storm drains, and a permit would be required for any new connections or impacts to LACPW storm drain or sewer facilities.

1.5.2 EIR Scope

This EIR addresses the following issue areas identified based on the findings of the Initial Study and review of responses to the NOP that warrant further study and analysis:

- Air quality and greenhouse gas emissions.
- Water resources.
- Biological resources.
- Noise and vibration.
- Cultural resources.
- Hazards and hazardous materials.
- Aesthetics.

Effects not found to be significant are identified in the attached Initial Study and are discussed in Section 4.8 of this EIR. The EIR identifies any significant environmental impacts, and recommends technically feasible mitigation measures, where possible, that would reduce or eliminate significant environmental effects.

The Alternatives section of this EIR (Section 5.0) is prepared in accordance with Section 15126.6 of the State CEQA Guidelines. The purpose of this analysis is to determine whether there is a feasible way to achieve the basic objectives of the project, while reducing environmental impacts (Public Resources Code, § 21002.1.). CEQA also requires the EIR to identify any alternatives that were considered by the Lead Agency but were rejected as infeasible, including a brief explanation of the underlying reasons for that determination. The EIR also includes an analysis of potential impacts associated with the No Project Alternative. The merits of the various alternatives that would meet most of the basic project objectives are discussed in Section 5.3. Section 5.4 discusses alternatives considered but determined to be infeasible and identifies the "environmentally superior" alternative.

The level of detail contained throughout this EIR is consistent with the requirements of CEQA and recent court decisions. The State CEQA Guidelines provide the standard by which the adequacy of this EIR is determined. The Guidelines state:

> *"An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure." [emphasis added] (Section 15151).*

1.6 RESPONSIBLE AND TRUSTEE AGENCIES

The State CEQA Guidelines define "lead", "responsible", and "trustee" agencies. CMWD and LVMWD are public agencies that have the principal responsibility for carrying out and approving the proposed project. Based on the Interconnection Agreement between CMWD and LVMWD, CMWD is the lead agency. As defined in Section 15381 of the State CEQA Guidelines, responsible agencies are public agencies with discretionary approval power over the project. As a water project, the proposed project is exempt from local building and zoning ordinances under Section 53091 of the California Government Code. The proposed project would not require any discretionary permits; therefore, there are no responsible agencies for this project.

As defined in Section 15386 of the State CEQA Guidelines, trustee agencies are State agencies having jurisdiction by law over the natural resources affected by a project. Based upon this definition, the California Department of Fish and Wildlife, which has jurisdiction over biological resources that may be impacted by the proposed project, is a trustee agency.

1.7 MITIGATION MONITORING PLAN

Pursuant to California Resources Code Section 21081.6, a Mitigation Monitoring Plan will be developed to ensure the implementation of mitigation measures necessary to reduce or eliminate identified significant impacts. The Plan, if one is necessary, will be adopted by the CMWD Board of Directors in conjunction with the findings required under CEQA, when the Board certifies the EIR and approves the project.

1.8 PROJECT APPROVALS AND PERMITS

Project implementation may require CMWD to obtain permits and/or other forms of approval or regulatory review from Federal, State and local agencies. These agencies may include, but are not limited to, the following:

1.8.1 State Agencies

- State Water Resources Control Board - National Pollution Discharge Elimination System (NPDES) General Construction Stormwater Permit.
- State Water Resources Control Board Division of Drinking Water Amendment to Domestic Water Supply Permit.

1.8.2 Local Agencies

- City of Thousand Oaks Public Works Department – Roadway Encroachment Permit (pipeline installation).
- County of Ventura Public Works Department – Roadway Encroachment Permit (pipeline installation).
- Ventura County Watershed Protection District – Encroachment Permit (storm drain crossing).
- City of Westlake Village Public Works Department – Roadway Encroachment Permit (pipeline installation).

1.9 CERTIFICATION OF THE FINAL EIR

The Draft EIR will be circulated for review by public agencies and interested members of the public for a minimum 45-day period. CMWD will prepare responses to all comments on the adequacy of the Draft EIR received during this period. The Final EIR will be comprised of the Draft EIR (revised as needed to address comments), comments, and responses to comments received during circulation of the Draft EIR. At the time the project is approved, the mandated CEQA Findings and a Mitigation Monitoring and Reporting Program will be adopted. A draft Mitigation Monitoring and Reporting Program is provided as Appendix C. CMWD is the lead agency for the EIR and has the responsibility of determining the adequacy of the EIR pursuant to CEQA.

2.0 SUMMARY

This section has been prepared in accordance with the Section 15123 of the State CEQA Guidelines, and is divided into three components. The first summarizes the characteristics of the proposed project; the second identifies potential environmental impacts, mitigation measures, and residual impacts; and the third component is a summary and comparison of the alternatives considered.

2.1 PROJECT SYNOPSIS

2.1.1 Lead Agency

Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, California 91360

Contact: Eric Bergh (805) 579-7128

2.1.2 Location

The proposed project includes several components, mostly located within or near Lindero Canyon Road between Thousand Oaks Boulevard and Kanan Road in eastern Ventura County and western Los Angeles County (see Figure 3-1). The proposed North interconnection pipeline would be located within the public right-of-way of roadways in the City of Thousand Oaks (see Figure 3-2). The South segment of the interconnection pipeline (excluding the tie-in to the pump station [PS] and pressure regulating station [PRS]) and the Yerba Buena recycled water pipeline extension would be located within the Lindero Canyon Road public right-of-way in the City of Westlake Village (see Figure 3-3).

The proposed PS/PRS site is located in unincorporated Ventura County on assessor's parcel number (APN) 800-0-180-285 within the Oak Park Planning Area (see Figures 3-2 and 3-5). The PS/PRS site has a land use designation of public open space (POS) in the Oak Park Area Plan, which is zoned OS-40 ac (open space, 40-acre minimum parcel size). The western portion of the proposed permanent access road and pipeline easement (described in Section 2.1.3.3) would be located on APN 800-0-180-295 within the City of Thousand Oaks which is zoned RPD-1.5U-SP (residential planned development, 1.5 dwellings per net acre, specific plan).

The Canyon Oaks Park Lateral recycled water pipeline alignment is located within the City of Westlake Village in an area zoned OS (open space). The Lindero Pump Station No. 1 is located in the City of Thousand Oaks in an area zoned PL (public lands).

2.1.3 Project Description

The proposed project is comprised of the following primary components:

- North interconnection pipeline with new turn-out (CMWD).
- South interconnection pipeline (LVMWD).
- Co-located PS and PRS (combined PS/PRS) (CMWD/LVMWD).
- Lindero Pump Station No. 1 reverse flow valve upgrade (CMWD).

- Up to four new air/vacuum relief valves on the Lindero Feeder No. 2 pipeline (CMWD).
- Yerba Buena recycled water pipeline extension (LVMWD).
- Canyon Oaks Park Lateral recycled water pipeline (LVMWD).

2.1.3.1 North Interconnection Pipeline

This project component consists of the pipeline segment between the connection with CMWD's existing Lindero Feeder No. 2 pipeline located at the Kanan Road/Lindero Canyon Road intersection and the proposed PS/PRS site (see Figures 3-2 and 3-3). This alignment requires the construction of a new turn-out (meter station and control valve vault) at southeast corner of this intersection and a change in ownership of the Lindero Feeder No. 2 segment between Falling Star Avenue and Kanan Road from Oak Park Water Service back to CMWD. The proposed North interconnection pipeline would be buried under the traffic lanes of Lindero Canyon Road northward from the PS/PRS site to Kanan Road.

The North interconnection pipeline would be composed of approximately 6,300 linear feet of 30-inch inside diameter cement mortar-lined and coated welded steel pipe. Blow-offs would be provided at low points to enable draining of the pipeline when necessary and air/vacuum relief valves would be provided to allow for safe draining and filling of the pipeline and to protect the pipeline from damage from surge (water hammer). Isolation valves would be provided at the connection with Lindero Feeder No. 2, at the connection pipelines to the new turn-out, and at the PS/PRS site. Pipeline access manholes would be provided about every 1,000 feet along the alignment.

2.1.3.2 South Interconnection Pipeline

This project component consists of the pipeline segment between LVMWD's system (at the Thousand Oaks Boulevard/Lindero Canyon Road intersection) and the proposed PS/PRS site (see Figure 3-4). The proposed South interconnection pipeline would be installed under the southbound lanes of Lindero Canyon Road within the City of Westlake Village, southward from the PS/PRS site to Thousand Oaks Boulevard.

The South interconnection pipeline would be composed of approximately 5,000 linear feet of 30-inch inside diameter cement mortar-lined and coated welded steel pipe. Blow-offs would be provided at low points to enable draining of the pipeline when needed and air/vacuum relief valves would be provided to allow for safe draining and filling of the pipeline and to protect the pipeline from damage from surge (water hammer). Isolation valves would be provided at the connection with existing potable water pipelines at Thousand Oaks Boulevard and Lindero Canyon Road and within the proposed PS/PRS site. LVMWD would also provide the City of Westlake Village the opportunity to install a new fiber optics conduit and associated appurtenances in the trench with the new pipeline.

2.1.3.3 Pump Station (PS) and Pressure Regulating Station (PRS)

The interconnection PS, PRS, and related facilities would be constructed on a single site. A proposed site has been identified just north of the Ventura County boundary and east of Lindero Canyon Road based on distance from residences/schools, existing easement encumbrances, sufficient space for the facility, constructability requirements, and geologic characteristics.

The 0.77-acre PS/PRS site would be purchased in fee from the Rancho Simi Recreation and Park District. CMWD would also obtain a 0.55-acre permanent access and pipeline easement immediately west of the PS/PRS site to accommodate a proposed access road, pipelines, and utility services. The footprint of the PS, PRS, and related facilities would cover approximately 17 percent of the 0.77-acre PS/PRS site (see Figure 3-6). The PS/PRS site would include:

- Pumps, electrical equipment, metering equipment, and surge control equipment located within underground vaults.
- Two parallel pressure regulating control valves located in an underground concrete vault to provide the estimated range of flow rates (6.2 cubic feet per second [cfs] to 30 cfs) within the expected range of system pressures.
- Southern California Edison (SCE) electrical service equipment located within an underground concrete vault (if allowed by SCE).

An unpaved access road would be provided from Lindero Canyon Road. A permanent standby electrical generator is not proposed; however, sufficient room at the site would be provided should a mobile generator be needed. Once construction has been completed, the only visible surface features would be manholes, hatches, air vents, and possibly a small antenna.

2.1.3.4 Lindero Pump Station No. 1 Reverse Flow Valve Upgrade

The proposed project includes upgrades to CMWD's existing Lindero Pump Station No. 1 reverse flow valve to facilitate conveying potable water from CMWD's Oak Park region to its Conejo Valley region during operation of the proposed interconnection. Lindero Pump Station No. 1 is located approximately 650 feet southeast of the Erbes Road/Avenida De Las Flores intersection in the City of Thousand Oaks (see Figure 3-1). The proposed upgrade is comprised of one upsized control valve and related piping improvements.

2.1.3.5 Air/Vacuum Relief Valves for the Lindero Feeder No. 2 Pipeline

The proposed project includes installation of up to four new air/vacuum relief valves for CMWD's existing Lindero Feeder No. 2 pipeline to help protect CMWD's existing pipelines and the proposed North segment of the interconnection pipeline from potential damage resulting from surge. Depending on the results of a surge analysis to be conducted as part of development of the final engineering design, the project may include one or more of these new air/vacuum relief valves, one or more surge tanks at the pump station (described in Section 3.2.3), or a combination of both.

The potential locations for the new air/vacuum relief valves are within existing CMWD permanent easements at the North Ranch Country Club golf course (see Figure 3-4). To the extent feasible, the new air/vacuum relief valves would be located in areas that would not conflict with golfing activities. The proposed air/vacuum valves would be enclosed within a small metal cabinet mounted on a concrete pad.

2.1.3.6 Yerba Buena Recycled Water Pipeline Extension

Currently, the Yerba Buena Elementary School utilizes recycled water provided by LVMWD for landscape irrigation. LVMWD proposes to install approximately 1,300 linear feet of buried 6-inch diameter polyvinyl chloride (PVC) pipe under the northbound lanes of Lindero Canyon Road (see Figure 3-3). This pipeline would replace the existing service lateral to the Yerba Buena Elementary School and formalize their connection with a new meter location closer to the school campus.

2.1.3.7 Canyon Oaks Park Lateral Recycled Water Pipeline

LVMWD proposes to install up to 800 linear feet of buried 4-inch diameter PVC pipe to connect the existing recycled water pipeline along Lindero Canyon Road to Canyon Oaks Park to provide recycled water for irrigation purposes (see Figure 3-3). Currently, the park is irrigated with potable water.

2.2 ALTERNATIVES

The selection of alternatives is consistent with Section 15126.6 of the State CEQA Guidelines and focuses on those that would meet most of project's basic objectives, avoid or reduce environmental impacts, and provide a reasonable range of alternatives for analysis and comparison.

The selection of alternatives is limited by the fact that the project would link two existing water systems with discrete service areas and distribution system end points. Therefore, alternative pipeline alignments and alternative PS/PRS sites are very limited. Although utility conflicts may occur, pipeline alignments within a public right-of-way are preferred as they do not require acquisition of easements on private property which can be a lengthy and costly process. In addition, pipeline installation outside public rights-of-way is more likely to result in land use conflicts and environmental impacts. Therefore, pipeline alternatives crossing undeveloped areas were not considered in this analysis. Lindero Canyon Road is the only public right-of-way that could be used to link the two systems. Therefore, pipeline alignment alternatives are based on Lindero Canyon Road and intersecting streets.

The selection of alternative pump station sites is also limited by the existing layout of the CMWD and LVMWD potable water distribution systems. Therefore, the pump station site needs to be located in the vicinity of the water distribution system end points. A facility siting study was prepared by Phoenix Civil Engineering (2016), which identified four pump station sites based on four factors:

1. Site is vacant (no structures or active agriculture).
2. Large enough to accommodate the pump station, pressure regulating station, and related components.

3. Relatively level.
4. Sufficiently distant from schools and residences to minimize construction and operational noise impacts.

Site 2 identified in the facility siting study was selected as the proposed PS/PRS site. The other three sites are located within 1,220 feet of the proposed PS/PRS site and are considered as alternative pump station sites.

The draft Preliminary Design Report (PDR) prepared by Phoenix Civil Engineering in January 2018 recommended a standard above-ground pump station housed in a masonry building. A conceptual architectural plan and landscaping plan were then developed to address aesthetic considerations. Following completion of the draft PDR, CMWD staff attended a series of meetings to present the project to the Rancho Simi Recreation and Park District (RSRPD) Oak Park Committee, RSRPD Board of Directors, and Oak Park Municipal Advisory Council (MAC). Based on feedback at these meetings, CMWD staff determined it was necessary to evaluate the feasibility of constructing the PS and PRS underground (similar to the CMWD's Lake Sherwood Pump Station). The proposed project is underground pump station; therefore, an aboveground pump station is considered as an alternative.

2.2.1 No Project Alternative

The purpose of describing and analyzing the No Project Alternative is to allow the decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. Under the No Project Alternative, none of the proposed facilities would be constructed.

The No Project Alternative does not meet the purpose and need of the project or any of the project objectives. In addition, the project benefits would not be realized, including reducing the potential for shortages of potable water to existing communities in the event of natural disasters.

2.2.2 North Interconnection Pipeline Alignment Alternatives

A pipeline alignment study was prepared for the project by Phoenix Civil Engineering (2019) which identified several alignments for the North interconnection pipeline, including the proposed project. Three other pipeline alignments (see Figure 5-1) are utilized as alternatives for the purposes of this EIR:

- Alternative Alignment A leaves the proposed alignment along Lindero Canyon Road at Lakeview Canyon Road, extends west to Falling Star Avenue where it turns north and ends at the alternative tie-in to Lindero Feeder No. 2 at Kanan Road.

- Alternative Alignment B leaves the proposed alignment along Lindero Canyon Road near the North Ranch Pavilions driveway, extends west and northwest through parking lots, then extends northeast along Falling Star Avenue and ends at a tie-in to Lindero Feeder No. 2 at Kanan Road. This alignment may require nighttime pipeline installation to reduce disruption of vehicle traffic, parking, and access to businesses within the North Ranch Pavilions shopping center.
- Alternative Alignment C extends from the proposed alignment west on Kanan Road to connect to Lindero Feeder No. 2 at the Kanan Road/Falling Star Avenue intersection.

An alternative alignment was also considered through the greenbelt area bordering the North Ranch Pavilions shopping center on the east (Lindero Canyon Road side); however, this alignment was determined to be infeasible due to restrictions in use due to Southern California Edison utility easements that prevent a water pipeline from being installed in this area.

An alternative pipeline alignment located west of Lindero Canyon Road between Rockfield Street and Lakeview Canyon Road was initially considered within an undeveloped area underneath high-voltage power lines (greenbelt alternative). Due to required clearance distance between the power lines and construction equipment and underground utility congestion, this alternative was determined to be infeasible and not considered further.

2.2.3 Pump Station Site Alternatives

Three alternative pump station locations are utilized as alternatives for the purposes of this EIR:

- Pump Station Site A: located in Ventura County immediately east of Lindero Canyon Road and approximately 200 feet north of the proposed PS/PRS site on parcel numbers 800-0-180-285 and -295.
- Pump Station Site B: located in the City of Westlake Village immediately west of Lindero Canyon Road and approximately 350 feet southwest of the proposed PS/PRS site on parcel number 2056-002-900.
- Pump Station Site C: located in the City of Westlake Village immediately east of Lindero Canyon Road and approximately 1,000 feet south of the proposed PS/PRS site on parcel number 2056-002-900.

Each of these pump station sites would be served by the North and South interconnection pipelines as shown in Figure 3-3 and 3-4. However, the lengths of the pipelines would be different to suit the changed location of connection to the pump station.

2.2.4 Aboveground Pump Station Alternative

This alternative is based on preliminary designs developed in 2017, in which the pumps would be housed in a masonry building and pressure regulating control valves would be located outside the building. The building would consist of three rooms: one for the pumps, one for the electrical equipment, and a small restroom for staff working at this remote facility. The building would be approximately 70 feet by 40 feet and 20 to 30 feet tall and be constructed of concrete masonry block in the Mediterranean architectural style with a stucco finish, arches, and wrought-iron style decorative elements. The 103 foot by 194 foot facility (pump building, pressure regulating control valves, fire department access, flow meters) would be surrounded by fencing and landscaping.

2.3 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Tables 2-1 and 2-2 summarize the identified significant and less than significant environmental impacts for each resource/issue area analyzed in the EIR and proposed mitigation measures. No significant unavoidable impacts were identified, mitigation measures provided would reduce all impacts to less than significant levels.

2.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The No Project Alternative is considered environmentally superior due its lesser impacts overall (see Table 5-1). If the No Project Alternative is considered environmentally superior, Section 15126.6(e)(2) of the State CEQA Guidelines requires identification of the environmentally superior alternative among the other alternatives.

Based on the impact scores presented in Table 5-1, the proposed project would have the same or lesser impacts as any of the alternatives analyzed. Therefore, the proposed project is considered the environmentally superior project.

Table 2-1. Summary of Project-Specific Significant but Mitigable Environmental Impacts and Mitigation Measures

DESCRIPTION OF IMPACT	MITIGATION MEASURES
Impact AQ-1: Construction activities associated with implementation of the proposed project would result in air pollutant emissions that may affect regional or local air quality – significant, but mitigable. Construction of new facilities would generate air pollutant emissions, including exhaust emissions from heavy equipment, heavy-duty trucks and worker vehicles. In addition, earthwork (excavation, trenching, stockpiling, loading earth material, etc.), vehicle operation on unpaved surfaces, and wind erosion of exposed soil and soil stockpiles would generate fugitive dust. Peak day construction PM_{10} emissions within Los Angeles County (SCAB) would exceed the applicable Local Significance Threshold and are considered significant. The portion of the project within Los Angeles County is subject to SCAQMD Rule 403. The portion of the project within Ventura County is subject to relevant VCAPCD requirements. Best available control measures from both jurisdictions to minimize fugitive dust have been provided as mitigation measures.	**MM AQ-1:** Applicable construction mitigation measures listed in Section 7.4 of the VCAPCD Air Quality Assessment Guidelines and applicable Best Available Control Measures listed in SCAQMD Rule 403 would be implemented.
Impact BIO-1: Construction of the PS and PRS would occur adjacent to aquatic habitat in Lindero Creek that may support western pond turtle and two-striped garter snake – significant, but mitigable. The suitability of Lindero Creek to support these species is reduced by development of the upper watershed with residential and golf course land uses, channelization of the lower reach (Lake Lindero Country Club), surrounding residential development and roadway culverts. In addition, tracks of potential predators of these species (raccoon, coyote) were commonly observed in the streambed of Lindero Creek during the field survey. Western pond turtle and two-striped garter snake have not been reported from the Lindero Canyon watershed and were not observed during the field survey. However, focused surveys for these two species were not conducted. The proposed temporary construction easement is located immediately west of Lindero Creek, and construction activities may adversely affect these species (if present) through inadvertent mortality.	**MM BIO-1: Aquatic Reptile Surveys and Exclusion Measures**. Focused surveys for western pond turtle and two-striped garter snake shall be conducted in Lindero Creek adjacent to the PS/PRS site no more than seven days prior to any earthwork or vegetation removal. If any of these species are detected, exclusion fencing (Ertec special-status species fencing, or equivalent) shall be installed along the eastern boundary of the temporary construction easement area near Lindero Creek.

Table 2-1. Continued

DESCRIPTION OF IMPACT	MITIGATION MEASURES
Impact BIO-2: Pipeline installation and other project-related construction activities may disrupt breeding of migratory birds – significant, but mitigable. Vegetation (including landscaping) removal would occur at the PS/PRS site, air/vacuum relief valve sites, and along the Canyon Oaks Park Lateral pipeline alignment. Vegetation removal, noise, dust, and heavy equipment activity associated with project construction 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 Migratory Bird Treaty Act and Sections 3503 and 3513 of the California Fish and Game Code and are considered potentially significant.	**MM BIO-2: Breeding Migratory Bird Avoidance Measures**. Vegetation removal and pipeline installation and related construction activity adjacent to tree windrows or native vegetation 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 earlier than 14 days and no later 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) shall be established around the nest. The buffer area may be reduced if nest monitoring by a qualified biologist indicates construction activities are not adversely affecting nesting success. No construction activity shall occur within the buffer area until a biologist determines that the nest is abandoned, or fledglings are adequately independent from the adults.
Impact N-1: Noise generated by project construction activities may adversely affect noise-sensitive receptors – significant, but mitigable. 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 based on potential impacts to noise-sensitive receptors as defined in the Ventura County General Plan noise policies. Other affected cities do not have construction-related noise standards other than municipal code prohibitions for nighttime construction work. Noise modeling indicates Ventura County General Plan construction noise policy thresholds would not be exceeded. Nighttime construction work would be very limited in duration and scope, but would violate the municipal codes of the City of Thousand Oaks and the City of Westlake Village. Therefore, construction noise impacts are considered potentially significant.	**MM N-1**. The project shall comply with applicable municipal codes restricting nighttime construction work: • Obtain a permit for nighttime (after 7 p.m.) pipeline tie-in work to the Lindero Feeder No. 2 from the City of Thousand Oaks Public Works Director in accordance with Section 8-11.01 of the City's Municipal Code. • Obtain written permission from the Westlake Village City Manager for nighttime (after 7 p.m.) pipeline tie-in work to the LVMWD potable water system in accordance with Section 4.4.050(D) of the City's Municipal Code.

Table 2-1. Continued

DESCRIPTION OF IMPACT	MITIGATION MEASURES
Impact CR-1: Project-related excavation has the potential to adversely affect unreported archeological resources – significant, but mitigable. Based on the cultural resources records search and previous archeological field surveys, no previously recorded cultural resources are located within or immediately adjacent to proposed pipeline alignments or facility sites. The PS/PRS site is located near a stream, which are commonly sites of prehistoric occupation by Native Americans. An isolated prehistoric artifact (P-19-100211) was recorded within 260 feet of the PS/PRS site. Construction of the PS, PRS, and related facilities would require extensive excavation and cultural resources (isolated artifacts, intact deposits, burials) may be encountered. Impacts are unknown but potentially significant.	**MM CR-1**. The following mitigation measures are consistent with the guidelines of the State Office of Historic Preservation and shall be implemented during project construction. • A worker cultural resources sensitivity program shall be implemented for all project components. Prior to any ground-disturbing activity, a qualified archeologist shall provide an initial sensitivity training session to all affected CMWD and LVMWD staff, 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 sensitivity program shall address: ✓ The cultural sensitivity of the affected 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 non-compliance. • Prior to any ground disturbance at the PS/PRS site, an Extended Phase I Survey shall be completed in all areas of planned excavation and consist of shovel test probes and auger probes to determine whether or not intact subsurface cultural deposits are present. A qualified archaeologist shall oversee the Extended Phase I Survey and a Native American representative shall monitor all excavation. ✓ If intact subsurface cultural deposits are discovered during the Extended Phase I Survey, Phase II subsurface testing and evaluation shall be performed to determine the vertical and horizontal extent and composition of cultural deposits. ✓ If intact subsurface cultural deposits are determined to be significant after Phase II testing, project redesign or Phase III Data Recovery mitigation will be required. ✓ If intact subsurface cultural deposits are not found during the Extended Phase I Survey, no further work or mitigation is required at the PS/PRS site. • 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. CMWD and LVMWD 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 (NAHC).

Table 2-1. Continued

DESCRIPTION OF IMPACT	MITIGATION MEASURES
Impact HAZ-2: Excavation associated with construction of the PS and PRS may expose the public and environment to contaminated soil – significant, but mitigable. Installation of the proposed below-ground PS, PRS, and related components would require extensive excavation in an area adjacent to a previously contaminated site (Yerba Buena Elementary School site) and may result in discovery of soil containing pesticides and/or arsenic associated with historic agricultural land use. Contaminated soil may result in exposure of the public (adjacent residential areas and Wistful Vista Open Space) and the environment (surface water and wildlife habitat in adjacent Lindero Creek) to hazardous materials.	**MM HAZ-1**: All areas proposed for excavation at the PS/PRS site shall be tested and evaluated to identify soil contamination. A Site Evaluation Plan shall be developed and implemented prior to any soil disturbance. The Site Evaluation Plan shall include as a minimum: • Identification of soil sampling locations to encompass the entire footprint of proposed facilities. • Soil testing for organochlorine pesticides, petroleum hydrocarbons, and arsenic to the depth of probable historic agricultural cultivation. • Identification of soil contamination screening values. All soil with contamination exceeding California Human Health Screening Levels (or other approved screening levels) shall be segregated, stockpiled and covered as they are excavated. Contaminated soil shall be removed from the PS/PRS site to an appropriate solid waste disposal facility prior to completion of construction. Soil testing shall be coordinated with archeological testing (see Section 4.5.4.1) to avoid disturbance of unreported cultural resources. Therefore, any boring or excavation associated with soil testing shall be conducted after archeological testing indicates the lack of any cultural deposits or following Phase II subsurface testing and Phase III data recovery, as appropriate.

Table 2-2. Summary of Project-Specific Less than Significant Environmental Impacts

DESCRIPTION OF IMPACT
Impact AQ-2: Project maintenance activities would generate motor vehicle trips and the associated air pollutant emissions – less than significant. Air pollutant emissions generated by operation of the project would be limited to a few vehicle trips per month to maintain the PS/PRS. Based on a peak day of two light-duty truck round trips, estimated vehicle emissions are 0.02 pounds NO_x, <0.01 pounds ROC, 0.15 pounds CO, and 0.01 pounds PM_{10}. These emissions would not exceed the VCAPCD or SCAQMD thresholds and are considered less than significant.
Impact AQ-3: Construction activities associated with implementation of the proposed project would result in greenhouse gas emissions that may affect global climate change – less than significant. The proposed project would result in short-term GHG emissions associated with construction activities (see Table 4.1-5). Emissions of GHG from construction-related sources were estimated using CARB's EMFAC 2014 Model and emission factors provided in the California Climate Action Registry General Reporting Protocol. Estimated emissions of GHG associated with construction are 1,870.8 $MTCO_2E$, and 62.4 $MTCO_2E$ 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 for this project, greenhouse gas emissions are considered a less than significant impact to global climate change.
Impact AQ-4: Electrical consumption of the proposed PS/PRS would result in greenhouse gas emissions associated with power generation and may affect global climate change – less than significant. The proposed project would result in long-term GHG emissions associated with generating electrical power to operate the proposed PS/PRS. Based on an estimated power consumption of 1,000 KW-hr, emissions factors for Southern California Edison provided by CARB CalEEMod model, and 96 hours per year operation for testing and maintenance, annual GHG emissions would be 30.7 $MTCO_2E$. These emissions would be 93.1 $MTCO_2E$ when combined with amortized construction GHG emissions. As these emissions are less than the significance threshold for this project, greenhouse gas emissions are considered a less than significant impact to global climate change.
Impact WR-1: Construction activities associated with implementation of the proposed project may result in surface water contamination due to storm water run-off from construction sites – less than significant. Storm water run-off from project construction sites may transport sediment and pollutants to nearby storm drains and Lindero Creek and degrade water quality. Storm water pollution prevention plans would be developed by qualified practitioners and implemented for the proposed project. The plans would include appropriate erosion control measures (e.g., mulching, hydroseeding, soil binders, geotextiles), sediment controls (e.g., fiber rolls, street sweeping, storm drain inlet controls), and wind erosion controls. Impacts would be less than significant with implementation of a project-specific storm water pollution prevention plan because this would minimize storm water run-off and reduce the potential for water quality degradation.
Impact WR-2: Potable water to be used by the proposed project could affect local water supplies – less than significant. The proposed project would utilize potable water for construction (soil compaction, concrete/slurry mixing, dust control). Construction-related water use would average about several thousand gallons per day over the roughly two-year construction period. This daily usage is equivalent to the water use of about 10 persons, based on 210 gallons per day per capita in Thousand Oaks (Kennedy/Jenks Consultants, 2016). The impact of construction-related water use is considered a less than significant impact to local water supplies as it would represent a comparable water use to less than 0.01 percent of the current population of the City of Thousand Oaks.
Impact N-2: Noise generated by operation of the PS and PRS would not result in a perceptible increase in existing noise levels at nearby noise-sensitive receptors – less than significant. A noise study was conducted by Steve Rogers Acoustics (2019) to identify noise levels at noise-sensitive receptors generated by operation of the PS/PRS. Modeled operational noise levels are substantially below existing noise levels such that when added to existing noise levels, operational noise of the PS/PRS would not have a perceptible increase in noise levels at the nearest noise-sensitive receptor.

Table 2-2. Continued

DESCRIPTION OF IMPACT
Impact N-3: Vibration generated by the installation of the proposed pipeline and associated facilities may damage older structures or cause human annoyance – less than significant. Construction-related vibration was estimated using the Caltrans Transportation and Construction Vibration Guidance Manual. The estimated vibration level is a PPV of 0.060, based on operation of loaded heavy-duty trucks 30 feet from the structure. This value is slightly greater than the 0.04 PPV needed to be distinctly perceptible by humans, but much less than 0.1 PPV needed to be strongly perceptible to humans. The 0.060 PPV value is much less than 0.3 PPV which may cause damage to older residential structures. Therefore, the project-related increase in vibration associated with pipeline installation would not be significant.
Impact HAZ-1: Construction activities associated with the proposed project may result in inadvertent discharge of small quantities of hazardous materials – less than significant. During construction, small quantities of hazardous materials (e.g., fuel, lubricating oils, hydraulic fluid, engine coolant) would be used at project construction sites and transported to and from these sites. Small quantities of these substances could be accidentally released and result in soil contamination. However, hazardous materials handling procedures and worker safety procedures would be implemented as required by applicable regulations. Due to the small amounts of hazardous materials used during construction activities and the implementation of standard spill avoidance measures, potential impacts associated with use of hazardous materials for project construction purposes would be less than significant.
Impact HAZ-3: Construction of the PS, PRS and related components would occur in an area supporting flammable annual grasses and may increase risk of wildland fire – less than significant. Construction-related sources of ignition may include vehicle exhaust pipes, welders, grinders and related power tools. Vegetation within the PS/PRS site and construction easements would be removed as part of initial construction activities. In addition, a water truck would be used to reduce fugitive dust by wetting construction areas which would also reduce the potential for project-related fire ignition. Overall, the project-related increase in the risk of wildland fire to adjacent developed areas is considered less than significant.
Impact AES-1: The proposed PS and PRS may degrade the visual condition of the site in an area with a high level of visual sensitivity - less than significant. The proposed PS and PRS would be located below ground in concrete vaults with only manholes, access hatches, and air vents extending from a few inches to approximately one-foot above-ground (see Figure 4.7-1). In addition, a small antenna would be located at the PS/PRS site. These features would be located at finished grade about 12 feet lower in elevation than Lindero Canyon Road, which would limit the visibility of these features to a short segment of the northbound lane. The proposed PS/PRS would not be visible from Yerba Buena Elementary School due to an intervening vegetated berm located along the northern property boundary. Due to the low stature and scale of proposed improvements at the PR/PRS site, project-related degradation of the visual condition would be minor and considered a less than significant impact.
Impact AES-2: Above-ground components of the proposed buried turn-out may degrade the visual condition of this visually sensitive site - less than significant. The proposed new turn-out near the tie-in to the Lindero Feeder No. 2 would be located below ground in a concrete vault with only one manhole, one access hatch, two air vents, a control cabinet, and an electrical utility service meter pedestal visible (see Figure 4.7-2). The air vents (cylindrical structures with holes in Figure 4.7-2) would be surrounded by boulders similar to existing boulders at the site to partially conceal and reduce the prominence of these structures. The proposed control cabinet would be screened by landscape plantings. Due to the low stature and concealing boulders and landscaping, these above-ground features would not be noticeable to motorists on this scenic roadway (Kanan Road). Overall, the project-related degradation of the visual condition of this visually sensitive site would be minor and considered a less than significant impact.
Impact AES-3: Air/vacuum relief valve cabinets may degrade the visual condition of the North Ranch Country Club golf course - less than significant. Up to four above ground metal cabinets (up to two feet by three feet, four feet tall) would be located within the golf course but would be dispersed about 1,000 feet apart. Golfers are accustomed to seeing irrigation valves and controllers along the course, and the addition of four small cabinets is not anticipated to substantially alter the visual quality of the golf course. Therefore, aesthetics impacts are considered less than significant.

3.0 PROJECT DESCRIPTION

3.1 PROJECT LOCATION

The proposed project includes several components, mostly located within or near Lindero Canyon Road between Thousand Oaks Boulevard and Kanan Road in eastern Ventura County and western Los Angeles County (see Figure 3-1). The proposed North interconnection pipeline would be located within the public right-of-way of roadways in the City of Thousand Oaks (see Figure 3-2). The South segment of the interconnection pipeline (excluding the tie-in to the pump station [PS] and pressure regulating station [PRS]) and the Yerba Buena recycled water pipeline extension would be located within the Lindero Canyon Road public right-of-way in the City of Westlake Village (see Figure 3-3).

The proposed PS/PRS site is located in unincorporated Ventura County on assessor's parcel number (APN) 800-0-180-285 within the Oak Park Planning Area (see Figures 3-2 and 3-5). The PS/PRS site has a land use designation of public open space (POS) in the Oak Park Area Plan, which is zoned OS-40 ac (open space, 40-acre minimum parcel size). The western portion of the proposed permanent access road and pipeline easement (described in Section 3.2.3) would be located on APN 800-0-180-295 within the City of Thousand Oaks which is zoned RPD-1.5U-SP (residential planned development, 1.5 dwellings per net acre, specific plan).

The Canyon Oaks Park Lateral recycled water pipeline alignment is located within the City of Westlake Village in an area zoned OS (open space). The Lindero Pump Station No. 1 is located in the City of Thousand Oaks in an area zoned PL (public lands).

3.2 PROJECT ELEMENTS

The proposed project is comprised of the following primary components:

- North interconnection pipeline with new turn-out (CMWD).
- South interconnection pipeline (LVMWD).
- Co-located pump station (PS) and pressure regulating station (PRS) (combined PS/PRS) (CMWD/LVMWD).
- Lindero Pump Station No. 1 reverse flow valve upgrade (CMWD).
- Up to four new air/vacuum relief valves on the Lindero Feeder No. 2 pipeline (CMWD).
- Yerba Buena recycled water pipeline extension (LVMWD).
- Canyon Oaks Park Lateral recycled water pipeline (LVMWD).

An overview map of project elements is provided as Figure 3-1. A map of the North interconnection pipeline alignment and location of the PS/PRS site is provided as Figure 3-2. A map of the South interconnection pipeline alignment and recycled water pipeline alignments is provided as Figure 3-3. A map showing potential locations of new air/vacuum relief valves on the Lindero Feeder No. 2 pipeline is provided as Figure 3-4. The proposed PS/PRS site plan is provided as Figure 3-5. The proposed Lindero Feeder No. 2 tie-in plan and proposed new turn-out site plan are provided as Figures 3-6 and 3-7.

Photographs of the proposed PS/PRS site and pipeline alignments are provided as Figures 3-8 and 3-9.

3.2.1 North Interconnection Pipeline

This project component consists of the pipeline segment between the connection with CMWD's existing Lindero Feeder No. 2 pipeline located at the Kanan Road/Lindero Canyon Road intersection and the proposed PS/PRS site (see Figures 3-2 and 3-3). This alignment requires the construction of a new turn-out (meter station and control valve vault) at the southeast corner of this intersection and a change in ownership of the Lindero Feeder No. 2 segment between Falling Star Avenue and Kanan Road from Oak Park Water Service back to CMWD. The proposed North interconnection pipeline would be buried under the traffic lanes of Lindero Canyon Road northward from the PS/PRS site to Kanan Road.

The North interconnection pipeline would be composed of approximately 6,300 linear feet of 30-inch inside diameter cement mortar-lined and coated welded steel pipe. Blow-offs would be provided at low points to enable draining of the pipeline when necessary and air/vacuum relief valves would be provided to allow for safe draining and filling of the pipeline and to protect the pipeline from damage from surge (water hammer). Isolation valves would be provided at the connection with Lindero Feeder No. 2, at the connection pipelines to the new turn-out and at the PS/PRS site. Pipeline access manholes would be provided about every 1,000 feet along the alignment.

3.2.2 South Interconnection Pipeline

This project component consists of the pipeline segment between LVMWD's system (at the Thousand Oaks Boulevard/Lindero Canyon Road intersection) and the proposed PS/PRS site (see Figure 3-4). The proposed South interconnection pipeline would be installed under the southbound lanes of Lindero Canyon Road within the City of Westlake Village, southward from the PS/PRS site to Thousand Oaks Boulevard.

The South interconnection pipeline would be composed of approximately 5,000 linear feet of 30-inch inside diameter cement mortar-lined and coated welded steel pipe. Blow-offs would be provided at low points to enable draining of the pipeline when needed and air/vacuum relief valves would be provided to allow for safe draining and filling of the pipeline and to protect the pipeline from damage from surge (water hammer). Isolation valves would be provided at the connection with existing potable water pipelines at Thousand Oaks Boulevard and Lindero Canyon Road and within the proposed PS/PRS site. LVMWD would also provide the City of Westlake Village the opportunity to install a new fiber optics conduit and associated appurtenances in the trench with the new pipeline.

3.2.3 Pump Station (PS) and Pressure Regulating Station (PRS)

The interconnection PS, PRS, and related facilities would be constructed on a single site. A proposed site has been identified just north of the Ventura County boundary and east of Lindero Canyon Road based on distance from residences/schools, existing easement encumbrances, sufficient space for the facility, constructability requirements, and geologic characteristics.

The 0.77-acre PS/PRS site would be purchased in fee from the Rancho Simi Recreation and Park District. CMWD would also obtain a 0.55-acre permanent access and pipeline easement immediately west of the PS/PRS site to accommodate a proposed access road, pipelines, and utility services. The footprint of the PS, PRS, and related facilities would cover approximately 17 percent of the 0.77-acre PS/PRS site (see Figure 3-5). The PS/PRS site would include:

- Pumps, electrical equipment, metering equipment, and surge control equipment located within underground vaults. The surge control equipment may include one or more surge tanks similar to those shown in Figure 3-6. The need for and size of surge tanks would be determined during development of the final engineering design. If surge tanks are determined not to be necessary, the footprint of the PS, PRS, and related facilities may be smaller than shown in Figure 3-6. The pumping system would include two vertical turbine pumps with 350 horsepower motors and variable frequency drives to provide the estimated range of flow rates (8 cubic feet per second [cfs] to 21 cfs) within the expected range of system pressures.
- Two parallel pressure regulating control valves located in an underground concrete vault to provide the estimated range of flow rates (6.2 cfs to 30 cfs) within the expected range of system pressures.
- Southern California Edison (SCE) electrical service equipment located within an underground concrete vault (if allowed by SCE).

An unpaved access road would be provided from Lindero Canyon Road. A permanent standby electrical generator is not proposed; however, sufficient room at the site would be provided should a mobile generator be needed. Once construction has been completed, the only visible surface features would be manholes, hatches, air vents, and possibly a small antenna.

3.2.4 Lindero Pump Station No. 1 Reverse Flow Valve Upgrade

The proposed project includes upgrades to CMWD's existing Lindero Pump Station No. 1 reverse flow valve to facilitate conveying potable water from CMWD's Oak Park region to its Conejo Valley region during operation of the proposed interconnection. Lindero Pump Station No. 1 is located approximately 650 feet southeast of the Erbes Road/Avenida De Las Flores intersection in the City of Thousand Oaks (see Figure 3-1). The proposed upgrade is comprised of one upsized control valve and related piping improvements.

3.2.5 Air/Vacuum Relief Valves for the Lindero Feeder No. 2 Pipeline

The proposed project includes installation of up to four new air/vacuum relief valves for CMWD's existing Lindero Feeder No. 2 pipeline to help protect CMWD's existing pipelines and the proposed North segment of the interconnection pipeline from potential damage resulting from surge. Depending on the results of a surge analysis to be conducted as part of the final engineering design, the project may include one or more of these new air/vacuum relief valves, one or more surge tanks at the pump station (described in Section 3.2.3), or a combination of both.

The potential locations for the new air/vacuum relief valves are within existing CMWD permanent easements at the North Ranch Country Club golf course (see Figure 3-4). To the extent feasible, the new air/vacuum relief valves would be located in areas that would not conflict with golfing activities. The proposed air/vacuum valves would be enclosed within a small metal cabinet mounted on a concrete pad.

3.2.6 Yerba Buena Recycled Water Pipeline Extension

Currently, the Yerba Buena Elementary School utilizes recycled water provided by LVMWD for landscape irrigation. LVMWD proposes to install approximately 1,300 linear feet of buried 6-inch diameter polyvinyl chloride (PVC) pipe under the northbound lanes of Lindero Canyon Road (see Figure 3-3). This pipeline would replace the existing service lateral to the Yerba Buena Elementary School and formalize their connection with a new meter location closer to the school campus.

3.2.7 Canyon Oaks Park Lateral Recycled Water Pipeline

LVMWD proposes to install up to 800 linear feet of buried 4-inch diameter PVC pipe to connect the existing recycled water pipeline along Lindero Canyon Road to Canyon Oaks Park to provide recycled water for irrigation purposes (see Figure 3-3). Currently, the park is irrigated with potable water.

3.3 CONSTRUCTION

Construction of LVMWD's project components (South interconnection pipeline, recycled water pipelines) would be conducted separately from CMWD's project components (North interconnection pipeline, PS/PRS, Lindero Pump Station No. 1 reverse flow valve upgrade, new air/vacuum relief valves on the Lindero Feeder No. 2 pipeline).

Construction would be primarily limited to normal construction working hours, between the hours of 7 a.m. and 4:30 p.m., Monday through Friday. However, nighttime work will be considered for the tie-in to the Lindero Feeder No. 2 due to traffic at the Kanan Road/Lindero Canyon Road intersection. In addition, pipeline installation work may be required during other times and on weekends as determined necessary to maintain reliable water system operations, accommodate traffic control restrictions, or for other reasons. Working hours for pipeline installation within the public right-of-way would be finalized through the roadway encroachment permitting process. Pipeline tie-in to the Lindero Feeder No. 2 is anticipated to be conducted in the winter when water demand is lower.

3.3.1 North Interconnection Pipeline

Installation of the North interconnection pipeline is anticipated to require approximately 12 months, including pavement repair and installation of manholes, blow-offs, air/vacuum relief valves, and isolation valves. A minimum of one traffic lane in each direction would be open during pipeline installation. Roadways disturbed during pipeline installation would be restored following construction. Generally, trench spoils would be temporarily stockpiled within the construction staging and storage area, then backfilled to the trench after pipeline installation or hauled away for re-use or disposal.

Based upon an installation rate of approximately 40 feet per day, the average amount of excess spoils requiring removal would be about 70 cubic yards per day. This would require approximately seven truck round trips per day. The average daily number of heavy-duty trucks hauling material to and from the construction crew (including the delivery of pipe sections and miscellaneous supplies, hauling of pipe bedding and backfill materials, and removal of excess spoils) would be approximately 14 truck round trips per day.

Storage of materials and equipment would be dependent upon the contractor and subcontractors. Typically, pipe material would be stored at the PS/PRS site. If the contractor is local, they may store equipment and materials in their own yard.

3.3.2 South Interconnection Pipeline

Excluding the pipeline termination point at the proposed PS/PRS site, installation of this pipeline would be within the roadway right-of-way. Installation of this segment is anticipated to require approximately six months, including pavement repair and installation of blow-offs, air/vacuum relief valves, and isolation valves. Both northbound lanes and one southbound lane would remain open on Lindero Canyon Road during pipeline installation. Bike lanes in both directions would be maintained during construction. Portions of Lindero Canyon Road disturbed during pipeline installation would be restored following construction. Generally, trench spoils would be temporarily stockpiled within the construction staging and storage area, then backfilled to the trench after pipeline installation or hauled away for re-use or disposal.

Based upon an installation rate of approximately 40 feet per day, the average amount of excess spoils requiring removal would be about 115 cubic yards per day. This would require approximately 12 truck round trips per day. The average daily number of heavy-duty trucks hauling material to and from the construction crew (including the delivery of pipe sections and miscellaneous supplies, hauling of pipe bedding and backfill materials, and removal of excess spoils) would be approximately 24 truck round trips per day.

Storage of materials and equipment would be dependent upon the contractor and subcontractors. If the contractor is local, they may store equipment and materials in their own yard.

3.3.3 Pump Station/PRS Site

A 0.93-acre temporary construction easement to the north and east of the PS/PRS site would be acquired by CMWD to be used as a construction staging and storage area. Oak tree canopies overhang the northern portion of the proposed construction staging and storage area. However, removal of oak trees is not proposed. It is anticipated that construction of the PS, PRS, and associated facilities would require approximately 18 months. The average daily number of heavy-duty truck trips associated with hauling equipment and materials to and from the site would be about 20 truck round trips per day.

Groundwater was encountered at the PS/PRS site during geotechnical boring at a depth of 33 feet (Oakridge Geoscience, 2019a), which is below the anticipated maximum depth of excavation (30 feet). However, groundwater elevations change over time and excavation for the proposed pumps and other components may encounter groundwater. CMWD would require the construction contractor to install and operate a dewatering system as needed to avoid exposure of groundwater in excavations and potential contamination with concrete (vault construction) and/or hydrocarbons (equipment fuels and lubricants).

3.3.4 Lindero Pump Station No. 1 Reverse Flow Valve Upgrade

Construction of this component would involve replacement of the reverse flow valve and installation of related piping. It is anticipated to require four weeks to complete this component, with an average of two heavy-duty truck round trips per day.

3.3.5 Air/Vacuum Relief Valves for the Lindero Feeder No. 2 Pipeline

Construction of the new air/vacuum relief valves would involve excavation for installation of up to four new outlets on the existing pipeline to connect the new valves. Excavation spoils would be hauled away for disposal. Once the outlet has been installed, piping would be constructed to extend aboveground and the air/vacuum valve would be installed within a small metal cabinet, with the excavation backfilled to match existing grades. It is anticipated the construction of four new air/vacuum relief valves would require approximately eight weeks, with an average of two heavy-duty truck round trips per day.

3.3.6 Yerba Buena Recycled Water Pipeline Extension

Due to traffic control concerns, it is not anticipated that this component would be constructed concurrently with the South interconnection pipeline. Installation of this pipeline would be restricted to the Lindero Canyon Road right-of-way. Installation of this pipeline extension is anticipated to require approximately one month, including pavement repair. Both southbound lanes and one northbound lane would remain open on Lindero Canyon Road during pipeline installation. Bike lanes in both directions would be maintained during construction. Portions of Lindero Canyon Road disturbed during pipeline installation would be restored following construction. Generally, trench spoils would be temporarily stockpiled within the construction staging and storage area, then backfilled to the trench after pipeline installation or hauled away for re-use or disposal.

Based upon a pipe installation rate of approximately 80-100 feet per day, the average amount of excess spoils requiring removal would be approximately 30 cubic yards per day. This would require approximately three heavy-duty truck round trips per day. The average daily number of trucks hauling material to and from the construction crew (including the delivery of pipe sections and miscellaneous supplies, hauling of pipe bedding, and backfill materials and removal of excess spoils) would be approximately 36 truck round trips per day.

3.3.7 Canyon Oaks Park Lateral Recycled Water Pipeline

This component would be constructed following the completion of the Yerba Buena recycled water pipeline extension. Installation of this pipeline would occur within the public right-of-way and on private property within an easement. Installation of this segment is anticipated to require approximately two weeks. Generally, trench spoils would be temporarily stockpiled within the work area, then backfilled to the trench after pipeline installation or hauled away for re-use or disposal.

Based upon a pipe installation rate of approximately 160 feet per day, the average amount of excess spoils requiring removal would be approximately 30 cubic yards per day. This would require approximately three heavy-duty truck round trips per day. The average daily number of trucks hauling material to and from the construction crew (including the delivery of pipe sections and miscellaneous supplies, hauling of pipe bedding and backfill materials, and removal of excess spoils) would be approximately six truck round trips per day.

3.4 OPERATION

The proposed project facilities would only be used during periods of water transfer between systems. The PS/PRS site would be unstaffed, but maintenance would occur by CMWD and LVMWD staff on a periodic basis.

The operation of the PS and PRS would require coordination between the two agencies. There are specific hydraulic parameters and operating criteria that have to be met on both sides of the facility. When the proposed PS or PRS discharge is not operating, the 30-inch diameter pipelines between the PS and the connection to the Lindero Feeder No. 2 and between the PRS and the connection to LVMWD's existing system would remain full. The water in the pipeline would require management to prevent it from becoming stagnant and losing disinfection residual. Several water quality management strategies may be considered for implementation:

1. Operate the PS on a regular basis to ensure water is circulated from the LVMWD system into the CMWD system.
2. Operate the PRS on a regular basis to ensure water is circulated from the Calleguas system into the LVMWD system.
3. If water loses disinfection residual and cannot be delivered to customers, discharge the water into an existing sewer or storm drain facility.

The preferred operational strategy includes operation of the PS and the PRS (one at a time) as described under 1 and 2 above, on a predetermined alternating schedule. This would help to ensure that water is circulated between both systems to mitigate water quality concerns.

The two agencies would communicate directly with one another regarding the operation of the PS and PRS facilities. The Interconnection Agreement specifies basic communication protocols between both agencies, however, more specific requirements (if determined necessary by CMWD and LVMWD) would be included in a future Operations Agreement.

3.5 CUMULATIVE PROJECTS

Section 15130 of the State CEQA Guidelines requires a discussion of cumulative impacts, and determination of the project's contribution to identified cumulative impacts. The project's contribution must be viewed when added to the effects of past projects, the effects of other current projects and the effects of reasonably foreseeable future projects.

The discussion of cumulative impacts must reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great of detail as is provided for the effects attributable to the project alone. The discussion should be guided by standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute rather than the attributes of other projects which do not contribute to the cumulative impact. The following elements are necessary for an adequate discussion of significant cumulative impacts:

- 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
- A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the Lead Agency.

The cumulative impacts discussion of this EIR is based on a list of other projects that may generate impacts to which the proposed project may also incrementally contribute. The following is a list of other projects in the project area that may be implemented at about the same time as the proposed project.

3.5.1 Ventura County

The Ventura County Planning Division's April 1, 2019 pending and approved project lists were reviewed and no projects were identified that are anticipated to result in a physical change in the environment in the project area (Oak Park Planning Area).

3.5.2 City of Thousand Oaks

The following projects were identified that are anticipated to result in a substantial physical change in the environment (equivalent to one single-family residence or larger) in the project area (east Thousand Oaks). However, none of these projects is located in the immediate project area.

- Conejo School Road & Willow Lane Sidewalks Project: pavement widening, new sidewalks, bike lane striping (under review).
- Public storage building: Willow Lane at South Skyline Drive (under review).

3.5.3 City of Westlake Village

The following projects were identified by the City Planning Department that are anticipated to result in a substantial physical change in the environment (equivalent to one single-family residence or larger).

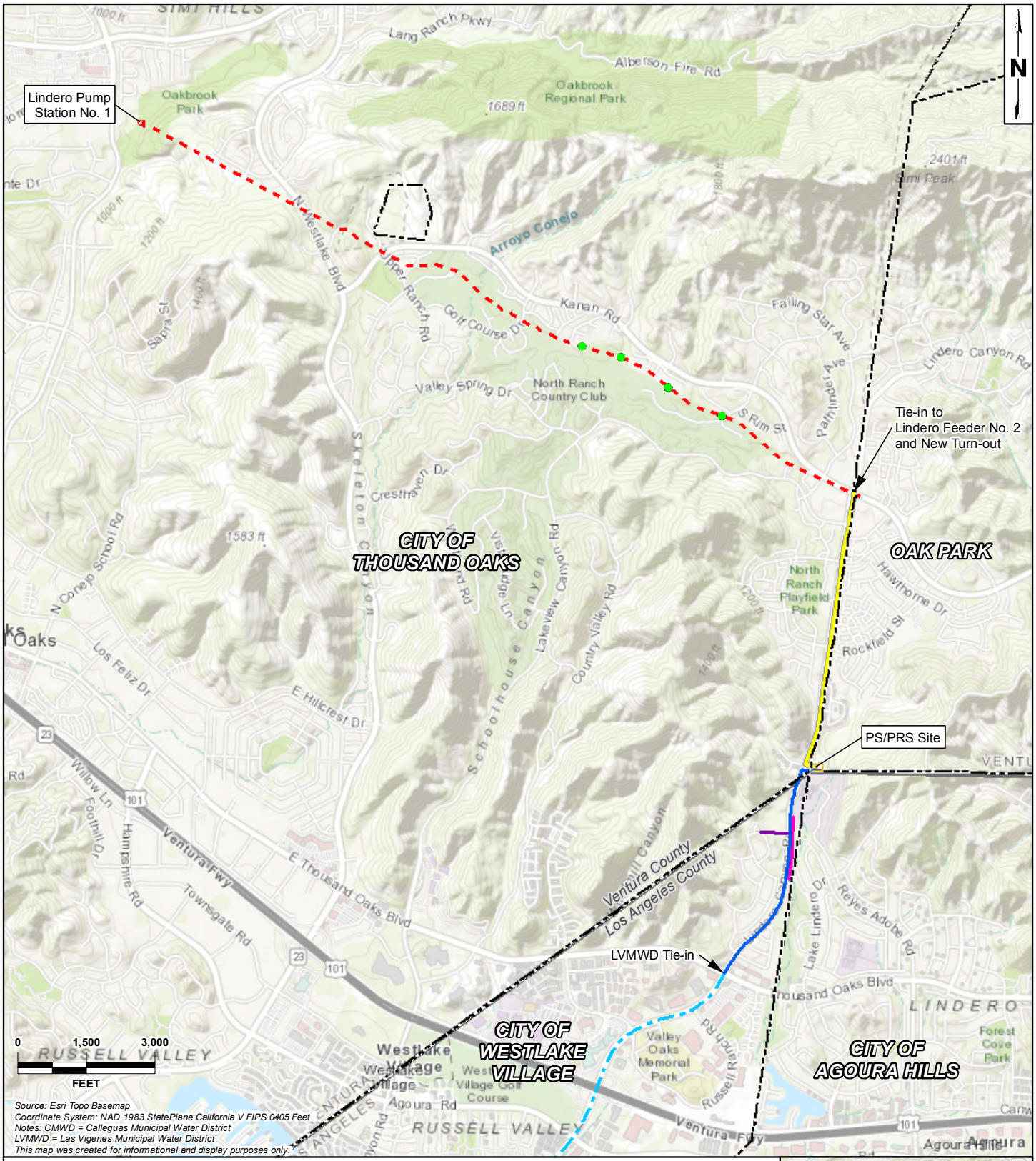
- PDP no. 16-002: spa and salon, 12 additional hotel rooms, swimming pool and yoga pavilion at 31943 Agoura Road (under review).
- PDP no. 18-001: 13,000 square foot multi-purpose building and 1,140 square foot storage building at the Calvary Community Church (under review).

3.5.4 City of Agoura Hills

The following projects were identified in the City's December 2018 Quarterly Report that are anticipated to result in a substantial physical change in the environment (equivalent to one single-family residence or larger).

- 08-AVDP-001: mixed use addition of restaurant space, outdoor dining area, play areas and parking at 28888 Roadside Drive (under review).
- 13-AVDP-001: 46,987 square foot mixed use including restaurant/retail, residential and parking garage on Agoura Road (under review).
- AVDP-01161-2015: 200,000 square foot mixed use with 118 multi-family dwelling units, hotel, restaurant/retail and office at the intersection of Kanan Road and Agoura Road (under review).
- CUP-01430-2107: 36,750 square foot office development with underground parking 30440 Agoura Road (under review).
- AVDP-01443-2017: 44,969 square foot mixed use including office, restaurant, retail, residential, and underground parking garage at the intersection of Kanan Road and Agoura Road (under review).
- AVDP-01469-2018: 37,852 square foot mixed use development with office, retail, restaurant, residential, and underground parking garage at 28902 Agoura Road (under review).
- CUP-01511-2018: 72-unit senior assisted living facility at 29541 Canwood Street (under review).
- CUP-01542-2018: 8,274 square foot animal rescue facility at 28260 Dorothy Drive (under review).
- 06-CUP-003: 103,000 square foot industrial park at 28700 Canwood Street (approved).
- 14-SPR-003: 49,000 square foot gym facility with restaurant at 29431 Agoura Road (approved).
- CUP-01150-2015: 225-room hotel with parking at 29505 Agoura Road (approved).

- SPR-01048-2015: 69,867 square feet of industrial buildings at 29621 Agoura Road (approved).
- 07-AVDP-002; 90,700 square foot mixed use development with residential, office and retail at the intersection of Agoura Road and Cornell Road (approved).
- CUP-01359-2017: 75-unit senior care facility at 29353 Canwood Street (approved).
- SPR-01437-2017: remodel 100,000 square feet of retail at 5727 Kanan Road (approved).

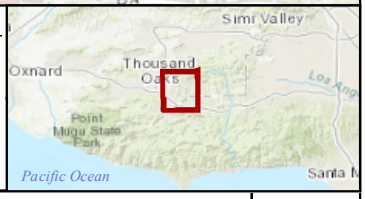


Source: Esri Topo Basemap
Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet
Notes: CMWD = Calleguas Municipal Water District
LVMWD = Las Vigenes Municipal Water District
This map was created for informational and display purposes only.

LEGEND:

- North Interconnection Pipeline (CMWD Segment)
- Existing Lindero Feeder No.2
- LVMWD Existing Pipeline
- South Interconnection Pipeline (LVMWD Segment)
- Canyon Oaks Park Lateral Recycled Water Pipeline
- Yerba Buena Recycled Water Pipeline Extension
- Lindero Pump Station No.1
- Pump Station/PRS Site
- City Limit
- County Boundary
- Proposed Air/Vacuum Relief Valve Location

MAP EXTENT:



padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

PROJECT NAME:
CMWD - LVMWD INTERCONNECTION
VENTURA AND LOS ANGELES COUNTIES, CA

PROJECT NUMBER: 1802-0331

DATE: June 2019

PROJECT OVERVIEW

FIGURE 3-1

Calleguas Water District\Figure 3-1 - Project Overview.mxd 6/11/2019

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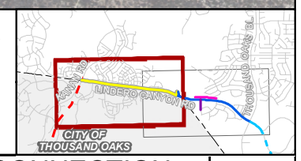
LEGEND:

- Pump Station/PRS Site
- City Limit
- County Boundary
- Proposed New Turn-Out
- North Interconnection Pipeline
- Existing Lindero Feeder No.2
- South Interconnection Pipeline
- Connector Pipeline to New Turn-Out

MAP EXTENT:



0 250 500
FEET

Source: NAIP Imagery 2016
Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet
Notes: CMWD = Calleguas Municipal Water District
LVMWD = Las Virgenes Municipal Water District
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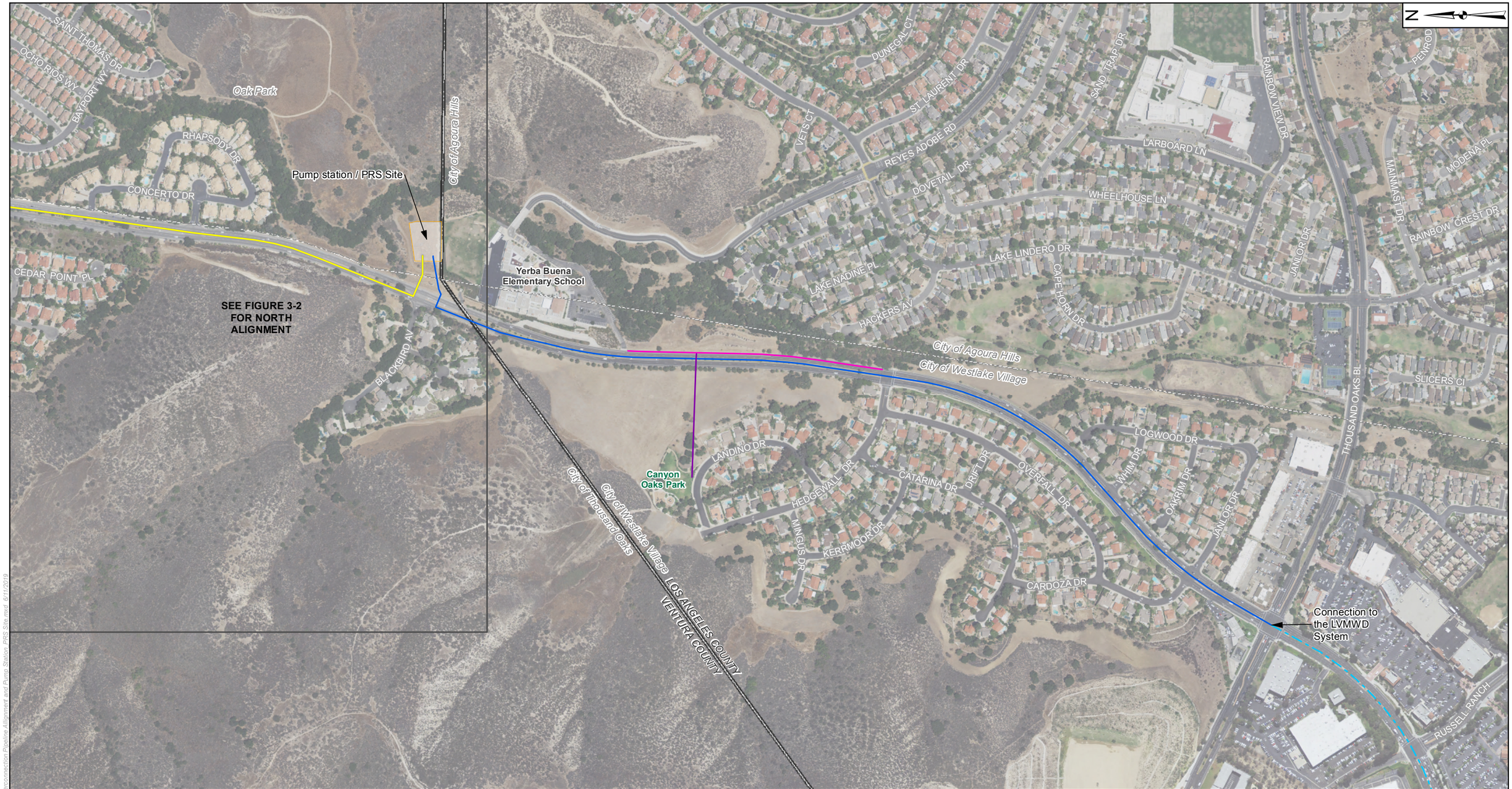
PROJECT NAME: CMWD - LVMWD INTERCONNECTION VENTURA AND LOS ANGELES COUNTIES, CA
PROJECT NUMBER: 1802-0331
DATE: June 2019

NORTH INTERCONNECTION PIPELINE ALIGNMENT AND PUMP STATION/PRS SITE

FIGURE 3-2

Calleguas Water District\Figure 3-2_3-3 - CMWD Interconnection Pipeline Alignment and Pump Station_PRS Site.mxd, 6/11/2019

Back of Figure 3-2



LEGEND:

- Pump Station/PRS Site
- City Limit
- County Boundary
- North Interconnection Pipeline
- LVMWD Existing Pipeline
- South Interconnection Pipeline
- Canyon Oaks Park Lateral Recycled Water Pipeline
- Yerba Buena Recycled Water Pipeline Extension

MAP EXTENT:

0 250 500
FEET

Source: NAIP Imagery 2016
Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet
Notes: CMWD = Calleguas Municipal Water District
LVMWD = Las Virgenes Municipal Water District
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PROJECT NAME: CMWD - LVMWD INTERCONNECTION
VENTURA AND LOS ANGELES COUNTIES, CA

PROJECT NUMBER: 1802-0331

DATE: June 2019

SOUTH INTERCONNECTION PIPELINE AND RECYCLED WATER PIPELINE ALIGNMENTS

FIGURE 3-3

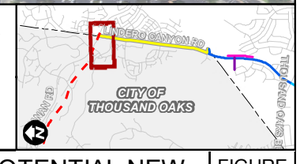
Calleguas Water District\Figure 3-2_3-3 - CMWD Interconnection Pipeline Alignment and Pump Station_PRS Site.mxd 6/11/2019

Back of Figure 3-3

LEGEND:

- North Interconnection Pipeline
- Existing Lindero Feeder No.2
- Connector Pipeline to New Turn-out
- Proposed Air/Vacuum Relief Valve Location

MAP EXTENT:



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Source: NAIP Imagery 2016
Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet
Notes: CMWD = Calleguas Municipal Water District
LVMWD = Las Virgenes Municipal Water District
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ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

PROJECT NAME: CMWD - LVMWD INTERCONNECTION VENTURA AND LOS ANGELES COUNTIES, CA
PROJECT NUMBER: 1802-0331
DATE: June 2019

LOCATIONS OF POTENTIAL NEW AIR/VACUUM RELIEF VALVES FOR LINDERO FEEDER NO. 2 PIPELINE

FIGURE 3-4

Calleguas Water District\Figure 3-4 - Locations of Potential New Air_Vacuum Relief Valves for Lindero Feeder No2 Pipeline.mxd 6/11/2019

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LINDERO CREEK

PRS CONTROL VALVES

3:1 SLOPE

25'

2'

PUMPS

SURGE TANKS

CMWD FLOWMETER

LVMWD FLOWMETER

SERVICE METER AND SCE TRANSFORMER

SCE SERVICE CONDUIT

TO LINDERO FEEDER NO. 2

EX 24" DIA VCP SEWER LINE (TRIUNFO)

APN 800-0-180-285

RW

COUNTY LIMITS

PROPOSED UNIMPROVED ACCESS ROAD

APN: 800-0-180-295

EX. P.P.

FH

R/W

LINDERO

CMWD 30" PIPELINE ALIGNMENT

CYN

CONNECTION TO LVMWD SYSTEM

ROAD

BLACKBIRD AVENUE

LVMWD 30" PIPELINE ALIGNMENT

LEGEND

PS/PRS SITE BOUNDARY

PERMANENT ACCESS AND PIPELINE EASEMENT

40' 20' 0 40' 80'

SCALE IN FEET

Source: Phoenix Civil Engineering, Inc. Document Dated 07-05-18

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

PROJECT NAME: CMWD-LVMWD INTERCONNECTION PROJECT

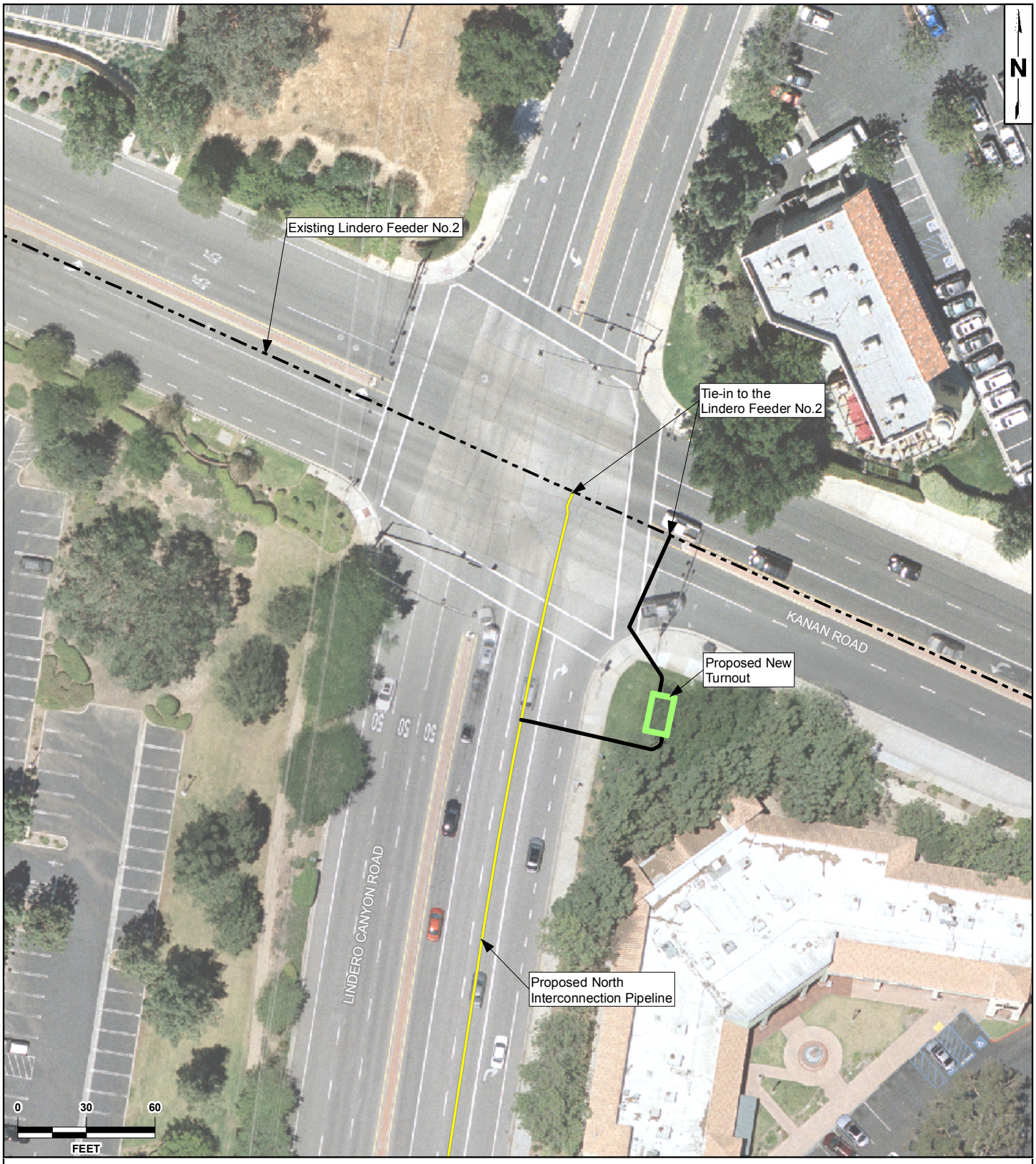
PROJECT NUMBER: 1802-0331

DATE: April 2019

PUMP STATION/PRS SITE PLAN

FIGURE 3-5

Back of Figure 3-5



LEGEND:

- Existing Lindero Feeder No.2
- Proposed North Interconnection Pipeline
- Proposed Replacement Turnout
- Proposed Connector Pipeline to New Turn-out

Source:Benner and Carpenter, Inc. 2019
Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet
Notes: This map was created for informational and display purposes only.

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PROJECT NAME:
CMWD - LVMWD INTERCONNECTION
VENTURA AND LOS ANGELES COUNTIES, CA

PROJECT NUMBER: 1802-0331

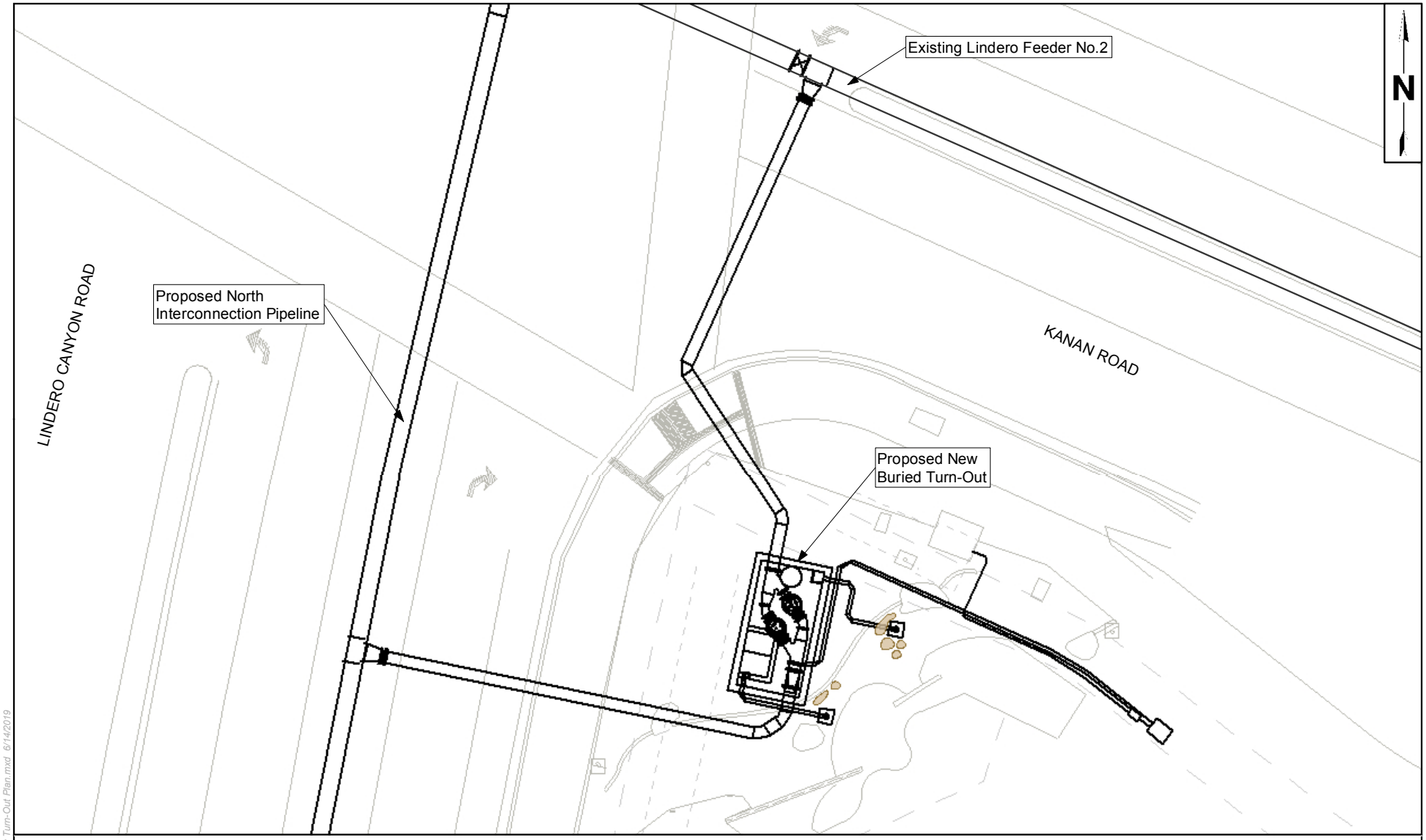
DATE: June 2019

PROPOSED LINDERO FEEDER NO.2 TIE-IN PLAN

FIGURE 3-6

Calleguas Water District\Figure 3-6 - Proposed Lindero Feeder No.2 Tie-In Plan.mxd 6/11/2019

back of Figure 3-6



LEGEND:

Proposed Boulders for Visual Screening (See Figure 4.7-2)

Source: Benner and Carpenter, Inc. 2019, Phoenix Civil Engineering, Inc. 06/2019
Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet
Notes: This map was created for informational and display purposes only.

0 10 20
Feet

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ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

PROJECT NAME:
CMWD - LVMWD INTERCONNECTION
VENTURA AND LOS ANGELES COUNTIES, CA

PROJECT NUMBER: 1802-0331

DATE: June 2019

PROPOSED NEW BURIED TURN-OUT PLAN

FIGURE 3-7

Back of Figure 3-7

a. South Interconnection pipeline alignment at Janlor Drive, facing south

b. South Interconnection pipeline alignment at Hedgewall Drive, facing south

c. South Interconnection pipeline alignment on Lindero Canyon Road at the PS/PRS Site (left)

d. Canyon Oaks Park Lateral alignment, facing east

Notes: CWMD = Calleguas Municipal Water District;
LVMWD = Las Virgenes Municipal Water District

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

PROJECT NAME:
CMWD - LVMWD INTERCONNECTION
VENTURA AND LOS ANGELES COUNTIES, CA

PROJECT NUMBER: 1802-0331

DATE: May 2019

PHOTOGRAPHS OF THE SOUTH INTERCONNECTION AND CANYON OAKS PARK LATERAL PIPELINE ALIGNMENTS

FIGURE 3-8

Calleguas Water District\Figure 3-8 - Alignment Photos.mxd 5/3/2019

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a. Pump station/PRS site, facing east

b. Pump station/PRS site from Yerba Buena Elementary School

c. North Interconnection pipeline alignment at Rockfield Street, facing north

Notes: CWMD = Calleguas Municipal Water District;
LVMWD = Las Virgenes Municipal Water District

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

PROJECT NAME:
CMWD - LVMWD INTERCONNECTION
VENTURA AND LOS ANGELES COUNTIES, CA

PROJECT NUMBER: 1802-0331

DATE: May 2019

PHOTOGRAPHS OF THE NORTH INTERCONNECTION PIPELINE ALIGNMENT AND PS/PRS SITE

FIGURE 3-9

Back of Figure 3-9

4.0 ENVIRONMENTAL IMPACT ANALYSIS

4.1 AIR QUALITY AND GREENHOUSE GAS EMISSIONS

4.1.1 Physical Setting

4.1.1.1 Climatological Setting

The project area is characterized by cool winters and hot, dry summers occasionally 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. Winter weather is generally a result of the size and location of low pressure weather systems originating in the north Pacific Ocean.

The proposed PS/PRS site is located in unincorporated Ventura County immediately adjacent to the City of Thousand Oaks. In Thousand Oaks, the maximum average monthly temperature is 85 degrees Fahrenheit (°F) in July and August, and the minimum average monthly temperature is 44°F in December and February. The average monthly maximum precipitation is 4.21 inches in February, and the average monthly minimum is 0.04 inches in July, with an average annual precipitation of 16.62 inches.

4.1.1.2 Ambient Air Quality

Air quality in Ventura County and adjacent Los Angeles County is directly related to air pollutant emissions and regional topographic and meteorological factors. The California Air Resources Board (CARB) has divided the State into 15 air basins to better manage air pollution. Air basin boundaries were determined by grouping together areas with similar geographical and meteorological features. Political boundaries were also considered in determining the air basin boundaries. The proposed facilities would be located in the Ventura County portion of the South-Central Coast Air Basin (SCCAB) and the Los Angeles County portion of the South Coast Air Basin (SCAB). The SCCAB encompasses the counties of Ventura, Santa Barbara, and San Luis Obispo. The SCAB encompasses Orange County and coastal portions of Los Angeles, San Bernardino, and Riverside counties.

The U.S. Environmental Protection Agency (USEPA) and 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 National and California Ambient Air Quality Standards (NAAQS and CAAQS) relevant to the project are provided in Table 4.1-1.

4.1.1.3 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, or 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.

According to data from the National Oceanic and Atmospheric Administration, the 2017 average global temperature across land and ocean surface areas was 0.84°C (1.51°F) above the twentieth-century average of 13.9°C (57.0°F), making it the third-warmest year on record behind 2016 (warmest) and 2015 (second warmest). 2017 was the warmest non-El-Niño year in the record. Since the start of the twenty-first century, the annual global temperature record has been broken five times. From 1900 to 1980 a new temperature record was set on average every 13.5 years; however, since 1981, the average period between temperature records has decreased to every 3 years.

4.1.2 Regulatory Setting

4.1.2.1 Attainment Status

Proposed facilities would be located in eastern Ventura County (SCCAB) and western Los Angeles County (SCAB). Ventura County has been designated by CARB and USEPA as unclassified or in attainment of all criteria ambient air pollutant standards with the exception of:

- Federal 2015 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.

According to the baseline (2012) air pollutant emissions inventory presented in the Ventura County Air Pollution Control District (VCAPCD)’s 2016 Air Quality Management Plan, 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 (NO_x) emissions in the County.

The Los Angeles County portion of the SCAB has been designated by CARB and USEPA as unclassified or in attainment of all criteria ambient air pollutant standards with the exception of:

- Federal 2015 8-hour ozone standard: non-attainment, classified as “extreme”.
- California 8-hour ozone standard: non-attainment.
- Federal 1-hour ozone standard: non-attainment, classified as “extreme”.
- California 1-hour ozone standard: non-attainment.
- California PM_{10} standard: non-attainment.
- Federal particulate matter less than 2.5 microns ($PM_{2.5}$) 24-hour standard: non-attainment, classified as “serious”.
- Federal 2012 $PM_{2.5}$ annual standard: non-attainment.
- California $PM_{2.5}$ annual standard: non-attainment.

The South Coast Air Quality Management District (SCAQMD) 2016 Air Quality Management Plan indicates mobile sources contributed about 88 percent of the total regional NO_x emissions in 2012.

Table 4.1-1. 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* (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	9.0 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)	

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

Table 4.1-2. Summary of Ambient Air Pollutant Data Collected at the Thousand Oaks and Simi Valley Monitoring Stations

Parameter	Standard	Year		
		2015	2016	2017
Ozone – parts per million (ppm): Thousand Oaks				
Maximum 1-hr concentration monitored		0.078	0.080	0.090
Number of days exceeding CAAQS	0.09	0	0	0
Maximum 8-hr concentration monitored		0.069	0.076	0.073
Number of days exceeding 8-hour ozone NAAQS & CAAQS	0.070	0	1	6
PM_{10} – micrograms per cubic meter ($\mu g/m^3$): Simi Valley				
Maximum 24-hour average sample (California sampler)		62.8	156.3	149.8
Number of samples exceeding CAAQS	50	3	4	9
Number of samples exceeding NAAQS	150	0	1	0
$PM_{2.5}$ – micrograms per cubic meter ($\mu g/m^3$): Thousand Oaks				
Maximum 24-hour sample		32.2	35.2*	32.0
Number of samples exceeding NAAQS	35	0	0	0

*value is rounded down for comparison to the NAAQS

4.1.2.2 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 Thousand Oaks station (near Thousand Oaks High School), located approximately 4.9 miles northwest of the proposed PS/PRS site. The nearest air quality monitoring station in Los Angeles County is located in Reseda 14.7 miles east of the PS/PRS site. Table 4.1-2 lists the monitored maximum concentrations and number of exceedances of air quality standards at the Thousand Oaks station for the years 2015 through 2017. PM_{10} is not monitored at the Thousand Oaks station; therefore, data from the nearest station (Simi Valley, 9.5 miles northeast of the PS/PRS site) is provided.

As shown in Table 4.1-2, the State 8-hour ozone standard was occasionally exceeded at the Thousand Oaks station. Concentrations of PM_{10} monitored at the Simi Valley station exceeded the State 24-hour standard an average of 5.3 sampling periods per year from 2015 through 2017. Concentrations of $PM_{2.5}$ monitored at the Thousand Oaks station did not exceed the Federal 24-hour standard from 2015 through 2017.

4.1.2.3 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 alignments and near the proposed PS/PRS site including:

- Lindero Canyon Road, and adjacent parallel and intersecting streets (Ventura County, cities of Westlake Village and Thousand Oaks).
- Kanan Road (Ventura County, City of Thousand Oaks)
- Landino Drive (City of Westlake Village, near Canyon Oaks Park Lateral pipeline alignment).

One school is located near the proposed PS/PRS site:

- Yerba Buena Elementary School (City of Agoura Hills, Las Virgenes Unified School District).

4.1.2.4 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 determine if they conform to 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 SIP 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 USEPA classifies air basins (i.e., distinct geographic regions) as either "attainment" or "non-attainment" for each criteria pollutant, based on whether the NAAQS have been achieved. Some air basins have not received sufficient analysis for certain criteria air pollutants and are designated as "unclassified" for those pollutants. The VCAPCD, SCAQMD, and CARB are the responsible agencies for providing attainment plans and for demonstrating attainment of these standards within the proposed project area.

The VCAPCD completed the 2016 update to the County's Air Quality Management Plan (AQMP) on February 14, 2017 to build on past AQMPs, including a strategy to attain the 2008 Federal 8-hour ozone standard, photochemical modeling to demonstrate the strategy would ultimately result in attainment of the Federal ozone standard, and a demonstration that reasonable further progress towards attainment of the Federal 8-hour ozone standard would occur. The 2016 AQMP 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. Ventura County is anticipated to attain the 2015 Federal 8-hour ozone standard (0.070 ppm) by 2025 (VCAPCD, 2017).

The SCAQMD completed its Final 2016 AQMP in March 2017, which indicates continued implementation of already adopted regulatory actions would reduce the 2012 baseline NO_x emissions from 522 tons per day to 255 tons per day by 2023. This NO_x emissions reduction appears sufficient to attain the 1-hour ozone standard by 2023, but not the 8-hour ozone standard. Therefore, additional control strategies and regulatory measures are proposed to meet the mandated attainment dates for the Federal 8-hour ozone standard. In addition, these NO_x emissions reductions are anticipated to result in attainment of $PM_{2.5}$ standards.

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 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 and incorporated into the SIP, and outline strategies for achieving the CAAQS for criteria pollutants for which the region is classified as non-attainment.

In 1991, the VCAPCD adopted an AQMP to attain the California ozone standards. The CCAA mandates that every three years areas update their clean air plans to attain the State ozone standard. The most recent triennial update (dated November 2015) 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 VCAPCD rules for enhancement and three possible new control measures to facilitate progress toward attainment.

The SCAQMD 2016 Final AQMP satisfies the triennial update requirement of the CCAA, including progress towards attainment of the CAAQS, emissions reductions of at least 5 percent per year, reduction in population exposure, and cost-effectiveness ranking of emissions control measures.

Local Authority

The VCAPCD is the local agency that has primary responsibility for regulating stationary sources of air pollution located within Ventura County. To this end, the VCAPCD 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 VCAPCD is also responsible for managing and permitting existing, new, and modified sources of air emissions within the County. Applicable VCAPCD rules and regulations for portions of the proposed project within Ventura County are limited to:

- Rule 51 (Nuisance): This Rule 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 applies to dust generated by construction.

Within Los Angeles County, the SCAQMD 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.

Applicable SCAQMD rules and regulations for portions of the proposed project within Los Angeles County are limited to:

- Rule 402 (Nuisance): Same as VCAPCD Rule 51.

- Rule 403 (Fugitive Dust): This Rule prohibits the emissions of fugitive dust associated with construction activities (and other operations) such that the dust remains visible beyond the property boundary or the dust emissions exceed 20 percent opacity (if the dust is the result of vehicle movement). Rule 403 also limits track-out of earth material onto adjacent streets and requires implementation of best available control measures.

4.1.2.5 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 of CO_2 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 is not 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 Intergovernmental Panel on Climate Change (IPCC): CO_2 – GWP of 1, CH_4 – GWP of 28, and N_2O – GWP of 265.

International Authority

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 brought up by the 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 in New York, and began adopting it within their own legal systems (through ratification, acceptance, approval, or accession). As of September 2018, 197 United Nations Climate Change Conference members have signed the agreement, 180 of which have ratified it. The United States ratified the Paris Agreement on September 3, 2016.

On June 1, 2017, President Trump announced that the U.S. would cease participation in the Paris Agreement. However, in accordance with Article 28 of the Paris Agreement, the earliest possible effective withdrawal date by the United States cannot be before November 4, 2020, four years after the Agreement came into effect in the United States and one day after the 2020 U.S. presidential election.

Federal Authority

On September 22, 2009, the USEPA released its final GHG Reporting Rule (Reporting Rule), in response to the fiscal year 2008 Consolidated Appropriations Act (H.R. 2764; Public Law 110-161) that required the USEPA to develop "…mandatory reporting of GHGs above appropriate thresholds in all sectors of the economy". 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 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.

In June 2008, CARB developed a Draft Scoping Plan for Climate Change, pursuant to AB 32. The Scoping Plan was approved at the Board hearing on December 12, 2008. The Scoping Plan proposes a comprehensive set of actions designed to reduce overall carbon emissions in California, improve our environment, reduce our dependence on oil, diversify our 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.

CARB developed regulations for mandatory reporting of greenhouse gas emissions in 2007, 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). These regulations were revised in 2010, 2012, 2013, and 2014, with the current regulations becoming effective on January 1, 2015. 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 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)).

In December 2009, 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. These revisions became effective March 18, 2010. According to the 2019 State CEQA Guidelines (Section 15064.4), a lead agency may use a model or methodology to estimate GHG emissions, has the discretion to select the most appropriate model or methodology, and must support the selection of the model or methodology with substantial evidence.

Local Authority

The Los Angeles County Department of Regional Planning completed its Community Climate Action Plan in August 2015 focusing on reducing GHG emissions in unincorporated Los Angeles County at least 11 percent below 2010 levels by 2020. To date, Ventura County has not adopted any documents related to GHG emissions reduction planning in the County. Other municipalities in which the proposed project would be located or potentially affect (City of Thousand Oaks, City of Westlake Village, City of Agoura Hills) have not adopted any documents related to GHG emissions reduction planning.

4.1.3 Impact Analysis

4.1.3.1 Significance Thresholds

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

Criteria Pollutants

Ventura County. 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. The VCAPCD considers temporary construction emissions insignificant and quantitative thresholds for construction emissions have not been established. However, the VCAPCD recommends fugitive dust and ROC and NO_x mitigation measures provided in the Ventura County Air Quality Assessment Guidelines be implemented.

Long-term air quality impacts occur during project operation and may 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 long-term air quality impact may occur when a project triggers any one of the following:

- Result in daily emissions exceeding 25 pounds of ROC or NO_x.
- Cause a violation or make a substantial contribution to a violation of an ambient air quality standard.
- Directly or indirectly cause the existing population to exceed the population forecasts in the most recently adopted AQMP.
- Be inconsistent with the AQMP and emit greater than 2 pounds per day ROC or NO_x.

These thresholds are applied to proposed project components located in Ventura County (North interconnection pipeline, new/relocated turn-out, PS/PRS, Lindero Pump Station No. 1 improvements, air/vacuum relief valves).

Note that criteria pollutant emissions from project components required to obtain a permit to operate from the VCAPCD are not considered when assessing the significance of air quality impacts (VCAPCD, 2003).

Los Angeles County. The SCAQMD has adopted the following air pollutant significance thresholds to be used in CEQA documents:

Pollutant	Construction (pounds/day)	Operation (pounds/day)
NO_x	100	55
ROC	75	55
PM_{10}	150	150
$PM_{2.5}$	55	55
SO_x	150	150
CO	550	550

These thresholds are applied to proposed project components located in Los Angeles County (South interconnection pipeline, Yerba Buena and Canyon Oaks Park Lateral recycled water pipelines).

As part of the SCAQMD's environmental justice program, its staff has developed localized significance threshold (LST) methodology and mass rate look-up tables by source receptor area (SRA) that can be used by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are developed based on the ambient concentrations of that pollutant for each source receptor area. Portions of the project within Los Angeles County are located within SRA 6 (West San Fernando Valley).

Greenhouse Gas Emissions

To date, GHG thresholds of significance have not been adopted by Ventura County. On November 8, 2011, the VCAPCD 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 SCAQMD is preferred. On December 5, 2008, the SCAQMD governing board 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 will be used in this EIR to determine the significance of the contribution of the project to global climate change.

4.1.3.2 Project-Specific Impacts

Construction Air Pollutant Emissions

Impact AQ-1: Construction activities associated with implementation of the proposed project would result in air pollutant emissions that may affect regional or local air quality – significant, but mitigable.

Construction of new facilities would generate air pollutant emissions, including exhaust emissions from heavy equipment, heavy-duty trucks, and worker vehicles. In addition, earthwork (excavation, trenching, stockpiling, loading earth material, etc.), vehicle operation on unpaved surfaces, and wind erosion of exposed soil and soil stockpiles would generate fugitive dust. Construction equipment exhaust emissions were calculated using project activity assumptions, and emission factors from the CARB OFFROAD 2017 model. Motor vehicle emissions were estimated using the EMFAC 2014 model developed by CARB and assuming that construction would be initiated in 2020.

Construction Emissions - Ventura County Components. Peak day construction emissions have been estimated and are based on simultaneous installation of the North interconnection pipeline and construction of the PS/PRS (see Table 4.1-3). Due to the temporary, short-term nature of construction emissions, the VCAPCD does not apply the quantitative emissions thresholds for ROC and NO_X to construction activities. The VCAPCD does require that emission reduction measures be implemented during construction to reduce exhaust emissions and fugitive dust generation. Applicable VCAPCD-recommended measures would be implemented and are provided below as mitigation measures.

Table 4.1-3. Ventura County Peak Day Construction Air Pollutant Emissions

Source	Pollutant, Pounds per Peak Day			
	ROC	NO_x	CO	PM_{10}
Equipment exhaust	12.5	127.4	83.8	5.8
On-road vehicles	0.8	10.7	13.4	0.6
Fugitive dust	0.0	0.0	0.0	133.8
Total	**13.3**	**138.1**	**97.2**	**140.2**

Construction Emissions - Los Angeles County Components. Construction emissions associated with the South interconnection pipeline have been estimated for comparison to the SCAQMD construction emissions thresholds (see Table 4.1-4). Daily heavy equipment emissions were estimated using the CARB OFFROAD 2017 model. Emissions of on-road vehicles were estimated using CARB's EMFAC 2014 model. Construction emissions associated with installation of the Yerba Buena recycled water pipeline extension and Canyon Oaks Park Lateral recycled water pipeline are not included in peak day emissions estimates as these two components would not be constructed at the same time as the South interconnection pipeline and would result in lower peak day emissions if estimated separately.

Table 4.1-4. Los Angeles County Peak Day Construction Air Pollutant Emissions

Source	Pollutant, Pounds per Peak Day			
	ROC	NO_x	CO	PM_{10}
Equipment exhaust	5.4	55.2	37.8	2.5
On-road vehicles	0.6	7.5	8.4	0.4
Fugitive dust	0.0	0.0	0.0	76.3
Total	**6.0**	**62.7**	**46.2**	**79.2**
SCAQMD Significance Threshold	75	100	550	150
Localized Significance Threshold*	--	103	426	4.0

*SRA 6, one-acre work area, 25 meter receptor distance

Peak day construction PM_{10} emissions within Los Angeles County (SCAB) would exceed the applicable LST and are considered significant. The project is subject to SCAQMD Rule 403 and best available control measures to minimize fugitive dust have been provided below as mitigation measures.

Operational Air Pollutant Emissions

Impact AQ-2: Project maintenance activities would generate motor vehicle trips and the associated air pollutant emissions – less than significant.

Air pollutant emissions generated by operation of the project would be limited to a few vehicle trips per month to maintain the PS/PRS. Based on a peak day of two light-duty truck round trips, estimated vehicle emissions are 0.02 pounds NO_x, <0.01 pounds ROC, 0.15 pounds CO, and 0.01 pounds PM_{10}. These emissions would not exceed the VCAPCD or SCAQMD thresholds and are considered less than significant.

Greenhouse Gas Emissions

Impact AQ-3: Construction activities associated with implementation of the proposed project would result in greenhouse gas emissions that may affect global climate change – less than significant.

The proposed project would result in short-term GHG emissions associated with construction activities (see Table 4.1-5). Emissions of GHG from construction-related sources were estimated using CARB's EMFAC 2014 Model and emission factors provided in the California Climate Action Registry General Reporting Protocol. Estimated emissions of GHG associated with construction are 1,870.8 $MTCO_2E$, and 62.4 $MTCO_2E$ 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, greenhouse gas emissions are considered a less than significant impact to global climate change.

Table 4.1-5. Total (Annual) Construction Greenhouse Gas Emissions (metric tons)

Project Component	CO_2	CH_4	N_2O	CO_2E
North interconnection pipeline	612.10	0.01	0.02	615.97
PS/PRS	718.16	0.01	0.02	721.81
Air-vacuum relief valves	10.18	<0.01	<0.01	10.24
Lindero Pump Station No. 1 reverse flow valve upgrade	2.66	<0.01	<0.01	2.67
South interconnection pipeline	448.65	0.01	0.02	451.20
Yerba Buena recycled water pipeline extension	54.76	<0.01	<0.01	55.03
Canyon Oaks Park Lateral recycled water pipeline	13.78	<0.01	<0.01	13.87
Total	**1860.28**	**0.04**	**0.06**	**1870.78**

Impact AQ-4: Electrical consumption of the proposed PS/PRS would result in greenhouse gas emissions associated with power generation and may affect global climate change – less than significant.

The proposed project would result in long-term GHG emissions associated with generating electrical power to operate the proposed PS/PRS. Based on an estimated power consumption of 1,000 KW-hr, emissions factors for Southern California Edison provided by the CARB CalEEMod model, and 96 hours per year operation for testing and maintenance, annual GHG emissions would be 30.7 $MTCO_2E$. These emissions would be 93.1 $MTCO_2E$ when combined with amortized construction GHG emissions. As these emissions are less than the significance threshold, greenhouse gas emissions are considered a less than significant impact to global climate change.

4.1.3.3 Cumulative Impacts

The cumulative projects, as listed in Section 3.5, would generate both short-term (demolition and construction) and long-term (primarily motor vehicles) air quality impacts. Project-related construction emissions would be in addition to short-term emissions of other projects that are under construction at the same time. Project-specific localized construction impacts within SRA 6 (West San Fernando Valley) would be significant and contribute to cumulative impacts of projects in the City of Agoura Hills (also located within SRA 6). Overall, the project contribution may be cumulatively considerable.

The project would also generate fugitive dust that may be considered a nuisance. None of the cumulative projects would generate fugitive dust affecting the same population, such that cumulative impacts would be the same as project-specific impacts.

4.1.3.4 General Plan Policy Consistency

The proposed project involves installation of components within Ventura County (Oak Park Planning Area), the City of Thousand Oaks, and the City of Westlake Village. The following discussion addresses consistency with applicable air quality policies of the general plans of these three jurisdictions.

Ventura County General Plan

Air quality policies of the Ventura County General Plan Goals, Policies and Programs document (Section 1.2.2) are applicable to components of the proposed project located in Oak Park and include:

1. Discretionary development that is inconsistent with the AQMP shall be prohibited, unless overriding considerations are cited by the decision-making body.
2. The air quality impacts of discretionary development shall be evaluated by use of the Guidelines for the Preparation of Air Quality Impact Analysis.
3. Discretionary development that would have a significant adverse air quality impact shall only be approved if it is conditioned with all reasonable mitigation measures to avoid, minimize or compensate (offset) for the air quality impact. Developers shall be encouraged to employ innovative methods and technologies to minimize air pollution impacts.
4. Where deemed necessary by the VCAPCD, discretionary development shall be conditioned to develop, implement, and maintain over time, Transportation Demand Management programs consistent with VCAPCD's trip reduction rule 210. TDM programs shall include a requirement for annual performance reporting to and approval by the VCAPCD.
5. Development subject to VCAPCD permit authority shall comply with all applicable VCAPCD rules and permit requirements, including the use of best available control technology as determined by the VCAPCD.

The proposed project is consistent with applicable Ventura County General Plan air quality policies because:

1. The project is consistent with the AQMP.
2. Air quality impacts have been evaluated using the VCAPCD Guidelines.
3. Mitigation would be implemented to minimize air pollutant emissions.
4. The project would generate minimal long-term traffic, and a Transportation Demand Management program is not needed.
5. The project would comply with applicable VCAPCD rules.

Oak Park Area Plan

Air quality policies of the Oak Park Area Plan applicable to the proposed project include:

- Discretionary development which could have significant adverse air quality impacts shall be conditioned to avoid, minimize or compensate for the air quality impact (Policy 1.1.2-1).

- Projects subject to VCAPCD permit authority shall comply with all applicable VCAPCD rules and permit requirements, including using the best available control technology as determined by the VCAPCD. Developers shall be encouraged to employ innovative technology in order to minimize air pollution impacts (Policy 1.1.2-2).
- Where deemed necessary by the VCAPCD, discretionary development shall be required to submit a Transportation Systems Management Plan, contribute funds to the Commuter Computer, develop or participate in employee ride sharing or van pooling programs, subsidize transit fares for employees, implement a four-day work week, incorporate an Integrated Energy System into the design of the development, and/or comply with other air pollution mitigation measures deemed appropriate by the VCAPCD (Policy 1.1.2-3).

The proposed project is consistent with applicable Oak Park Area Plan air quality policies:

- The project (with mitigation) would not have significant adverse air quality impacts (Policy 1.1.2-1).
- The proposed project does not require any VCAPCD permits but would comply with VCAPCD Rules 51 and 55 during construction (Policy 1.1.2-2).
- As the project would generate only a few vehicle trips per month, a Transportation Systems Management Plan is not required (Policy 1.1.2-3).

City of Thousand Oaks

Applicable City of Thousand Oaks General Plan air quality policies are limited to Conservation Element Policy CO-39:

- Support efforts to reduce greenhouse gas emissions, consistent with the intent of the State of California's California Global Warming Solutions Act of 2006 (Assembly Bill 32).

The project is consistent with AB 32 and a greenhouse gas analysis has been prepared. Therefore, the proposed project is consistent with this City policy.

City of Westlake Village

The following City of Westlake Village General Plan air quality policies are applicable to the proposed project:

- Continue to enforce construction site guidelines which require trucks hauling soil, dirt, sand or other emissive materials to cover their loads (Natural Resources Policy 7.1.1).
- Require soils to be seeded and watered upon completion of construction and initial landscaping activities ((Natural Resources Policy 7.1.2).

- Require construction sites to install truck wheel washers and other barriers to prevent transporting of soil onto public rights of way (Natural Resources Policy 7.1.3).

The proposed project is consistent with these policies because:

- As required by SCAQMD Rule 403, trucks transporting earth materials to and from construction sites would be covered.
- As required by SCAQMD Rule 403, construction areas where paving or landscaping would not be replaced would be seeded to minimize generation of fugitive dust.
- As required by SCAQMD Rule 403, wheel washers or equivalent methods (rumble plates) would be provided at construction sites to minimize track-out of earth materials on public roadways.

4.1.4 Mitigation Measures

4.1.4.1 Proposed Project

MM AQ-1. Applicable construction mitigation measures listed in Section 7.4 of the VCAPCD Air Quality Assessment Guidelines and applicable Best Available Control Measures listed in SCAQMD Rule 403 would be implemented.

4.1.4.2 Cumulative Impacts

Same as project-specific measures (see Section 4.1.4.1).

4.1.5 Residual Impacts

4.1.5.1 Proposed Project

Mitigation measures provided would minimize fugitive dust and PM_{10} emissions generated by project construction activities and comply with applicable VCAPCD and SCAQMD rules. Therefore, residual impacts would be less than significant.

4.1.5.2 Cumulative Impacts

Same as for the proposed project.

4.2 WATER RESOURCES

4.2.1 Physical Setting

4.2.1.1 Surface Water Characteristics

The proposed project components are located within the Lindero Canyon watershed, a sub-watershed of the Malibu Creek watershed. The Malibu Creek watershed encompasses approximately 109 square miles, extending from Simi Peak south to Malibu Lagoon, and west to Hidden Valley. Primary surface water features of the watershed include Las Virgenes Creek, Triunfo Creek, Medea Creek, Lindero Creek, Cold Creek, Malibu Creek, Lake Sherwood, Westlake Lake, Malibou Lake, and Lake Lindero.

Lindero Creek extends from near Simi Peak about 3.9 stream miles to Lake Lindero, and about 1.8 stream miles to its confluence with Medea Creek (see Figure 4.2-1). Much of the watershed is developed with residential land uses and two golf courses (North Ranch Country Club, Lake Lindero Country Club). Surface water was observed in Lindero Creek adjacent to the PS/PRS site on April 3, 2019, augmented by irrigation run-off from upstream residential land uses and the North Ranch Country Club. In addition, seeps have been reported in the area (Oakridge Geoscience, 2015), which may contribute to rising groundwater in the streambed.

Near the South interconnection pipeline alignment, Lindero Creek is channelized within the Lake Lindero Country Club and riparian vegetation is mostly absent. North of the Lake Lindero Country Club, Lindero Creek is a less confined earthen channel supporting a linear strip of riparian vegetation and oak woodland. Approximately 400 feet south of Rockfield Street, the channel transitions to a 12-foot by 12-foot reinforced concrete buried box culvert, extending northwest under Lindero Canyon Road to approximately 150 feet north of Rockfield Street, where it emerges as an earthen channel on the west side. This channel extends north and crosses under Kanan Road west of Falling Star Avenue, and supports mostly oak woodland vegetation.

Lindero Creek was included in the Malibu Creek Watershed Monitoring Program managed by the City of Calabasas. The program includes two water quality sampling locations on Lindero Creek; LIN1 located just downstream of Thousand Oaks Boulevard and LIN2 located near the outlet of Lake Lindero. Table 4.2-1 provides a summary of water quality parameters monitored on seven sampling days from February through May 2005. Data collected indicates fecal coliform, E. coli, total nitrogen and total phosphorus water quality standards are exceeded within Lindero Creek (Medlen, 2005). More recent data for this area are not available.

Table 4.2-1. Lindero Creek Water Quality Data (February-May 2005)

Parameter	Sampling Site LIN1	Sampling Site LIN2
Water Temperature (ºC)	12.6-15.1	13.6-19.6
Dissolved Oxygen (mg/l)	9.55-13.46	6.15-16.6
pH	8.0-8.6	8.0-8.9
Conductivity (µS)	2700-3600	1250-3000
Total Nitrogen (mg/l)	0.7-1.65	0.72-1.52
Fecal Coliform (colonies/100 ml)	23-1300	<2-1300

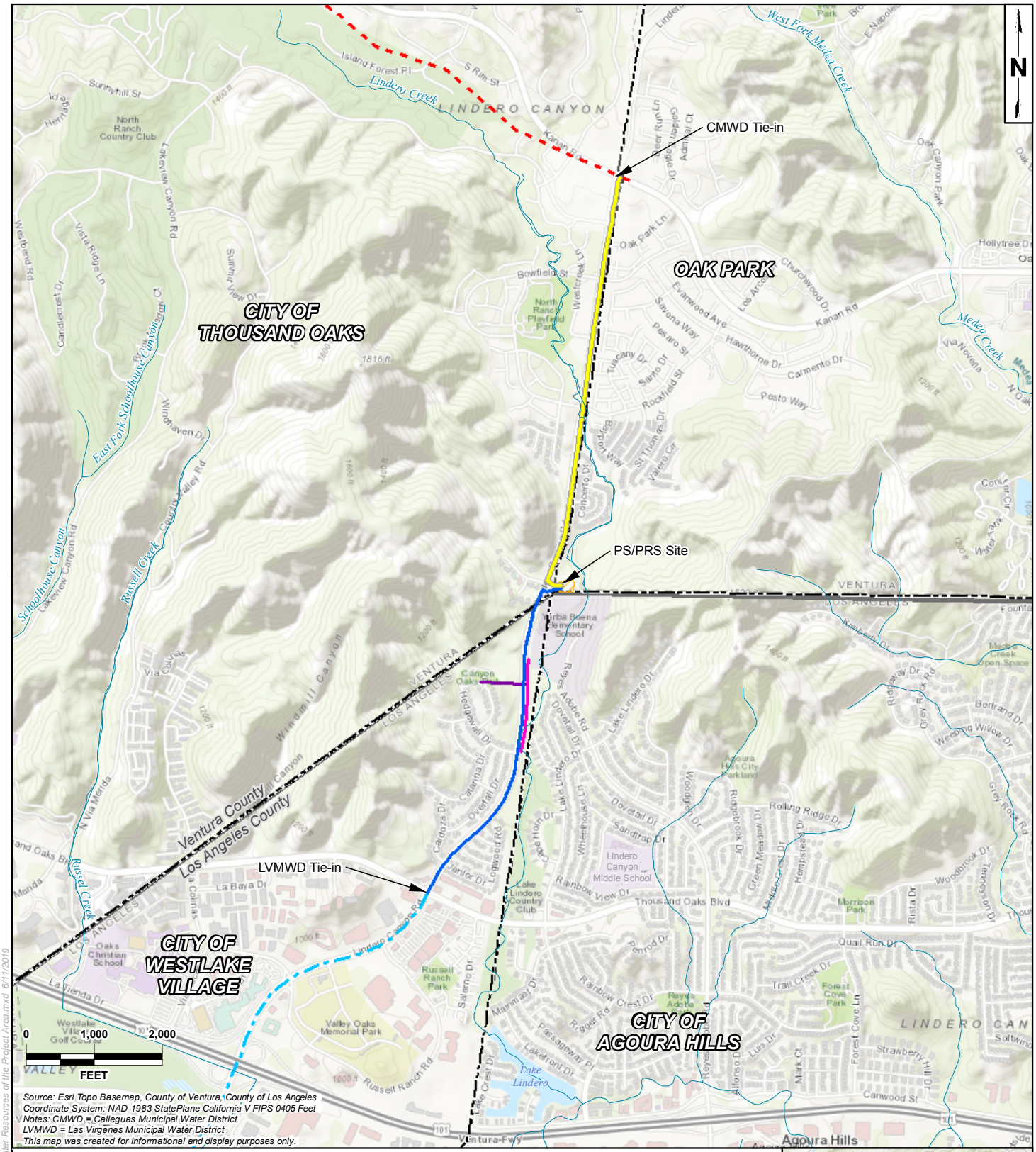
4.2.1.2 Groundwater Environment

The proposed pipeline alignments are located within the Russell Valley Groundwater Basin, which encompasses the Russell Valley and portions of the Lindero Canyon and Medea Creek watersheds. The Basin encompasses 3,100 acres and the principal water bearing formation is Holocene age alluvium about 35 to 55 feet thick (DWR, 2004). Recharge from underflow is estimated to be about 300 to 500 acre-feet/year and about 50 to 150 acre-feet/year from irrigation return. Groundwater extraction is estimated to be about 600 acre-feet/year (DWR, 2004). Total dissolved solids and sulfate exceed the established maximum contaminant levels for some wells in the Basin (DWR, 2004).

The 2014 Sustainable Groundwater Management Act requires the formation of groundwater sustainability agencies (GSAs) in high- and medium-priority groundwater basins and sub-basins by June 30, 2017 to meet California Water Code requirements. The Russell Valley Groundwater Basin is a low priority basin and formation of a GSA is not required to manage groundwater in the Basin.

4.2.1.3 Floodplain and Flooding

The proposed PS/PRS site is located approximately 100 feet from Lindero Creek, but is not within the flood hazard area (Zone A) indicated on Flood Insurance Rate Map no. 06111C0995E (see Figure 4.2-2). Flood Insurance Rate Map no. 06037C1241F indicates the flood hazard area (1% chance) associated with Lindero Creek includes a portion of the South interconnection pipeline alignment in Lindero Canyon Road, approximately 200 feet north of Hedgewall Drive (see Figure 4.2-3). However, the flood hazard map is outdated as the creek channel and embankment are located entirely east of Lindero Canyon Road and the proposed interconnection pipeline alignment near Hedgewall Drive.



Source: Esri Topo Basemap, County of Ventura, County of Los Angeles
Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet
Notes: CMWD = Calleguas Municipal Water District
LVMWD = Las Virgenes Municipal Water District
This map was created for informational and display purposes only.

LEGEND:

- CMWD Interconnection Pipeline (North Segment)
- Existing Lindero Feeder No.2
- LVMWD Existing Pipeline
- LVMWD Interconnection Pipeline (South Segment)
- Canyon Oaks Park Lateral Recycled Water Pipeline
- Yerba Buena Recycled Water Pipeline Extension
- Existing Blue Line Channel
- Lindero Pump Station No.1
- Pump Station/PRS Site
- City Limit
- County Boundary

MAP EXTENT:

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

PROJECT NAME:
CMWD - LVMWD INTERCONNECTION
VENTURA AND LOS ANGELES COUNTIES, CA

PROJECT NUMBER: 1802-0331

DATE: June 2019

SURFACE WATER RESOURCES OF THE PROJECT AREA

FIGURE 4.2-1

Calleguas Water District\Figure 4_2_1 - Surface Water Resources of the Project Area.mxd 6/11/2019

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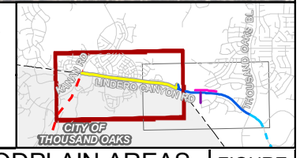
LEGEND:

- Pump Station/PRS Site
- City Limit
- County Boundary
- Proposed New Turn-Out
- North Interconnection Pipeline
- Existing Lindero Feeder No.2
- South Interconnection Pipeline
- Connector Pipeline to New Turn-Out
- FEMA National Flood Hazard Layer (NFHL)

MAP EXTENT:



0 250 500
FEET

Source: NAIP Imagery 2016
Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet
Notes: CMWD = Calleguas Municipal Water District
LVMWD = Las Virgenes Municipal Water District
This map was created for informational and display purposes only.

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

PROJECT NAME: CMWD - LVMWD INTERCONNECTION VENTURA AND LOS ANGELES COUNTIES, CA
PROJECT NUMBER: 1802-0331
DATE: June 2019

REGULATED FLOODPLAIN AREAS ALONG THE NORTH INTERCONNECTION PIPELINE

FIGURE 4.2-2

Calleguas Water District\Figure 4_2_3 - CMWD Interconnection Pipeline Alignment and FEMA Flood.mxd 6/11/2019

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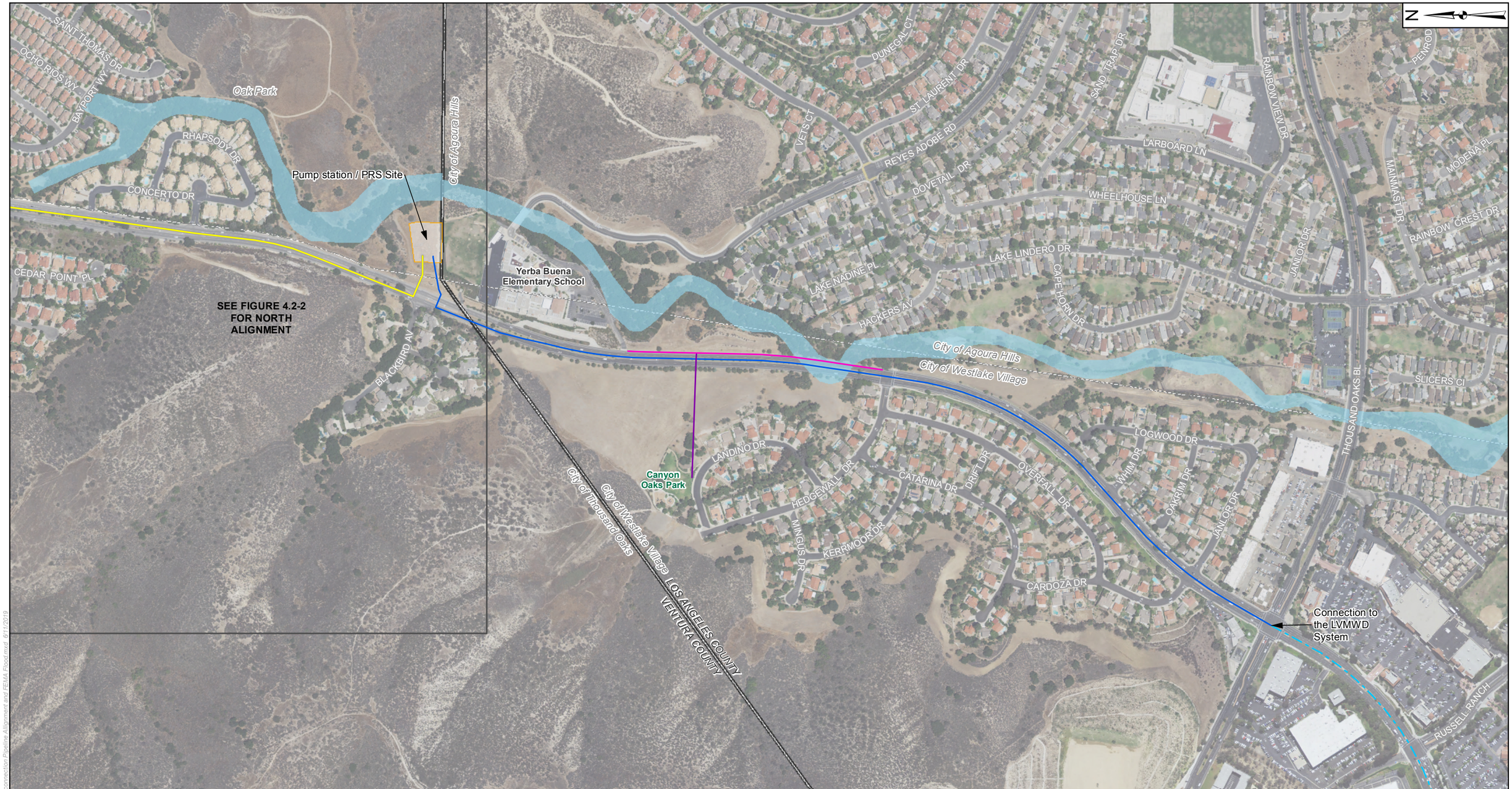

LEGEND:

- Pump Station/PRS Site
- City Limit
- County Boundary
- North Interconnection Pipeline
- LVMWD Existing Pipeline
- South Interconnection Pipeline
- Canyon Oaks Park Lateral Recycled Water Pipeline
- Yerba Buena Recycled Water Pipeline Extension
- FEMA National Flood Hazard Layer (NFHL)

MAP EXTENT:

0 250 500
FEET

Source: NAIP Imagery 2016
Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet
Notes: CMWD = Calleguas Municipal Water District
LVMWD = Las Virgenes Municipal Water District
This map was created for informational and display purposes only.

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

PROJECT NAME: CMWD - LVMWD INTERCONNECTION
VENTURA AND LOS ANGELES COUNTIES, CA

PROJECT NUMBER: 1802-0331

DATE: June 2019

REGULATED FLOODPLAIN AREAS ALONG THE SOUTH INTERCONNECTION PIPELINE

FIGURE 4.2-3

Calleguas Water District\Figure 4.2.3 - CMWD Interconnection Pipeline Alignment and FEMA Flood.mxd, 6/11/2019

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4.2.2 Regulatory Setting

4.2.2.1 Federal Clean Water Act (CWA)

The Federal Water Pollution Control Act Amendments of 1972 and 1987, collectively known as the Clean Water Act (33 United States Code [USC] §§1251 et seq.), establish the principal Federal statutes for water quality protection. The Clean Water Act (CWA)'s intent is "to restore and maintain the chemical, physical, and biological integrity of the nation's water, to achieve a level of water quality which provides for recreation in and on the water, and for the propagation of fish and wildlife."

CWA Section 303(d) requires States, territories, and tribes to develop lists of impaired waters within their jurisdictions every two years. Impaired waters are those that do not meet water quality standards. States, territories, and tribes are also required to establish priority rankings for waters on their respective lists. Water bodies in a given State or territory are prioritized by comparing their existing degrees of pollution, and the sensitivity and importance of beneficial uses that are being threatened. The water bodies that are deemed most important are designated as "high priority".

Section 303(d) also requires States, territories, and tribes to develop Total Maximum Daily Loads (TMDLs) for all water bodies on their respective lists of impaired waters. In essence, TMDLs are plans by which impaired water bodies would be restored such that they consistently meet the established water quality standard(s) that are currently being violated. TMDLs specify the maximum amount of pollutants that a water body can receive and still meet water quality standards, and allocates pollutant loads among point and non-point sources in the subject watershed. The intent of CWA is for the TMDL program to work hand in hand with the impaired waters lists; impaired waters are identified, and then restored to meet water quality standards. Based upon a March 22, 1999 consent decree between the U.S. Environmental Protection Agency, Heal the Bay, Inc., and Baykeeper, TMDLs must be prepared for all impaired waters within 13 years.

The proposed project components are located within the Lindero Canyon watershed, a sub-watershed of the Malibu Creek watershed, approximately 10.5 miles northwest of Malibu Lagoon. The proposed pipeline alignments are primarily located within/along Lindero Canyon Road which parallels Lindero Creek. Lindero Creek extends from the southern slopes of Simi Peak to Lake Lindero, to its confluence with Medea Creek, which then flows into Malibou Lake. Malibu Creek flows out of Malibou Lake to the Pacific Ocean. For the purposes of water quality assessment, Lindero Creek is considered two reaches: Reach 1 is located between Lake Lindero and the confluence with Medea Creek and Reach 2 is located above Lake Lindero. Medea Creek is considered two reaches: Reach 1 is located between Malibu Lake and the confluence with Lindero Creek and Reach 2 is located above the confluence with Lindero Creek. Table 4.2-2 lists water quality impairments of these waterbodies identified as required by Section 303(d) of the CWA.

Table 4.2-2. Impaired Waters of the Lindero Canyon and Medea Creek Watersheds

Waterbody	Source of Impairment
Lindero Creek Reach 1	Benthic community effects, indicator bacteria, algae, invasive species, selenium, scum/foam (unnatural), trash
Lindero Creek Reach 2	Indicator bacteria, algae, selenium, scum/foam (unnatural), trash
Lake Lindero	Chloride, algae, odor, specific conductance, eutrophic, selenium, trash
Medea Creek Reach 1	Benthic community effects, indicator bacteria, algae, trash, sedimentation/siltation, metals/metalloids
Medea Creek Reach 2	Benthic community effects, indicator bacteria, selenium, trash, sedimentation/siltation, algae, invasive species

4.2.2.2 California Porter-Cologne Act

The Porter-Cologne Act (California Water Code Section 13000) is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and groundwater, and to both point and non-point sources of pollution. Pursuant to the Porter-Cologne Act, it is the policy of the State that:

- The quality of all the waters of the State shall be protected.
- All activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason.
- The State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation.
- The State shall undertake all possible steps to encourage development of water recycling facilities to help meet the growing water requirements of the State.

Pursuant to the Porter-Cologne Act, the responsibility for protection of water quality in California rests with the State Water Resources Control Board (SWRCB). The SWRCB administers Federal and State water quality regulations for California's ocean waters, and also oversees and funds the State's nine Regional Water Quality Control Boards (RWQCBs). The RWQCBs prepare water quality control plans, establish water quality objectives, and carry out Federal and State water quality regulations and permitting duties for inland water bodies, enclosed bays, and estuaries within their respective regions. The Porter-Cologne Act gives the SWRCB and RWQCBs broad powers to protect water quality by regulating waste dischargers to water and land, and requiring cleanup of hazardous wastes.

The RWQCBs regulate discharges under the Porter-Cologne Act primarily through issuance of National Pollutant Discharge Elimination System (NPDES) and waste discharge report permits. Anyone discharging or proposing to discharge materials that could affect water quality (other than to a community sanitary sewer system regulated by an NPDES permit) must file a report of waste discharge. The Porter-Cologne Act provides RWQCBs with several options for enforcing regulations, including cease and desist orders, cleanup and abatement orders, administrative civil liability orders, civil court actions, and criminal prosecutions.

The Malibu Creek watershed (including Lindero Creek and Medea Creek) is within the jurisdiction of the Los Angeles Regional Water Quality Control Board (LARWQCB), which includes coastal drainages from Rincon Point (western boundary of Ventura County) to the eastern Los Angeles County boundary.

Per the requirements of the CWA and the California Porter-Cologne Act, LARWQCB has prepared a Water Quality Control Plan for the watersheds under its jurisdiction. The Water Quality Control Plans from all nine of the RWQCBs and the California Ocean Plan (prepared and implemented by SWRCB) collectively constitute the State Water Quality Control Plan. Water Quality Control Plan, Los Angeles Region has been designed to support the intentions of the CWA and the Porter-Cologne Act by: (1) characterizing watersheds within the Los Angeles Region; (2) identifying beneficial uses that exist or have the potential to exist in each water body; (3) establishing water quality objectives for each water body to protect beneficial uses or allow their restoration, and; (4) providing an implementation program that achieves water quality objectives. Implementation program measures include monitoring, permitting, and enforcement activities. Per the requirements of CWA Section 303(c), the Water Quality Control Plan is reviewed every three years and revised as necessary to address problems with the plan and meet new legislative requirements.

Beneficial uses designated by LARWQCB in the Water Quality Control Plan for the Lindero Canyon and Medea Creek watersheds are listed in Table 4.2-3. Beneficial uses are potential uses of surface waters and groundwater that could be supported, including water supply, recharge of groundwater supplies, recreation, and wildlife habitat. Consistent with the requirements of CWA Section 303(d), LARWQCB identifies impaired waters and prepares TMDLs for impaired waters within its jurisdiction. TMDLs completed to date affecting the Lindero Canyon watershed address indicator bacteria, trash, algae, and scum/foam.

4.2.2.3 Municipal Stormwater Permits

The following permits regulate non-point water discharges (run-off) of storm water and non-storm water into storm drains within affected watersheds:

- Ventura County: Ventura County Municipal Separate Storm Sewer System MS4 NPDES (Order no. R4-2010-0108).
- Los Angeles County: Los Angeles County Coastal Watersheds Municipal Separate Storm Sewer System MS4 NPDES permit (Order no. R4-2012-0175).

These permits provide best management practices to be implemented by new development and construction activities to minimize discharge of pollutants to waterways.

Table 4.2-3. Beneficial Uses of Surface Waters of the Lindero Canyon and Medea Creek Watersheds

Watershed/Reach	Beneficial Uses
Lindero Creek Reach 1	Municipal water supply (potential), warm freshwater habitat (intermittent), wildlife habitat, water-contact recreation (intermittent), non-water contact recreation (intermittent)
Lindero Creek Reach 2	Municipal water supply (potential), warm freshwater habitat (intermittent), wildlife habitat, water-contact recreation (intermittent), non-water contact recreation (intermittent)
Medea Creek Reach 1	Municipal water supply (potential), groundwater replenishment, warm freshwater habitat (intermittent), cold freshwater habitat (potential), rare species habitat, wildlife habitat, wetland habitat, water-contact recreation (intermittent), non-water contact recreation (intermittent)
Medea Creek Reach 2	Municipal water supply (intermittent), groundwater replenishment, warm freshwater habitat, wildlife habitat, wetland habitat, water-contact recreation, non-water contact recreation

4.2.3 Impact Analysis

4.2.3.1 Significance Thresholds

Construction Water Quality

Any project-related exceedance of the water quality objectives of the Water Quality Control Plan is considered a significant impact.

Groundwater Quantity

Any project-related activity that would substantially increase groundwater production from an overdrafted basin is considered a significant impact. Overdraft is defined as a long-term decline in groundwater in storage caused by extraction rates exceeding recharge rates.

Groundwater Quality

Any project-related exceedance of the water quality objectives of the Water Quality Control Plan is considered a significant impact.

Surface Water Quantity

Any project-related reduction in surface flow that would substantially reduce the potential for the affected waterbody to support identified beneficial uses is considered a significant impact.

Surface Water Quality

Any land use or project that would individually or cumulatively degrade surface water quality causing an exceedance of the water quality objectives of the Water Quality Control Plan is considered to have a significant impact. Any land use or project that would directly or indirectly cause stormwater quality to exceed the applicable waste discharge requirements is considered to have a significant impact.

Flooding

Development within an identified flood hazard area (1 percent annual chance) may result in significant flood hazard impacts to persons and/or property.

4.2.3.2 Project-Specific Impacts

Storm/Surface Water Quality

Impact WR-1: Construction activities associated with implementation of the proposed project may result in surface water contamination due to storm water run-off from construction sites – less than significant.

Storm water run-off from project construction sites may transport sediment and pollutants to nearby storm drains and Lindero Creek and degrade water quality. The proposed project would be subject to the Statewide General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (2009-0009-DWQ, as amended), and best management practices required by this permit would be implemented during project construction.

Portions of the proposed project located within Ventura County and the City of Thousand Oaks would be subject to Best Management Practices identified for construction sites exceeding one acre as identified in the County's stormwater quality management program developed for the Ventura County Municipal Separate Storm Sewer System Permit (Order R4-2010-0108, NPDES Permit no. CAS004002). Portions of the proposed project located within the City of Westlake Village would be required to implement best management practices identified for construction sites subject to the Los Angeles County Coastal Watersheds Municipal Separate Storm Sewer System MS4 NPDES permit (Order no. R4-2012-0175).

Storm water pollution prevention plans would be developed by qualified practitioners and implemented for the proposed project. The plans will include appropriate erosion control measures (e.g., mulching, hydroseeding, soil binders, geotextiles), sediment controls (e.g., fiber rolls, street sweeping, storm drain inlet controls), and wind erosion controls. Impacts would be less than significant with implementation of a project-specific storm water pollution prevention plan because this would minimize storm water run-off and reduce the potential for water quality degradation.

Groundwater Quantity

The proposed project would not result in the consumption of any groundwater. Water would be used during the construction period for soil compaction, concrete/slurry mixing, and dust control. This water would be supplied by fire hydrants located in the City of Westlake Village or the City of Thousand Oaks which originates as imported surface water (see discussion of the State Water Project in Section 1.3.1).

Groundwater Quality

Groundwater may be encountered during deep excavations for construction of the PS/PRS near Lindero Creek. However, proposed dewatering prior to excavation at the PS/PRS site would avoid construction activities within or adjacent to exposed groundwater and associated groundwater contamination.

Surface Water Quantity/Water Supply

Impact WR-2: Potable water to be used by the proposed project could affect local water supplies – less than significant.

The proposed project does not involve any direct consumption of surface water. However, potable water supplied to the project area and that to be transported by proposed pipelines originates as surface water in the Sacramento/San Joaquin delta in northern California. The proposed project would utilize potable water for construction (soil compaction, concrete/slurry mixing, dust control). It is also possible that there may be the need to occasionally perform maintenance-related purging of stagnant water from the proposed PS and/or PRS to a sewer or storm drain. However, the preferred strategy will be to operate the facilities periodically to maintain good water quality.

Construction-related water use would average about several thousand gallons per day over the roughly two-year construction period. This daily usage is equivalent to the water use of about 10 persons, based on 210 gallons per day per capita in Thousand Oaks (Kennedy/Jenks Consultants, 2016). The impact of construction-related water use is considered a less than significant impact to local water supplies as it would represent a comparable water use to less than 0.01 percent of the current population of the City of Thousand Oaks.

Flooding

The PS/PRS site is not located within the FEMA-identified 1 percent (100-year) flood hazard area associated with Lindero Creek and would not be subject to flooding. The South interconnection pipeline would be located within the Lindero Canyon Road right-of-way and would pass through a flood hazard area approximately 200 feet north of Hedgewall Drive associated with Lindero Creek. However, the FEMA flood hazard map does not reflect current conditions. The interconnection pipeline would be fully buried and not subject to failure should Lindero Canyon Road become inundated during a major storm event. The proposed project would not result in any changes to mapped flood water elevations or result in any increase in the number of persons or area of property potentially exposed to flooding. Therefore, flood hazard impacts are not anticipated.

4.2.3.3 Cumulative Impacts

The cumulative projects listed in Section 3.5 would generate storm water run-off and could result in contamination of surface waters. However, none of the projects are located in the Lindero Creek watershed. Therefore, the proposed project would not incrementally contribute to cumulative surface water quality impacts of these projects. Other projects listed in Section 3.5 may result in groundwater contamination through excavation-related exposure of groundwater, and the project may incrementally contribute to contamination of the Russell Valley Groundwater Basin. Other projects listed in Section 3.5 would be served potable water by CMWD or LVMWD and potable water usage by the proposed project would contribute to a less than significant cumulative water supply impact.

4.2.3.4 General Plan Policy Consistency

Ventura County General Plan

Water resources policies of the Ventura County General Plan Goals, Policies and Programs document (Section 1.3.2) are applicable to components of the proposed project located in Ventura County and include:

1. Discretionary development which is inconsistent with the goals and policies of the County's Water Management Plan shall be prohibited, unless overriding considerations are cited by the decision-making body.
2. Discretionary development shall comply with all applicable County and State water regulations.
3. The installation of on-site septic systems shall meet all applicable State and County regulations.
4. Discretionary development shall not significantly impact the quantity or quality of water resources within watersheds, groundwater recharge areas or groundwater basins.

5. Landscape plans for discretionary development shall incorporate water conservation measures as prescribed by the County's Guide to Landscape Plans, including use of low water usage landscape plants and irrigation systems and/or low water usage plumbing fixtures and other measures designed to reduce water usage.
6. The use of the Santa Clara River as a multiple resource (i.e., source of supply for water, concrete aggregates and biological habitat) shall be permitted to continue; with the use of the River as a water resource having priority over all other uses.
7. Out-of-river mining below the historic or predicted high groundwater level in the Del Norte/El Rio (Oxnard Forebay Basin) area may be permitted if the applicant can demonstrate to the satisfaction of the County of Ventura that the excavation activity will not interfere with or affect groundwater quality and quantity.
8. All discretionary development shall be conditioned for the proper drilling and construction of new oil, gas and water wells and destruction of all abandoned wells on-site.
9. New wells in the Oxnard Plain pressure basin shall not be allowed if they would increase seawater intrusion in the Oxnard or Mugu aquifers.
10. All new golf courses shall be conditioned to prohibit landscape irrigation with water from groundwater basins or inland surface waters identified as Municipal and Domestic Supply or Agricultural Supply in the California Regional Water Quality Control Board's Water Quality Control Plan unless either: a) the existing and planned water supplies for a Hydrologic Area, including interrelated Hydrologic Areas and Subareas, are shown to be adequate to meet the projected demands for existing uses as well as reasonably foreseeable probable future uses within the area, or b) it is demonstrated that the total groundwater extraction/recharge for the golf course will be equal to or less than the historic groundwater extraction/recharge (as defined in the Ventura County Initial Study Assessment Guidelines) for the site. Where feasible, reclaimed water shall be utilized for new golf courses.

The proposed project is consistent with these water resources policies because:

- The proposed project is consistent with the County’s Water Management Plan and complies with County and State regulations.
- The proposed project does not involve any septic systems, landscaping, direct use of surface water, mining, new wells, or golf courses.
- The proposed project would not significantly impact surface or groundwater resources.

Oak Park Area Plan

Water resources policies of the Oak Park Area Plan include:

- Unused wells shall be abandoned and destroyed per the requirements of the County Well Ordinance (Policy 1.2.2-1).
- Developers of discretionary projects shall be required to submit a water conservation plan which should include consideration of low water usage landscape plants and irrigation systems, low or ultra-low water usage plumbing fixtures and other measures designed to reduce water usage (Policy 1.2.2-2).
- Landscaping within discretionary development shall utilize reclaimed water from the Triunfo Water and Sanitation District where economically and physically feasible (Policy 1.2.2-3).
- All discretionary permits shall be reviewed for consistency with the goals, objectives and policies of the County's Water Quality Management Plan (Policy 1.2.2-4).
- Discretionary development shall be designed to minimize soil erosion and downstream siltation and pollution by temporary revegetation shall be used on graded areas to reduce erosion potential and use of soil stabilization fabrics where necessary during the construction phase (Policy 1.2.2-5).
- Each residential tract shall include at least one model home which shall utilize a water conserving landscape design (Xeriscape) consistent with the Ventura County Guide to Landscape Plans (Policy 1.2.2-6).

The proposed project is consistent with the water resources policies of the Oak Park Area Plan (Section 1.2.2):

- No unused wells are located in proximity to project components.
- The proposed project would not involve any landscaping or plumbing fixtures.
- The proposed project would not require a discretionary permit from Ventura County such that review for consistency with the Water Quality Management Plan is not required.
- Although not subject to Ventura County review, areas affected by pipeline installation and PS/PRS construction would be restored through revegetation, replacement of hardscape, replacement of landscaping, and/or soil stabilization.
- The project does not include residential development.

City of Thousand Oaks

Water resources policies of the Thousand Oaks General Plan include:

- Locate structures and additions outside of the 100-year floodplain unless such facilities are necessary to serve existing uses and construction of these structures will not increase the hazard to life or property within or adjacent to the floodplain (Safety Element Policy C-6).
- Protect remaining floodplains in order to help retain stormwater runoff from tributary watersheds and reduce the potential for erosion and periodic flooding within downstream reaches of the Arroyo Conejo and Calleguas Creek (Conservation Element CO-14).
- Every effort shall be made to design and construct stormwater retention and debris basins to minimize any potentially adverse impacts to significant landform features, aquatic resources, and associated native plant and animal communities (Conservation Element CO-15).
- Continue to ensure the provision of water in quantities sufficient to satisfy current and projected demand (Conservation Element CO-17).
- Encourage the use of reclaimed water for irrigation purposes (Conservation Element CO-19).

The proposed project is consistent with the City's General Plan policies because:

- No facilities would be constructed within the 100-year floodplain.
- The Lindero Creek floodplain would not be affected.
- The proposed project does not involve any storm water retention basins or debris basins that may adversely affect landform features, aquatic resources or native plant and animal communities.
- The proposed project would help to ensure the current and projected potable water demand is satisfied during natural disasters.
- The proposed project includes providing reclaimed water to Canyon Oaks Park to replace potable water used for irrigation.

City of Westlake Village

The following City of Westlake Village General Plan water resources policy is applicable to the proposed project:

- Limit the impacts of development on Triunfo Canyon Creek and other riparian habitat areas through interagency coordination and development review (Watershed Policy 1.2).

The proposed project is consistent with this City policy because it would not adversely affect riparian habitat areas along Lindero Creek.

4.2.4 Mitigation Measures

4.2.4.1 Proposed Project

Significant water resources impacts were not identified; therefore, mitigation measures are not required.

4.2.4.2 Cumulative Impacts

Significant cumulative water resources impacts were not identified; therefore, mitigation measures are not required.

4.2.5 Residual Impacts

4.2.5.1 Proposed Project

Significant water resources impacts were not identified; therefore, mitigation measures are not required, and residual impacts would be less than significant.

4.2.5.2 Cumulative Impacts

Significant cumulative water resources impacts were not identified; therefore, mitigation measures are not required, and residual impacts would be less than significant.

4.3 BIOLOGICAL RESOURCES

4.3.1 Physical Setting

4.3.1.1 Overview

Although the proposed project components are located within or immediately adjacent to developed areas, designated open spaces (with mostly intact native vegetation and wildlife habitat) nearly surround the project sites including:

- Wistful Vista Open Space (Rancho Simi Recreation and Park District) located immediately east of the PS/PRS site and east of developed areas along Lindero Canyon Road within Oak Park.
- North Ranch Open Space (Conejo Open Space Conservation Agency) located west of developed areas along Lindero Canyon Road and north of Kanan Road within the City of Thousand Oaks.
- Lang Ranch Open Space (City of Thousand Oaks) located north of Kanan Road within the City of Thousand Oaks.
- Oakbrook Open Space (Conejo Recreation and Park District) located north of Kanan Road within the City of Thousand Oaks.
- Woodridge Open Space (Conejo Open Space Conservation Agency/City of Thousand Oaks) located north of Kanan Road within the City of Thousand Oaks.

4.3.1.2 Description of the Proposed Pipeline Alignments and PS/PRS Site

The proposed pipeline alignments are mostly located within roadway rights-of-way or other developed areas. Although the PS/PRS site is undeveloped, it supports mostly non-native vegetation typical of disturbed sites. A vegetation/habitat map of the pipeline alignments, the PS/PRS site and vicinity is provided as Figures 4.3-1 through 4.3-3. Slopes on both sides of Lindero Canyon Road in the project area (including the PS/PRS site) burned in November 2018 during the Woolsey Fire.

North Interconnection Pipeline

This pipeline would extend north from the proposed PS/PRS site to its connection to Lindero Feeder No. 2 within the public right-of-way along Lindero Canyon Road. Affected areas are developed with either roadway pavement, sidewalks, or landscaping. The only native vegetation is located along Lindero Creek and the slopes on the west side of Lindero Canyon Road, north of Blackbird Avenue. Lindero Creek in the project area supports coast live oak riparian forest dominated by coast live oak (*Quercus agrifolia*) and red willow (*Salix laevigata*). Arroyo willow (*Salix lasiolepis*) is also present along the low flow channel and occasional valley oaks (*Quercus lobata*) occur along the margin of this plant community. The slopes west of Lindero Canyon Road north of Blackbird Avenue support purple sage scrub (also known as *Salvia leucophylla* Shrubland Alliance) which is dominated by purple sage (*Salvia leucophylla*) and California buckwheat (*Eriogonum fasciculatum*) (see Figure 4.3-1).

South Interconnection Pipeline

This pipeline would extend south from the proposed PS/PRS site to its connection to the LVMWD potable water distribution system within the public right-of-way along Lindero Canyon Road. Much of the area along the roadway shoulder is developed with landscaping and sidewalks. Native vegetation is limited to coast live oak riparian forest along Lindero Creek, which is located immediately adjacent to Lindero Canyon Road near Hedgewall Drive (see Figure 4.3-2).

PS/PRS Site

Although periodically mowed for fire prevention purposes, the site burned in November 2018. Adjacent oak trees and riparian vegetation mostly survived. Vegetation is recovering at the site, mostly invasive non-native plant species typical of disturbed areas, including black mustard (*Brassica nigra*), rip-gut grass (*Bromus diandrus*), red brome (*Bromus madritensis* ssp. *rubens*), and summer mustard (*Hirschfeldia incana*). A narrow strip of purple sage scrub (*Salvia leucophylla* Shrubland Alliance) is located immediately north of the site and is dominated by purple sage and sagebrush (*Artemisia californica*). Coast live oak riparian woodland occurs along Lindero Creek east of the site and along an unnamed tributary located just north of the site (see Figure 4.3-3). A small patch of arroyo willow scrub (*Salix lasiolepis* Shrubland Alliance) is located along the unnamed tributary immediately east of Lindero Canyon Road. This patch of arroyo willow scrub was entirely burned in November 2018, which killed the trees. However, it is anticipated that willows will re-colonize this area. Coast live oak trees protected under the Ventura County Non-coastal Zoning Ordinance are located both north and east of the site.

Lindero Pump Station No. 1

This existing pump station is entirely paved and surrounded by a wall and does not support any vegetation or wildlife habitat.

Air/Vacuum Relief Valves for the Lindero Feeder No. 2 Pipeline

The four proposed locations are within the North Ranch Country Club golf course and support landscaping (turfgrass, trees, or shrubs). Native vegetation is absent.

Yerba Buena Recycled Water Pipeline Extension

This pipeline would be located within the Lindero Canyon Road public right-of-way and parallel to the South interconnection pipeline. Natural vegetation along this pipeline alignment is limited to coast live oak riparian forest associated with Lindero Creek located to the east and weedy plant species colonizing disturbed areas near the roadway shoulder.

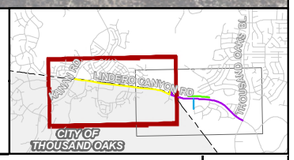
Canyon Oaks Park Lateral Recycled Water Pipeline

This pipeline would extend east from Canyon Oaks Park to Lindero Canyon Road across disturbed areas supporting non-native annual grassland, dominated by rip-gut grass (see Figure 4.3-2). The proposed pipeline alignment is located immediately adjacent to six large coast live oak trees within and adjacent to Canyon Oaks Park. Landscaping trees within Canyon Oaks Park (canary island pine [*Pinus canariensis*]) and along Lindero Canyon Road (Aleppo pine [*Pinus halepensis*]) are located along the pipeline alignment and may require removal.

LEGEND:

- Permanent Access and Pipeline Easement
- Pump Station/PRS Site
- Temporary Construction Easement
- City Limit
- County Boundary
- Biological Study Area
- CMWD Interconnection Pipeline
- Lindero Feeder No.2
- LVMWD Interconnection Pipeline
- Connector Pipeline to New Turn-Out
- Vegetation Types
  - CR - Coast live oak riparian forest
  - DI - Disturbed (weedy annual grassland)
  - DV - Developed (roads, residences, landscaping)
  - PS - Purple sage scrub

MAP EXTENT:



0 250 500
FEET

Source: NAIP Imagery 2016
Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet
Notes: CMWD = Calleguas Municipal Water District
LVMWD = Las Virgenes Municipal Water District
This map was created for informational and display purposes only.

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

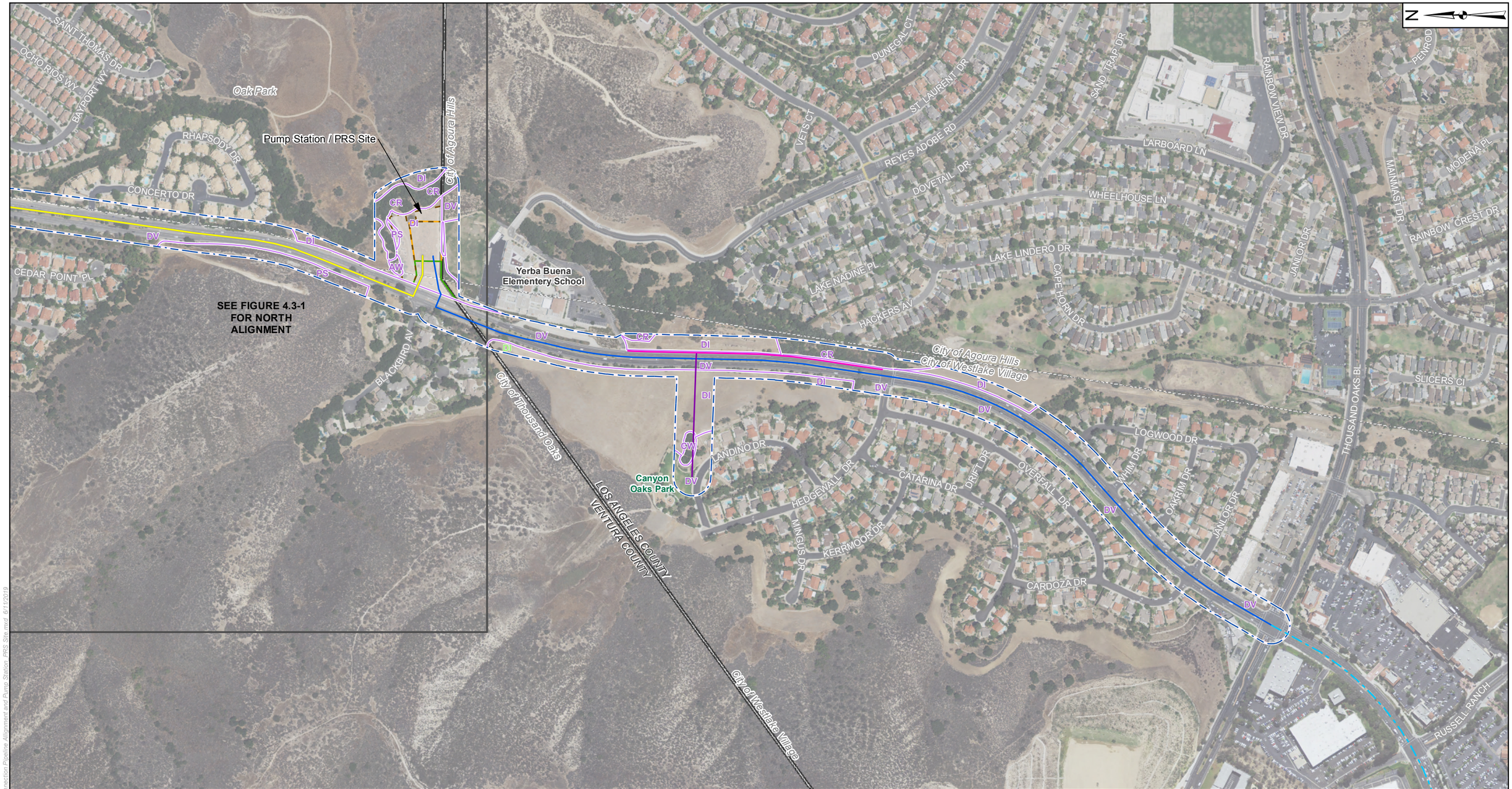
PROJECT NAME: CMWD - LVMWD INTERCONNECTION VENTURA AND LOS ANGELES COUNTIES, CA
PROJECT NUMBER: 1802-0331
DATE: June 2019

NORTH INTERCONNECTION PIPELINE ALIGNMENT BIOLOGICAL HABITAT MAP

FIGURE 4.3-1

Calleguas Water District\Figure 4.3 - CMWD Interconnection Pipeline Alignment and Pump Station_PRS Site.mxd 6/11/2019

Back of Figure 4.3-1



LEGEND:

- Permanent Access and Pipeline Easement
- Pump Station/PRS Site
- Temporary Construction Easement
- City Limit
- County Boundary
- Biological Study Area
- CMWD Interconnection Pipeline
- LVMWD Existing Pipeline
- LVMWD Interconnection Pipeline
- Canyon Oaks Park Lateral Recycled Water Pipeline
- Yerba Buena Recycled Water Pipeline Extension
- Vegetation Types
  - CR - Coast live oak riparian forest
  - CW - Coast live oak woodland
  - DI - Disturbed (weedy annual grassland)
  - DV - Developed (roads, residences, landscaping)
  - PS - Purple sage scrub

MAP EXTENT:

0 250 500
FEET

Source: NAIP Imagery 2016
Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet
Notes: CMWD = Calleguas Municipal Water District
LVMWD = Las Virgenes Municipal Water District
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padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

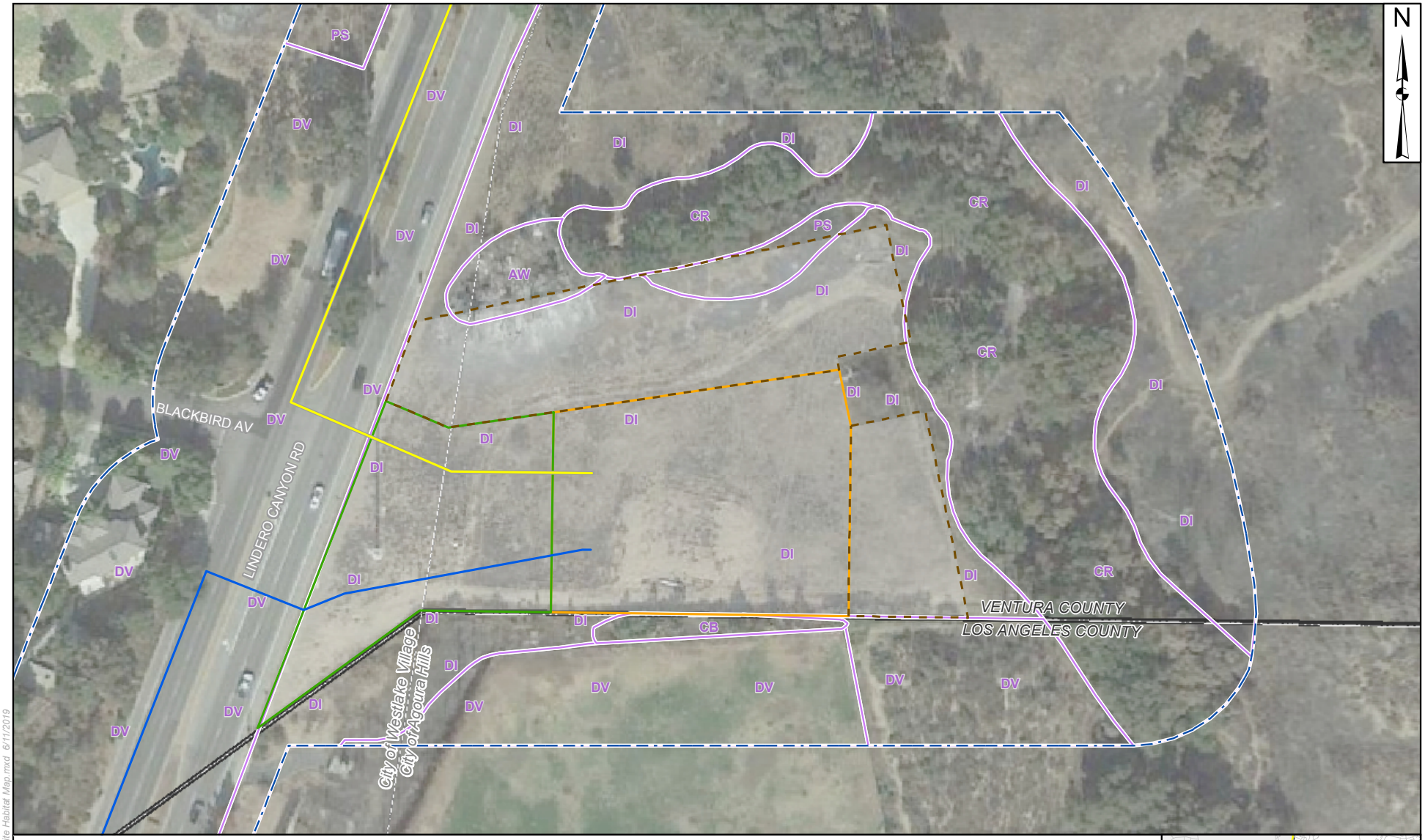
PROJECT NAME: CMWD - LVMWD INTERCONNECTION VENTURA AND LOS ANGELES COUNTIES, CA
PROJECT NUMBER: 1802-0331
DATE: June 2019

SOUTH INTERCONNECTION PIPELINE AND RECYCLED WATER PIPELINE ALIGNMENTS BIOLOGICAL HABITAT MAP

FIGURE 4.3-2

Calleguas Water District\Figure 4.3 - CMWD Interconnection Pipeline Alignment and Pump Station_PRS Site.mxd 6/11/2019

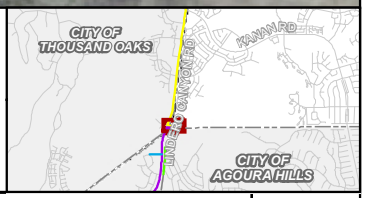
Back of Figure 4.3-2



LEGEND:

- CMWD Interconnection Pipeline
- LVMWD Interconnection Pipeline
- County Boundary
- Biological Study Area
- Permanent Access and Pipeline Easement
- Pump Station/PRS Site
- Temporary Construction Easement
- Vegetation Types
  - AW - Arroyo willow scrub
  - CB - Coyote brush scrub
  - CR - Coast live oak riparian forest
  - DI - Disturbed (weedy annual grassland)
  - DV - Developed (roads, residences, landscaping)
  - PS - Purple sage scrub

MAP EXTENT:



0 50 100
Feet

Source: Google Earth Pro Image 2018, County of Ventura
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:
CMWD - LVMWD INTERCONNECTION
VENTURA AND LOS ANGELES COUNTIES, CA

PROJECT NUMBER: 1802-0331

DATE: June 2019

PS/PRS SITE BIOLOGICAL HABITAT MAP

FIGURE 4.3-3

Back of Figure 4.3-3

4.3.1.3 Wildlife

Table 4.3.1 provides a list of wildlife species observed at or flying over the proposed pipeline alignments and the PS/PRS site during field surveys conducted by Padre Associates biologists on April 3, 2019 and April 10, 2019. Species that appeared to be breeding near the PS/PRS site included starling, acorn woodpecker, and lesser goldfinch.

Table 4.3-1. Wildlife Species Observed in the Vicinity of Proposed Project Components

Common Name	Scientific Name
Amphibians	
Baja California treefrog	*Pseudacris hypochondriaca*
Birds	
Mallard	*Anas platyrhynchos*
Wrentit	*Chamaea fasciata*
Anna's hummingbird	*Calypte anna*
Common raven	*Corvus corax*
American crow	*Corvus brachyryhnchos*
Song sparrow	*Melospiza melodia*
Red-tailed hawk	*Buteo jamaicensis*
Great horned owl	*Bubo virginianus*
California scrub-jay	*Aphelocoma californica*
Mourning dove	*Zenaida macroura*
Spotted towhee	*Pipilo maculatus*
Lesser goldfinch	*Spinus psaltria*
California quail	*Callipepla californica*
Black phoebe	*Sayornis nigricans*
Yellow-rumped warbler	*Setophaga coronata*
Dark-eyed junco	*Junco hyemalis*
Acorn woodpecker	*Melanerpes formicivorus*
European starling	*Strunus vulgaris*
Mammals	
Pocket gopher	*Thomomys bottae*
Tree squirrel	*Sciurus* sp.
California ground squirrel	*Otospermophilus beechyi*
Bobcat	*Lynx rufus*
Feral domestic cat	*Felis catus*
Striped skunk	*Mephitis mephitis*
Raccoon	*Procyon lotor*
Coyote	*Canis latrans*

4.3.1.4 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 are essential to the regional ecology of an area as they provide avenues of genetic exchange and allow animals to access alternative territories as fluctuating dispersal pressures dictate.

Native vegetation and cover provided by Lindero Creek may be used by wildlife to make local movements in the suburban environment. Tracks observed in the streambed during the field survey include raccoon, coyote, skunk, and bobcat. However, Lindero Creek terminates at Lake Lindero and does not provide a means (streambed or large culvert) for wildlife to cross U.S. Highway 101 and access the Santa Monica Mountains. In addition, a metal grate bolted to the box culvert where the Creek crosses under Lindero Canyon Road 400 feet south of Rockfield Street serves to prevent passage of wildlife larger than a raccoon.

A wildlife habitat linkage possibly allowing regional wildlife movement between the Santa Monica Mountains and the Sierra Madre Range has been identified as part of the South Coast Missing Linkages Project (Penrod et al., 2006). The western margin of this potential wildlife linkage is located approximately 1.0 miles north of the proposed North interconnection pipeline tie-in to the Lindero Feeder No. 2. No proposed facilities would be located within this identified habitat linkage.

The proposed PS/PRS site is located approximately 4.2 miles northwest of the Liberty Canyon Road undercrossing of U.S. Highway 101, which is considered a critical point for wildlife seeking to cross this busy freeway which acts as nearly a complete barrier to regional wildlife movement. The California Department of Transportation (Caltrans) is planning to build a wildlife crossing (165-foot wide by 200-foot long vegetation-surfaced bridge) across U.S. Highway 101 immediately west of Liberty Canyon Road. The purpose is to help maintain wildlife populations that travel between the Santa Monica Mountains and Simi Hills, and ultimately to the Sierra Madre Mountain Range.

4.3.1.5 Flora

A botanical survey was conducted at the PS/PRS site and adjacent areas on April 3, 2019. A total of 51 plant species were identified including 33 native species (65 percent). Of the 18 non-native species identified, 14 are considered invasive by the California Invasive Plant Council, including one species rated as highly invasive, eight species rated as moderately invasive, and five species rated as limited invasiveness.

4.3.1.6 Special-Status Plant Species

Special-status plant species are 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 4.3-2. The literature search conducted for this impact analysis indicates 15 special-status plant species have been reported within five miles of project components. Table 4.3-3 lists these species, their current status and the nearest known location relative to the proposed project facilities.

Purple sage scrub occurs on slopes in the project area and may be considered suitable habitat for Braunton's milkvetch, Malibu baccharis, slender mariposa lily, Plummer's mariposa lily, Ojai navarretia, chaparral nolina, Lyon's pentachaeta, and chaparral ragwort. Suitable habitat for other special-status species listed in Table 4.3-3 does not occur in the immediate project area and these species are considered absent.

Table 4.3-2. 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 the 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 (i.e., 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 (State CEQA Guidelines).
- Trees protected under the Ventura County Tree Protection Regulations (Section 8107-25 of the Non-Coastal Zoning Ordinance).
- Locally Important Plant Species designated by the Ventura County Resource Management Agency.
- Oak and Landmark trees protected by City of Thousand Oaks ordinances.

Table 4.3-3. Special-Status Plant Species Reported within 5 miles of the Proposed Pipeline Alignments and the PS/PRS Site

Common Name *Scientific Name*	Status	Habitat Description	Nearest Known Location Relative to the Proposed Facilities	Discussion
Braunton's milkvetch *Astragalus brauntonii*	FE, List 1B	Chaparral, coastal scrub, coniferous forest on recent burns or disturbed areas	West of Lindero Canyon, 0.5 miles west of the North interconnection pipeline alignment (CNDDB, 2019).	Suitable habitat in project area, not observed during spring botanical survey
Malibu baccharis *Baccharis malibuensis*	List 1B	Chaparral, woodland, coastal scrub	Near Oakbrook Regional Park, approximately 1.8 miles northwest of the North interconnection pipeline alignment (CNDDB, 2019).	Suitable habitat in project area, not observed during spring botanical survey
Round-leaved filaree *California macrophylla*	List 1B	Woodland, grassland	Liberty Canyon, approximately 4.1 miles southeast of the proposed PS/PRS site (CNDDB, 2019).	No suitable habitat in project area, not observed during spring botanical survey
Slender mariposa lily *Calochortus clavatus var. gracilis*	List 1B	Chaparral, coastal scrub	Cornell Corners (historic-1960), approximately 3.0 miles south of the South interconnection pipeline alignment (CNDDB, 2019).	Suitable habitat in project area, not observed during spring botanical survey
Plummer's mariposa lily *Calochortus plummerae*	List 4	Chaparral, woodland, coastal scrub, grassland, coniferous forest	Near Palo Comado Canyon, approximately 2.8 miles northeast of the North interconnection pipeline alignment (CNDDB, 2019).	Suitable habitat in project area, not observed during spring botanical survey
Santa Susana tarplant *Deinandra minthornii*	SR, List 1B	Chaparral, coastal scrub on sandstone-derived soils	Near Simi Peak, approximately 0.9 miles north of the North interconnection pipeline alignment (CNDDB, 2019).	No suitable habitat in project area, not observed during spring botanical survey
Dune larkspur *Delphinium parryi ssp. blochmaniae*	List 1B	Chaparral, coastal dunes, below 650' elevation	Near Lake Eleanor, approximately 3.9 miles southwest of the South interconnection pipeline alignment (CNDDB, 2019).	No suitable habitat in project area, not observed during spring botanical survey
Agoura Hills dudleya *Dudleya cymosa agourensis*	FT, List 1B	Volcanic rock outcrops in chaparral, woodland	Triunfo Canyon, approximately 1.8 miles south of the South interconnection pipeline alignment (CNDDB, 2019).	No suitable habitat in project area, not observed during spring botanical survey
Marcescent dudleya *Dudleya cymosa marcescens*	FT, SR, List 1B	Volcanic rock outcrops in chaparral	Near Mulholland Highway, approximately 3.8 miles south of the South interconnection pipeline alignment (CNDDB, 2019).	No suitable habitat in project area, not observed during spring botanical survey
Conejo buckwheat *Eriogonum crocatum*	SR, List 1B	Volcanic rock outcrops in chaparral, coastal scrub, grassland	Near Lake Eleanor, approximately 3.7 miles southwest of the South interconnection pipeline alignment (CNDDB, 2019).	No suitable habitat in project area, not observed during spring botanical survey
Ojai navarretia *Navarretia ojaiensis*	List 1B	Openings in chaparral and coastal scrub, grassland on clay soils	Near Kanan Road, approximately 2.5 miles east-southeast of the South interconnection pipeline alignment (CNDDB, 2019).	Suitable habitat in project area, not observed during spring botanical survey

Table 4.3-3. Continued

Common Name *Scientific Name*	Status	Habitat Description	Nearest Known Location Relative to the Proposed Facilities	Discussion
Chaparral nolina *Nolina cismontane*	List B	Chaparral, coastal scrub	Oak Canyon Community Park, approximately 0.9 miles east of the North interconnection pipeline alignment (CNDDB, 2019).	Suitable habitat in project area, not observed during spring botanical survey
Lyon's pentachaeta *Pentachaeta lyonii*	FE, SE List 1B	Openings in chaparral and coastal scrub, grassland	Ladyface Mountain, 1.1 miles southeast of the South interconnection pipeline alignment (CNDDB, 2019).	Suitable habitat in project area, not observed during spring botanical survey
Chaparral ragwort *Senecio aphanactis*	List 2B	Chaparral, woodland, coastal scrub	Near Lake Eleanor, 3.4 miles southwest of the South interconnection pipeline alignment (CNDDB, 2019)	Suitable habitat in project area, not observed during spring botanical survey
Coast live oak *Quercus agrifolia*	CTO, VCZO	Canyon bottoms, slopes	Near PS/PRS site and Canyon Oaks Park Lateral pipeline alignment	Present

Status Codes:
CTO Regulated under City of Thousand Oaks oak tree and landmark tree ordinances
FE Federal Endangered (USFWS)
FT Federal Threatened (USFWS)
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)
List 4 Plants of limited distribution (CNPS)
SE California Endangered (CDFW)
SR California Rare (CDFW)
VCZO Regulated under the Ventura County Non-coastal Zoning Ordinance

4.3.1.7 Special-Status Wildlife Species

Special-status wildlife species are defined in Table 4.3-4. The potential for these species to occur in the vicinity of the proposed project facilities was determined by habitat characterization of areas along the proposed pipeline alignments and the PS/PRS site, review of sight records from other environmental documents, and range maps described above. Table 4.3-5 lists special-status wildlife species that have the potential to occur near proposed facilities for at least a portion of their life cycle. A focused nighttime survey using a headlamp to detect eyeshine was conducted on April 10, 2019 by a qualified biologist to determine the presence of California red-legged frog in Lindero Creek in the vicinity of the PS/PRS site. Evidence of this species (eggs, larvae, adults) was not observed.

A small patch of recently burned purple sage scrub occurs within the temporary construction easement area north of the PS/PRS site and may be removed by construction activities. This patch is isolated from other similar habitat by development to the west, north, and south, and Lindero Creek to the east. Due to the small area and isolated location, the affected habitat is not anticipated to support Santa Monica grasshopper, coastal whiptail, California gnatcatcher, or southern California rufous-crowned sparrow. In any case, these species have not been reported in the immediate project area and were not observed during the field survey.

Table 4.3-4. 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 the 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., 2015 for fish; and Thomson et al., 2016 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]).
- Locally Important Animal Species designated by the Ventura County Resource Management Agency.

Table 4.3-5. Special-Status Wildlife Species Reported within 5 miles of the Proposed Pipeline Alignments and the PS/PRS Site

Common Name	Habitat	Status	Nearest Known Location Relative to Proposed Facilities	Discussion
Invertebrates				
Santa Monica grasshopper *Trimerotropis occidentiloides*	Chaparral, coastal scrub	SA	Near Kanan Road, approximately 2.2 miles southeast of the South interconnection pipeline alignment (CNDDB, 2019)	Suitable habitat absent at project sites
Amphibians				
Western spadefoot toad *Spea hammondii*	Seasonal pools, grassland	CSC	Vernal pool on a mesa, approximately 4.2 miles northeast of the North interconnection pipeline alignment (CNDDB, 2019)	Suitable habitat absent in project area
California red-legged frog *Rana draytonii*	Streams, ponds	FT, CSC	Las Virgenes Creek, approximately 4.7 miles east of the PS/PRS site (CNDDB, 2019)	Suitable habitat present in Lindero Creek, but not observed during focused nighttime survey
Reptiles				
Western pond turtle *Emys marmorata*	Vegetated ponds, stream pools	CSC	Medea Creek, approximately 2.4 miles east-southeast of the South interconnection pipeline alignment (CNDDB, 2019)	Suitable habitat present in Lindero Creek near PS/PRS site
Southern California legless lizard *Anniella stebbinsi*	Moist, loose soil, typically in woodlands	CSC	La Baya Park site, approximately 0.5 miles west of the South interconnection pipeline alignment (CNDDB, 2019)	Suitable habitat absent at project sites
Coastal whiptail *Aspidoscelis tigris stejnegeri*	Coastal scrub, chaparral	CSC	East of Lake Sherwood, approximately 3.2 miles southwest of the South interconnection pipeline alignment (CNDDB, 2019)	Suitable habitat absent at project sites
Two-striped garter snake *Thamnophis hammondii*	Streams	CSC	Triunfo Creek, approximately 2.5 miles south-southeast of the South interconnection pipeline alignment (CNDDB, 2019)	Suitable habitat present in Lindero Creek near PS/PRS site

Common Name	Habitat	Status	Nearest Known Location Relative to Proposed Facilities	Discussion
Birds				
California gnatcatcher *Polioptila californica californica*	Coastal scrub	FT, CSC	Near Las Virgenes Road, approximately 4.9 miles east of the PS/PRS site (CNDDB, 2019)	Suitable habitat absent at project sites
Golden eagle *Aquila chrysaetos*	Grassland, scrub, chaparral	FP, WL	Nest site reported from Lobo Canyon, approximately 2.8 miles south-southeast of the South interconnection pipeline alignment (CNDDB, 2019)	Suitable habitat absent at project sites
Southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	Coastal scrub, chaparral	WL	Near Kanan Road, approximately 2.1 miles southeast of the South interconnection pipeline alignment (CNDDB, 2019)	Suitable habitat absent at project sites
Tri-colored blackbird *Agelaius tricolor*	Freshwater, brackish marshes	CSC, SE Candidate	Lake Sherwood, approximately 4.6 miles west-southwest of the South interconnection pipeline alignment (CNDDB, 2019)	Suitable habitat absent in project area
Mammals				
Yuma myotis *Myotis yumanensis*	Roosts in caves, bridges, mines, crevices	SA	Peter Strauss Ranch, approximately 3.1 miles southeast of the South interconnection pipeline alignment (CNDDB, 2019)	Suitable roosting habitat absent in project area
Small-footed myotis *Myotis ciliolabrum*	Roosts in caves, bridges, buildings, mines, crevices	SA	China Flat, approximately 2.0 miles northeast of the North interconnection pipeline alignment (CNDDB, 2019)	Suitable roosting habitat absent in project area
Hoary bat *Lasiurus cinereus*	Roosts in dense deciduous tree foliage	SA	Peter Strauss Ranch, approximately 3.1 miles southeast of the South interconnection pipeline alignment (CNDDB, 2019)	Suitable roosting habitat absent in project area
Western red bat *Lasiurus blossevillii*	Roosts in dense tree foliage	CSC	Peter Strauss Ranch, approximately 3.1 miles southeast of the South interconnection pipeline alignment (CNDDB, 2019)	Suitable roosting habitat absent in project area
Pallid bat *Antrozous pallidus*	Roosts in caves, bridges, mines, crevices, hollow trees	CSC	China Flat, approximately 2.0 miles northeast of the North interconnection pipeline alignment (CNDDB, 2019)	Suitable roosting habitat absent in project area
Western mastiff bat *Eumops perotis californicus*	Roosts in crevices, buildings, trees and tunnels	CSC	China Flat, approximately 2.0 miles northeast of the North interconnection pipeline alignment (CNDDB, 2019)	Suitable roosting habitat absent in project area

Status Codes:

CE Candidate: California Endangered (CDFW)
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)

4.3.2 Regulatory Setting

Numerous 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 components, and their respective requirements.

4.3.2.1 Federal Regulations and Standards

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 U.S. Environmental Protection Agency 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.

4.3.2.2 State Regulations and Standards

California Fish and Game Code

The California Fish and Game Code, administered by the California Department of Fish and Wildlife (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 regulations addressing modifications to streambeds and lakes (Sections 1600-1616), as well as 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 prohibits take or destruction of bird nests and eggs and take of migratory birds.

California Endangered Species Act

This Act generally parallels the main provisions of the Federal ESA and is administered by the CDFW. The California Endangered Species Act (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. The CESA “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.

California Species of Special Concern

California also has identified wildlife species of special concern, which is a species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- Is extirpated from the State or, in the case of birds, is extirpated in its primary season or breeding role.
- Is Federally-listed as threatened or endangered, but not State-listed, meets the State definition of threatened or endangered, but has not formally been listed.
- Is experiencing, or formerly experienced, serious (non-cyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status.
- Has naturally small populations exhibiting high susceptibility to risk from any factor(s) that, if realized, could lead to declines that would qualify it for State threatened or endangered status.

Having been so designated, these species of special concern are considered as “special-status species” and substantial adverse effects to these species may be considered a significant impact in this EIR (see Section 4.3.3.1).

4.3.3 Impact Analysis

4.3.3.1 Significance Thresholds

As lead agency, CMWD has determined that the following biological resources significance thresholds are appropriate for the proposed project:

- 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, the U.S. Fish and Wildlife Service, or the National Marine Fisheries Service.
- Have a substantial adverse effect on riparian habitat or a sensitive natural community identified in local or regional plans, policies, or regulation, or by the CDFW or the U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on State or Federally-protected wetlands (including, but not limited to, marsh, vernal pool, and coastal) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.
- Conflict with any local polices or ordinances protecting biological resources, such as a tree preservation policy or ordinance, unless exempted under Section 53091.e of the California Government Code.
- Substantially degrade the quality of the environment, substantially reduce the habitat of a fish and wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of an endangered, rare, or threatened species.

4.3.3.2 Project-Specific Impacts

Special-Status Plant Species

Oak trees protected under the Ventura County Non-Coastal Zoning Ordinance occur immediately adjacent to the temporary construction easements at the proposed PS/PRS site. These trees would not be removed by construction activities. In any case, the project is not subject to zoning ordinances under Section 53091.e of the California Government Code.

Based on the lack of suitable habitat and the results of a spring botanical survey, other special-status plant species listed in Table 4.3-3 are not anticipated to occur within areas affected by construction and operation of project components. Therefore, impacts to special-status plant species are not anticipated.

Special-Status Wildlife Species

Impact BIO-1: Construction of the PS and PRS would occur adjacent to aquatic habitat in Lindero Creek that may support western pond turtle and two-striped garter snake – significant, but mitigable.

The suitability of Lindero Creek to support these species is reduced by development of the upper watershed with residential and golf course land uses, channelization of the lower reach (Lake Lindero Country Club), surrounding residential development, and roadway culverts. In addition, tracks of potential predators of these species (raccoon, coyote) were commonly observed in the streambed of Lindero Creek during the field survey. Western pond turtle and two-striped garter snake have not been reported from the Lindero Canyon watershed and were not observed during the field survey. However, focused surveys for these two species were not conducted. The proposed temporary construction easement is located immediately west of Lindero Creek, and construction activities may adversely affect these species (if present) through inadvertent mortality.

Impact BIO-2: Pipeline installation and other project-related construction activities may disrupt breeding of migratory birds – significant, but mitigable.

Vegetation (including landscaping) removal would occur at the PS/PRS site, air/vacuum relief valve sites, and along the Canyon Oaks Park Lateral pipeline alignment. Vegetation removal, noise, dust, and heavy equipment activity associated with project construction 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 Migratory Bird Treaty Act and Sections 3503 and 3513 of the California Fish and Game Code and are considered potentially significant.

Sensitive Plant Communities and Wetlands

Coast live oak riparian forest has been identified as a high priority for inventory by CDFW and stands along Lindero Creek are considered sensitive for the purposes of this analysis. Although a wetland delineation was not conducted, it is anticipated that wetlands (as defined by the CWA and/or SWRCB) occur in some portion of the Lindero Creek streambed in the project area. However, no project-related loss of this sensitive vegetation or wetlands would occur.

Habitat Connectivity/Wildlife Movement Corridors

The proposed project would involve construction activities adjacent to Lindero Creek. The Lindero Creek corridor may facilitate local wildlife movements in the suburban environment, but does not provide for regional wildlife movements that would have a meaningful benefit to the survival and persistence of wildlife populations. Overall, the proposed project would not adversely impact wildlife movement because Lindero Creek is not an important wildlife movement corridor and the project would not impact this creek.

4.3.3.3 Cumulative Impacts

Each of the cumulative projects listed in Section 3.5 are located in developed areas such that impacts would be mostly limited to removal of non-native weedy vegetation or landscaping. However, adjacent native habitat may be adversely affected by fire prevention activities. In addition, removal of oak trees protected under local ordinances may occur. Indirect impacts to special-status species and breeding birds may also occur. The proposed project would incrementally contribute to these impacts (excluding oak tree removal) and the project's contribution may be considered cumulatively considerable.

4.3.3.4 General Plan Policy Consistency

Ventura County General Plan

Biological resources policies of the Ventura County General Plan Goals, Policies and Programs document (Section 1.5.2) are applicable to components of the proposed project located in Ventura County and include:

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.
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.
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.

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.
5. The CDFW, the U.S. Fish and Wildlife Service, National Audubon Society and the California Native Plant Society shall be consulted when discretionary development may affect significant biological resources. The National Park Service shall also be consulted regarding discretionary development within the Santa Monica Mountains or Oak Park Area.
6. Based on the review and recommendation of a qualified biologist, the design of road and floodplain improvements shall incorporate all feasible measures to accommodate wildlife passage.
7. When considering proposed discretionary development, County decision-makers shall consider the development's potential project-specific and cumulative impacts on the movement of wildlife at a range of spatial scales including local scales (e.g., hundreds of feet) and regional scales (e.g., tens of miles).
8. Development within the Habitat Connectivity and Wildlife Corridors and the Critical Wildlife Passage Areas shown in Figures 1.5.5 – 1.5.8 of the Resources Appendix, shall be subject to the provisions and standards of the Habitat Connectivity and Wildlife Corridor overlay zone (HCWC overlay zone) and the Critical Wildlife Passage Areas overlay zone (CWPA overlay zone) as set forth in the Non-Coastal Zoning Ordinance.

The proposed project is consistent with these biological resources policies because:

- The potential biological impacts of the project 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.
- Lindero Creek may support significant wetland habitat as defined by Ventura County. However, proposed facilities would not be located within 100 feet of this potentially significant wetland habitat.

- The CDFW, U.S. Fish and Wildlife Service, Ventura Audubon Society, and California Native Plant Society were contacted 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 not located within a Critical Wildlife Passage Area as identified in the Ventura County General Plan.

Oak Park Area Plan

Biological resources policies of the Oak Park Area Plan (Section 1.3.2) are applicable to components of the proposed project located in the Oak Park Planning Area (PS/PRS site, portions of the North and South interconnection pipelines) and include:

- Where not previously prepared, a biological field reconnaissance report detailing the composition of species at the site and suitable mitigation measures shall be prepared as part of the environmental assessment of all discretionary permits involving earth movement or construction on previously undeveloped land (Policy 1.3.2-1).
- Discretionary development shall be located to avoid the loss or damage to healthy mature trees and sensitive plant species, including: Catalina mariposa lily, wind poppy and Santa Susana tarplant and other rare or endangered species (Policy 1.3.2-2).
- Where applicable, developers shall be required to submit an updated Oak Tree Report, covering all oaks located within 50 feet of any proposed grading or construction. Trees, along with identifying number, health and aesthetic grades, shall be shown on the grading plan (Policy 1.3.2-3).
- All discretionary development shall comply with the oak tree preservation and mitigation requirements of the adopted Oak Park Development Plans (Policy 1.3.2-4).
- 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 7.5-minute quad map shall be evaluated by a qualified biologist, approved by the County, 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 1.3.2-5).
- Where improved channels are necessary for flood control purposes, they shall be constructed to maintain as natural a setting as possible (Policy 1.3.2-6).

- No blasting shall be permitted from February 15 through June 30 unless a field survey determines that there are no nesting raptors (other than kestrels) within 1/2 mile of the blasting site or unless studies are conducted to the satisfaction of Ventura County which indicate that blasting in an area will have no significant impact on nesting raptors (Policy 1.3.2-7).
- Brush removal adjacent to proposed buildings shall be limited to 2 acres or less per lot, unless greater clearance is required by the Fire Protection Ordinance (Policy 1.3.2-8).
- The CDFW, the U.S. Fish and Wildlife Service, National Audubon Society, California Native Plant Society and the National Park Service shall be consulted when discretionary development may affect significant biological resources (Policy 1.3.2-9).

The proposed project is consistent with these biological resources policies because:

- Biological field surveys were conducted for the project, including identification of potentially affected species and mitigation measures, as part of EIR preparation.
- The proposed project would not adversely affect Catalina mariposa lily, wind poppy, Santa Susana tar plant, or other rare or endangered species.
- The proposed project would not result in the removal of any oak trees. As a water project, it is exempt from the tree protection requirements of the Ventura County Non-coastal Zoning Ordinance under Section 53901(e) of the Government Code.
- The proposed project is not subject to the Oak Park Development Plans.
- Lindero Creek may support significant wetland habitat as defined by Ventura County. However, the proposed project would not impact this potentially significant wetland habitat.
- No flood control channel improvements or blasting is proposed.
- Brush removal is not required for underground structures (pipelines, PS/PRS), and any fuel management practiced at the PS/PRS site would affect much less than two acres.
- The CDFW, U.S. Fish and Wildlife Service, Ventura Audubon Society, and California Native Plant Society were contacted as part of the Notice of Preparation process or as part of Draft EIR preparation and distribution.

City of Thousand Oaks

General Plan biological resources policies include:

- Streams and creeks should be protected as open space and maintained in as natural a state as possible, and appropriate measures taken to manage urban runoff, in order to protect the City's and other downstream communities' water quality, wildlife diversity, native vegetation, and aesthetic value (Conservation Element CO-10).
- Degraded sections of streams and creeks should be restored or enhanced as opportunities arise and financial resources become available (Conservation Element CO-11).
- Major barrancas should be protected in a natural state. Appropriate land uses for these natural features include recreation trails and open space (Conservation Element CO-12).
- Use of concrete for flood control improvements in natural drainage courses should occur only when no reasonable alternatives can be found that would maintain natural hydrological and ecological functions (Conservation Element CO-13).
- Isolation and fragmentation of natural open space areas should be prevented wherever possible (Conservation Element CO-26).
- Since natural stream drainages often serve as important movement corridors for wildlife, they should be preserved wherever it is feasible to do so (Conservation Element CO-27).
- Continue to protect oak and landmark trees and their habitat in recognition of their historic, aesthetic and environmental value to the citizens of Thousand Oaks, in particular Valley Oak habitat (Conservation Element CO-29).
- Preserve wetlands and associated wetland buffers as open space and maintain these areas in a natural state to protect the community's water quality, biodiversity and aesthetic value (Conservation Element CO-30).
- The City shall encourage and promote the conservation and protection of all rare, threatened, endangered or sensitive species listed by State and Federal agencies (United States Fish and Wildlife Service and California Department of Fish and Wildlife), the California Native Plant Society (CNPS), the County of Ventura and the City of Thousand Oaks (Conservation Element CO-32).

The proposed project is consistent with the City’s General Plan biological resources policies as it would:

- Not adversely affect Lindero Creek (Policies CO-10 through CO-13, CO-27).
- Not isolate or fragment natural open space areas (Policy CO-26).

- Not result in the removal of oak trees or landmark trees within the City (Policy CO-29).
- Not adversely affect potential wetlands (Policy CO-30).
- Not result in significant impacts to rare, threatened, endangered, or sensitive species (Policy CO-32).

City of Westlake Village

General Plan biological resources policies include:

- Encourage new development projects to identify biological constraints and habitat linkages prior to project planning and site design (Natural Resources Policy 1.3).
- Minimize the overall reduction of oak trees throughout the community, where appropriate, based on the biological resource survey (Natural Resources Policy 2.4).
- Prohibit development in riparian habitats to the greatest extent feasible (Natural Resources Policy 2.5).

The proposed project is consistent with the City's General Plan biological resources policies because:

- Biological constraints and wildlife corridors were identified in the Initial Study Checklist prepared prior to completion of the project design and preparation of the EIR.
- Oak trees would not be removed.
- Development would not occur within Lindero Creek.

4.3.4 Mitigation Measures

4.3.4.1 Proposed Project

MM BIO-1: Aquatic Reptile Surveys and Exclusion Measures. Focused surveys for western pond turtle and two-striped garter snake shall be conducted in Lindero Creek adjacent to the PS/PRS site no more than seven days prior to any earthwork or vegetation removal. If any of these species are detected, exclusion fencing (Ertec special-status species fencing or equivalent) shall be installed along the eastern boundary of the temporary construction easement area near Lindero Creek.

MM BIO-2: Breeding Migratory Bird Avoidance Measures. Vegetation removal and pipeline installation and related construction activity adjacent to tree windrows or native vegetation 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 earlier than 14 days and no later 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) shall be established around the nest. The buffer area may be reduced if nest monitoring by a qualified biologist indicates construction activities are not adversely affecting nesting success. No construction activity shall occur within the buffer area until a biologist determines that the nest is abandoned, or fledglings are adequately independent from the adults.

4.3.4.2 Cumulative Impacts

Same as for the proposed project.

4.3.5 Residual Impacts

4.3.5.1 Proposed Project

Mitigation measures provided would avoid impacts to special-status species and breeding birds that may occur as a result of project construction activities. Therefore, residual impacts would be less than significant.

4.3.5.2 Cumulative Impacts

Same as for the proposed project.

4.4 NOISE AND VIBRATION

4.4.1 Physical Setting

4.4.1.1 Noise Environment

The noise environment of areas potentially affected by the proposed project is dominated by traffic noise generated by arterial roadways and State highways, including Thousand Oaks Boulevard, Lindero Canyon Road, Kanan Road, and U.S. Highway 101.

Noise sensitive land uses in proximity to proposed project components include residential land uses and two schools:

- Lindero Canyon Road, and adjacent parallel and intersecting streets (Ventura County, cities of Westlake Village and Thousand Oaks).
- Landino Drive (City of Westlake Village, near Canyon Oaks Park Lateral pipeline alignment).
- Yerba Buena Elementary School (City of Agoura Hills, Las Virgenes Unified School District).
- Red Oak Elementary School (Oak Park).

4.4.1.2 Projected Traffic Noise

The Ventura County General Plan Hazards Appendix provides projected 2020 noise levels (dBA Community Noise Equivalent Level [CNEL]) for County roads. The estimated 65 dBA CNEL noise contour along Kanan Road east of Lindero Canyon Road is 130 feet, which means land uses located within 130 feet of the roadway centerline would be exposed to 24-hour noise levels of at least 65 dBA CNEL.

The City of Thousand Oaks General Plan Noise Element indicates the future 60 dBA CNEL noise contour along Thousand Oaks Boulevard would be approximately 500 feet from the roadway centerline. The City's Noise Element also indicates the future 60 dBA CNEL noise contour along Lindero Canyon Road would be approximately 200 feet from the roadway centerline.

4.4.1.3 Results of Project-Specific Noise Measurements

The existing ambient noise levels at the PS/PRS site and adjacent Blackbird Avenue were recorded by Steve Rogers Acoustics (2019) for a 24-hour period from September 12 to 13, 2018. These noise data are summarized in Table 4.4-1.

Table 4.4-1. Summary of Existing Ambient Noise Measurement Data

Location	Lowest Value (dBA Leq)	Highest Value (dBA Leq)	24-hour Value (CNEL)
PS/PRS site	35	52	52
Blackbird Avenue	56	76	76

4.4.2 Regulatory Setting

4.4.2.1 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. The field of acoustics deals primarily with the propagation and control of sound.

4.4.2.2 Frequency

Continuous sound can be described by frequency (pitch) and amplitude (loudness). 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). High frequencies are sometimes more conveniently expressed in kilohertz (kHz), or thousands of Hertz. The audible frequency range for humans is generally between 20 Hz and 20,000 Hz.

4.4.2.3 Sound Pressure Levels and Decibels

The amplitude of pressure waves generated by a sound source determines the loudness of that source. Sound pressure amplitude is measured in micro-Pascals (mPa). One mPa is approximately one hundred billionth (0.00000000001) of normal atmospheric pressure. Sound pressure amplitudes for different kinds of noise environments can range from less than 100 to 100,000,000 mPa. Because of this huge range of values, sound is rarely expressed in terms of mPa. Instead, 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, which corresponds to 20 mPa.

4.4.2.4 Addition of Decibels

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 a sound pressure level of 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.

4.4.2.5 A-Weighted Decibels

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. 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 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. Other weighting networks have been devised to address high noise levels or other special problems (e.g., B-, C-, and D-scales), but these scales are rarely used in noise impact assessments. Noise levels for impact assessments are typically reported in terms of A-weighted decibels or dBA. Table 4.4-2 describes typical A-weighted noise levels for various noise sources.

4.4.2.6 Human Response to Changes in Noise Levels

As discussed above, doubling sound energy results in a three 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 mid-frequency (1,000 Hz–8,000 Hz) range. In typical noisy environments, changes in noise of one to two dB are generally not perceptible. However, it is widely accepted that people are able to begin to detect sound level increases of three dB in typical noisy environments.

Further, a five 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 number of similar sources or the volume of traffic on a highway) that would result in a three dB increase in sound would generally be perceived as barely detectable.

Table 4.4-2. 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.

4.4.2.7 Noise Descriptors

Noise in our daily environment 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 analysis.

- 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 (L_{xx}) represents the sound level exceeded for a given percentage of a specified period (e.g., L_{10} is the sound level exceeded 10% of the time, and L_{90} is the sound level exceeded 90% of the time).
- Maximum Sound Level (L_{max}) 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 a 10 dB penalty 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 a 10 dB penalty applied to A-weighted sound levels occurring during the nighttime hours between 10:00 p.m. and 7:00 a.m., and a five dB penalty applied to the A-weighted sound levels occurring during evening hours between 7:00 p.m. and 10:00 p.m.

4.4.2.8 Sound Propagation

When sound propagates over a distance, it changes in level and frequency content. 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 six dB for each doubling of distance from a point source. Roadways consist of several localized noise sources on a defined path, and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of three dB for each doubling of distance from a line source.

Ground Absorption

The propagation path of noise from a source 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 five dB of noise reduction. Taller barriers provide increased noise reduction. Vegetation between a noise source and receiver is rarely effective in reducing noise because it does not create a solid barrier.

4.4.2.9 Regulatory Framework

State Policies

The California Department of Health has established noise guidelines to facilitate land use planning, which are summarized in Table 4.4-3.

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).

Table 4.4-3. 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 Public 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.

City of Thousand Oaks

The City's General Plan Noise Element identifies residential uses, schools, hospitals churches, outdoor spectator sports facilities, performing arts facilities, hotels, and motels as "noise-sensitive land uses". The City's Noise Element also provides standards for land use compatibility (same as State standards in Table 4.4-3).

Section 8-11.01 of the City's Municipal Code currently limits construction projects to the hours of 7 a.m. to 7 p.m. (with some limited exceptions), unless permission is specifically granted by the Public Works Department for work outside these hours.

City of Westlake Village

Chapter 4.4 of the City's Municipal Code prohibits or limits certain types of noises including radios, band practice, engine operation in residential districts, motor vehicle operation, loading and unloading materials, and construction activities. Any construction work utilizing noise generating equipment conducted before 7 a.m. or after 7 p.m. Monday through Friday, or before 8 a.m. or after 5 p.m. on Saturday or anytime on Sundays and holidays would violate the Municipal Code.

City of Agoura Hills

Section 9656 of the City's Municipal Code sets noise standards in residential zone districts, including 55 dBA between 7 a.m. and 10 p.m. and 50 dBA between 10 p.m. and 7 a.m. This noise standard also applies to schools, hospitals, and churches while in use. Construction activities conducted between 7 a.m. and 8 p.m. on Monday through Saturday are exempted from this standard.

4.4.2.10 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 the 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. Building damage is not a factor for most projects, with the occasional exception of blasting and pile-driving during construction. 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 signal. PPV is often used in monitoring of blasting vibration since it is related to the stresses that are experienced by buildings.

4.4.3 Impact Analysis

4.4.3.1 Significance Thresholds

The proposed project may adversely affect noise-sensitive land uses located within four jurisdictions:

- Ventura County (Oak Park): residential areas along the North interconnection pipeline alignment east of Lindero Canyon Road and near the PS/PRS site, and the Red Oak Elementary School.
- City of Thousand Oaks: residential areas along the North interconnection pipeline alignment west of Lindero Canyon Road and near the PS/PRS site.
- City of Westlake Village: residential areas along the South interconnection pipeline alignment, Yerba Buena recycled water pipeline alignment, and Canyon Oaks Park Lateral recycled water pipeline alignment.
- City of Agoura Hills: Yerba Buena Elementary School near the PS/PRS site and residential areas along the South interconnection pipeline alignment.

Noise policies and noise ordinances adopted by the relevant jurisdiction are used as significance thresholds.

Ventura County

Residences are considered noise-sensitive receptors only during evening and nighttime (7 p.m. to 7 a.m.). 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.

Operational noise exceeding the following levels at residential land uses is considered a significant impact:

- 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.

City of Thousand Oaks

Construction activities conducted adjacent to residences between 7 p.m. and 7 a.m. may result in a significant impact. Operational noise exceeding the following levels at residential land uses is considered a significant impact based on the City's General Plan Noise Element:

- Project-related increase of greater than 1.0 dBA at residences in areas where the annual average noise level at General Plan build-out would be between 55 and 60 dBA CNEL.
- Project-related increase of greater than 0.5 dBA at residences in areas where the annual average noise level at General Plan build-out would be greater than 60 dBA CNEL.

City of Westlake Village

Construction activities conducted adjacent to residences after 7 p.m. Monday through Friday, or after 5 p.m. on Saturday or anytime on Sundays and holidays may result in a significant impact. Operational noise exceeding 45 dBA between 10 p.m. and 7 a.m. and 50 dBA between 7 a.m. and 10 p.m. at residences is considered a significant impact based on the City's General Plan Noise Element.

City of Agoura Hills

Construction activities conducted adjacent to residences after 8 p.m. Monday through Saturday, or anytime on Sundays and holidays may result in a significant impact. Operational noise exceeding 55 dBA CNEL at residences and schools is considered a significant impact based on the City's General Plan Noise Element.

4.4.3.2 Project-Specific Impacts

Construction Noise

Impact N-1: Noise generated by project construction activities may adversely affect noise-sensitive receptors – significant, but mitigable.

The Federal Highway Administration (FHWA) Roadway Construction Noise Model was used to estimate noise generated by construction activities at the nearest noise-sensitive receptor. 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 based on potential impacts to noise-sensitive receptors as defined in the Ventura County General Plan noise policies. Other affected cities do not have construction-related noise standards other than municipal code prohibitions for nighttime construction work.

Construction noise impact scenarios are limited to noise-sensitive receptors located in Ventura County and include:

1. Impacts to nearby residences (Riverstone Lane) from potential nighttime pipeline tie-in at the Lindero Feeder No. 2.
2. Impacts to the Red Oak Elementary School from daytime PS/PRS construction.
3. Impacts to nearby residences (Concerto Drive) from nighttime PS/PRS construction. It is anticipated that nighttime construction would be limited to short duration critical tasks with a small amount of noise generating equipment.

Nighttime pipeline tie-in to the LVMWD system may occur at Thousand Oaks Boulevard, which would require written permission from the Westlake Village City Manager.

Noise modeling results are provided in Table 4.4-4 and are compared to Ventura County General Plan construction noise policy thresholds. Note that these thresholds vary based on the duration of construction activities near a noise-sensitive receptor. Noise modeling results in Table 4.4-4 indicate that Ventura County General Plan construction noise policy thresholds would not be exceeded. Nighttime construction work would be very limited in duration and scope, but could violate the municipal codes of the City of Thousand Oaks and the City of Westlake Village. Therefore, construction noise impacts are considered potentially significant.

Table 4.4-4. Proposed Project Construction Noise Modeling Results

Construction Activity	Ventura County General Plan Threshold	Nearest Noise-Sensitive Receptor	Modeled Noise Value (dBA Leq)
Nighttime pipeline tie-in to Lindero Feeder No. 2	70 dBA Leq (4-7 days) or existing + 3 dB	Riverstone Lane	60.5
PS/PRS daytime construction	55 dBA Leq (>8 weeks) or existing + 3 dB	Red Oak Elementary School	49.9
PS/PRS nighttime construction	65 dBA Leq (1-2 weeks) or existing + 3 dB	Concerto Drive	56.8

Operational Noise

Impact N-2: Noise generated by operation of the PS and PRS would not result in a perceptible increase in existing noise levels at nearby noise-sensitive receptors – less than significant.

A noise study was conducted by Steve Rogers Acoustics (2019) to identify noise levels at noise-sensitive receptors generated by operation of the PS/PRS. The study included 24-hour noise measurements at the PS/PRS site and at Blackbird Avenue, and noise analysis using the SoundPLAN model. Noise sources assessed in the model included pumps, pressure regulating valves, ventilation fan, and transformer. Note that each of these noise sources would be installed below ground in concrete vaults.

Noise modeling results are provided in Table 4.4-5 and are compared to applicable thresholds. Note that the City of Thousand Oaks and City of Agoura Hills thresholds are 24-hour (CNEL) standards and cannot be directly compared to short-term Leq noise levels provided by the SoundPLAN model. However, modeled operational noise levels provided in Table 4.4-5 are substantially below existing noise levels (see Table 4.4-1) such that when added to existing noise levels, operational noise of the PS/PRS would not have a perceptible increase in noise levels at the nearest noise-sensitive receptor.

Table 4.4-5. Proposed PS/PRS Operational Noise Modeling Results

Jurisdiction	Applicable Threshold	Nearest Noise-Sensitive Receptor	Modeled Noise Value (dBA Leq)
Ventura County (Oak Park)	45 dBA Leq OR existing + 3 dBA	Concerto Drive	25.3
City of Thousand Oaks	Existing + 0.5 dBA CNEL	Blackbird Avenue	30.0
City of Agoura Hills	55 dBA CNEL	Yerba Buena Elementary School	28.1

Construction-related Vibration

Impact N-3: Vibration generated by the installation of the proposed pipeline and associated facilities may damage older structures or cause human annoyance – less than significant.

The precise placement of the proposed pipelines within the proposed alignment has not been finalized; this will be determined during final design. However, construction activities may be conducted as close as 30 feet to commercial and residential structures. Construction-related vibration was estimated using the Caltrans Transportation and Construction Vibration Guidance Manual.

The estimated vibration level is a PPV of 0.060, based on operation of loaded heavy-duty trucks 30 feet from the structure. This value is slightly greater than the 0.04 PPV needed to be distinctly perceptible by humans, but much less than 0.1 PPV needed to be strongly perceptible to humans. The 0.060 PPV value is much less than 0.3 PPV, which may cause damage to older residential structures. Therefore, the project-related increase in vibration associated with pipeline installation would not be significant.

4.4.3.3 Cumulative Impacts

The cumulative projects listed in Section 3.5 would not impact the same land uses or noise-sensitive receptors as the proposed project. Therefore, the proposed project would not incrementally contribute to cumulative noise impacts.

4.4.3.4 General Plan Policy Consistency

Ventura County General Plan

The proposed project is consistent with noise policies provided in Section 2.16.2(1) of the Goals, Policies and Programs document of the Ventura County General Plan (see Section 4.4.2.9 of this EIR) because:

- Evening and nighttime construction noise would not exceed thresholds provided in the County's Construction Noise Threshold Criteria and Control Plan.
- Operational noise generated at the PS/PRS site is not anticipated to exceed the noise limitations provided in Section 2.16.2(1) of the County's Goals, Policies and Programs document.

Oak Park Area Plan

Applicable noise policies include:

- Development proposals shall be subject to the policies and standards of the Noise Section of the Goals-Policies-Programs of the Ventura County General Plan. Noise levels for noise-sensitive uses proposed to be located near continuous noise sources, and for noise generators proposed to be located near noise-sensitive uses, shall conform to the specific noise standards of said section (Policy 2.4.2-1).
- Noise sensitive uses shall be buffered from road noise by either the placement of walls or berms, the establishment of setbacks, greenbelts and appropriate speed limits, installation of double-glazed windows, or other appropriate means (Policy 2.4.2-2).
- Outdoor construction and grading equipment shall be permitted to operate only during the hours of 7:00 a.m. to 6:00 p.m. Monday through Saturday (Policy 2.4.2-3).
- Mufflers shall be used on all heavy construction equipment (Policy 2.4.2-4).

- Construction generators shall be located a minimum of 300 feet from occupied residences or appropriately shielded (Policy 2.4.2-5).

The proposed project is consistent with these noise policies because:

- Construction noise would not exceed standards provided by General Plan policies.
- The proposed project does not involve any new noise-sensitive uses that may be affected by road noise.
- Project-related construction equipment may operate in the evening or nighttime for short periods during critical tasks, but would not exceed Ventura County construction noise standards.
- All construction equipment would be equipped with standard mufflers.
- All construction generators would be equipped with standard cabinet enclosures to reduce noise.

City of Thousand Oaks

Applicable noise policies of the General Plan are:

- The City will strive to avoid future noise conflicts between land uses and noise sources or activities that would exceed the noise guidelines for noise-sensitive land uses adopted in the Noise Element (Policy N1-4).
- In evaluating projects for significant adverse environmental effects under the California Environmental Quality Act, the City will consider substantial increases in community noise level to be a potentially significant effect even if these increases do not result in a violation of the City's guidelines for normally acceptable noise levels for noise-sensitive land uses (Policy N-2.1).

The proposed project is consistent with policies of the City's General Plan Noise Element because:

- The buried nature of project components would prevent any future noise conflicts.
- This EIR has considered the impacts of noise increases in quiet areas such as the PS/PRS site.

City of Westlake Village

Applicable noise policies include:

- Prohibit the development of new industrial, commercial, or related land uses or the expansion of existing land uses when it can be demonstrated that such new or expanded land use would directly and unavoidably cause overall ambient noise levels to exceed an Ldn of 65 dBA exterior upon areas containing housing, schools, health care facilities or other noise-sensitive land uses (Hazards Policy 3.4).

- Control high-noise generating commercial/industrial equipment and activities to reduce the potentially adverse noise impacts of such equipment upon adjacent residential land uses (Hazards Policy 3.7).
- Require that all new non-residential development incorporate on-site ingress and egress points designed to divert traffic (and resultant noise) away from noise-sensitive land uses to the greatest degree practicable, consistent with applicable safety and planning considerations (Hazards Policy 4.1).

The proposed project is consistent with policies of the City's General Plan because:

- The proposed project would not result in noise levels exceeding 65 dBA Ldn at noise-sensitive land uses.
- The PS and PRS have been designed to avoid potentially adverse noise impacts to adjacent residential areas.
- The proposed project would generate minimal traffic associated with periodic maintenance such that traffic noise would not impact noise-sensitive land uses.

4.4.4 Mitigation Measures

4.4.4.1 Proposed Project

MM N-1. The project shall comply with applicable municipal codes restricting nighttime construction work:

- Obtain a permit for nighttime (after 7 p.m.) pipeline tie-in work to the Lindero Feeder No. 2 from the City of Thousand Oaks Public Works Director in accordance with Section 8-11.01 of the City's Municipal Code.
- Obtain written permission from the Westlake Village City Manager for nighttime (after 7 p.m.) pipeline tie-in work to the LVMWD potable water system in accordance with Section 4.4.050(D) of the City's Municipal Code.

4.4.4.2 Cumulative Impacts

Same as the proposed project, see Section 4.4.4.1.

4.4.5 Residual Impacts

4.4.5.1 Proposed Project

Mitigation measures provided are anticipated to reduce project-specific noise impacts to a level of less than significant.

4.4.5.2 Cumulative Impacts

Mitigation measures provided are anticipated to reduce cumulative noise impacts to a level of less than significant.

4.5 CULTURAL RESOURCES

This section is based on a Phase I Archeological Study prepared by Padre Associates for the Calleguas Municipal Water District.

4.5.1 Physical Setting

4.5.1.1 Geological Conditions

The proposed project components lie within the southernmost part of the west-central portion of the Transverse Ranges geologic province of Southern California. This province is characterized by east-west trending folds, faults, and mountain ranges that are transverse to the northwest trend of most of the geologic features in California. The proposed project components are situated at the eastern end of the Conejo Valley, which has distinctive geomorphic features comprised of mountains, artificial lakes and rolling hills. The Conejo Valley is approximately nine miles long and seven miles wide and is situated at an elevation of 800 to 900 feet above sea level. Geologic conditions within the project area consist of a thin sedimentary soil cover over bedrock. Miocene age Conejo Volcanic rocks are found in the south and western parts of the project area. These rocks are hard and generally stable. Softer marine sediments of the Topanga and Monterey formations (also of Miocene age) are found within the eastern and southern areas of the project area, and the Sespe, Llajas, Santa Susana, and Chatsworth formations, which are of Oligocene to Cretaceous age, are found near the northeast part of the project area. Unconsolidated alluvial sediments are found within canyons and the Conejo Valley bottom. Locally, soil cover and landslides occur on the hillsides (Impact Sciences, 2011).

4.5.1.2 Archaeological Context

Proposed project components are located within a cultural-geographic area known as the Conejo Corridor. The Conejo Corridor was an integral part of a much larger Chumash territory that extended well inland from the coast and Channel Islands to include all of Santa Barbara, most of Ventura, and parts of San Luis Obispo, Kern, and Los Angeles counties. Locally, sites related to Late Prehistoric period occupation dating from approximately A.D. 500 to historic contact, yield abundant evidence regarding the lifeways of these indigenous native people before the arrival of foreign explorers (Impact Sciences, 2011).

Early Period (c. 8,000 – c. 3350 B.P.)

Reliable evidence of Holocene (post-10,000 years ago) settlement in the region begins circa 8,000 Before Present (B.P.). The earliest sites were located on terraces and mesas; however, settlement gradually shifted to the coast (Wlodarski, 1988). Site assemblages dating to this period often contained substantial amounts of milling stones and manos, crude choppers, and core tools (W&S, 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 (Ventura County, 1988b).

Middle Period (c. 3350 – 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 fishhooks and plank canoes (*tomol*) appear (Wlodarski, 1988; W&S, 1997). Burials dating to this period provide evidence of wealth and social stratification indicating a transition to ranked society (Ventura County, 1988b). Excavation data from the Santa Monica Mountains demonstrate expansion to the inland region allowing trade and ceremonial exchange patterns to develop (Ventura County, 1988b; Ventura County, 2005).

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. Villages became the main population centers with satellite camps geared toward the seasonal harvest of plants, seeds, game, and material resources (Wlodarski, 1988). The Chumash became expert craftsman of baskets, stone vessels, shell beads, *tomol*, and fishing technology (Ventura County, 2005). It is also likely that communication and trade with non-Chumash tribes and villages accelerated during this period (Ventura County, 1988b).

4.5.1.3 Ethnographic Context

The proposed project components are 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 project area was included in the chiefdom *Lulapin,* whose limits extended from Malibu to just beyond modern Santa Barbara. The village *Muwu*, at modern Point Mugu approximately 18 miles west of the PS/PRS site, was the main headquarters for this chiefdom (Whitley and Clewlow, 1979; Whitley and Beaudry, 1991). Other villages included *Shimiyi* (from which Simi is derived), *Hu'wam* located at the base of Escorpión Peak, and *Ta'apu* located approximately 13 miles north of the PS/PRS site. 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 (Hoover, 1986). 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, was utilized. The Chumash harvested several 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 round of population dispersal and aggregation in response to the location and seasonal availability of different food resources (Landberg, 1965). 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 planting willows 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 ended 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.

4.5.1.4 Regional Historical Context

Contact Period (A.D. 1542 - 1782)

Juan Cabrillo, while exploring the California coast, became the first European to travel through the project region when he anchored near Point Mugu in October 1542. Over two hundred years later, Gaspar de Portolá led the first Spanish land expedition in January 1770, traveling through what is now the Conejo Valley and camping near a Chumash village near present-day Westlake Village (probably *Hipuc*).

Juan Crespi, a priest accompanying the expedition, named the campsite "El Triumfo del Dulcisimo Nombre de Jesus", the English translation of which is "The Triumph of the Sweetest Name of Jesus" (Bolton, 1926; Browning, 1992; Priestley, 1937). Several accounts of this expedition exist, including those of Juan Crespi (Bolton, 1926), Miguel Costansó (Browning, 1992), and Pedro Fages (Priestley, 1937). Costansó's diary contains observations regarding the native inhabitants' houses, settlement patterns, dress, and customs, as well as their attitudes toward the expedition (Browning, 1992). Fages noted the general Chumash population was distributed in small, numerous villages (Priestley, 1937).

In 1776, Juan Bautista de Anza traveled through Ventura County as leader of the San Francisco colonists, stopping near the outlet of the Santa Clara River. This route, known today as the Juan Bautista De Anza National Historic Trail, runs from near Nogales, Arizona to San Francisco, California, and crosses through Ventura County (CATE, 2000).

Mission Period (A.D. 1782 – 1834)

Junípero Serra founded Mission San Buenaventura, approximately 30 miles west of the project area, in 1782. 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 historic times, the alignment of present-day Lindero Canyon Road formed the approximate boundary between two adjacent land grants: Rancho El Conejo to the west, and Rancho Simi to the east. Rancho El Conejo was a 48,572-acre parcel granted to former Santa Barbara Presidio soldiers Jose Polanco and Ygnacio Rodriguez in 1803. Although Polanco would lose his portion of the grant in 1822 due to neglect, it would later be re-granted to influential Santa Barbara Army officer José de la Guerra y Noriega by Spanish governor Vicente de Solá (Hoffman, 1862). Rancho Simi was a 113,009-acre parcel granted to Santiago Pico and Luis Peña by Governor Diego de Borica in 1795 (Atkins, 2012). Pico constructed a large adobe dwelling on the property in the early nineteenth century, which served as the rancho headquarters and a stopover place between the Missions San Fernando Rey and San Buenaventura (SVHS, 2016).

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. A claim for Rancho El Conejo was filed with the Public Land Commission in 1852 and the grant was patented to José de la Guerra y Noriega and María del Carmen de Rodríguez in 1873 (Willey, 1886). José de la Guerra would later purchase nearby Rancho Simi from the Pico family in 1842, where he raised cattle and sheep (Atkins, 2012).

The standard rancho labor force mostly consisted of local Chumash and often small rancherias or villages were scattered about the estate (Lebow et al., 2001). Cattle ranching, and to a lesser extent sheep, became the principal agricultural activities, primarily for the lucrative hide and tallow trade (Bean, 1968).

Anglo-Mexican Period (A.D. 1845-1865)

Following the Bear Flag Revolt in 1846, John C. Frémont and the California Battalion marched into San Buenaventura, finding all the inhabitants fled except the Chumash neophytes. The Treaty of Hidalgo formally transferred California to the United States in 1848 and statehood was achieved in 1850. At the time, the area that would become Ventura County was originally the southern portion of Santa Barbara County (Murphy, 1979).

Locally, the Philadelphia and California Petroleum Company purchased most of Rancho Simi after de la Guerra's death in 1858. The rest of de la Guerra's family moved to an adobe in Tapo Rancho (Atkins, 2012). During the 1860s, Americans settled in the area and raised livestock and crops (SVHS, 2016). The lands held within the Rancho El Conejo remained in the de la Guerra and Rodriguez families until the 1860s, when severe cattle herd losses brought on by prolonged drought and disease forced the two families to sell their land.

Americanization Period (A.D. 1865-present)

In 1872, an immigrant from Minnesota named Howard Mills purchased one-half of the Conejo grant from the heirs of Captain Jose de la Guerra, renaming it Triunfo Ranch. Mills, who owned most of present-day Westlake Village and Hidden Valley, went bankrupt in 1891 and sold Triunfo Ranch to Andrew D. Russell. In 1874, approximately 2,259 acres of what would later be called the Newbury Tract was purchased by Egbert Starr Newbury, a Michigan native (Bidwell, 1989). Newbury later gained prominence as Conejo Valley's first postmaster and newspaper reporter and is also the man for whom the nearby township of Newbury Park is now named. When the Conejo Valley School District was established in March 1877, there were 126 residents living in Conejo Valley (Begun, 2006).

4.5.1.5 City of Thousand Oaks Historical Context

The City of Thousand Oaks, which was at one time called Conejo Mountain Valley (Begun, 2006), gained its current name because of a local contest held in the 1920s. The winning entry of that contest, "Thousand Oaks", was suggested by a 14-year old boy named Bobby Harrington (Chalquist, 2008; Bidwell, 1989; O'Brien, 2017).

In 1910, the Janss Investment Corporation, formed by the brothers Edwin and Harold Janss, purchased around 10,000 acres of land in what is now Thousand Oaks from the heir of John Edwards, a Welsh immigrant, who had himself previously purchased the land from the heirs of de la Guerra. While the Janss brothers had envisioned the rapid growth of a "total community" on their lands, it was not until the 1950s that the Conejo Valley began to see a significant population boom. Prior to that, the area was primarily used for ranching and agriculture, although a small number of Hollywood elites had taken an interest in the area as early as the 1920s. In particular, Jungleland USA, a private zoo, animal training facility, and animal theme park, was established in Thousand Oaks by Louis Goebel in 1926 as a support facility for Hollywood (Maulhardt, 2011).

In subsequent years, filmmaking emerged as a prominent industry in the Conejo Valley, whose rural landscape and commutable distance to Los Angeles were attractive traits for midcentury movie and television productions. Hollywood celebrities and executives soon began purchasing land in the Conejo Valley and, coupled with the arrival of several high-tech companies, such as Packard Bell and Technology Instrument Company in the 1960s and 1970s, the area's population increased dramatically. Between 1950 and 1970, the population of the Conejo Valley increased from 3,000 to 30,000 residents (McCormack, 2000).

The City of Thousand Oaks was incorporated in 1964, at which time the Janss Corporation suggested a new name: "City of Conejo". A vote was held but the old name prevailed, with most area residents (87 percent) agreeing that the city should remain "Thousand Oaks" (Conejo Valley Guide Welcome Blog Archive, 2018).

4.5.1.6 Cultural Resources Records Search

On September 19, 2018, a records search was ordered from the South Central Coastal Information Center of the California Historical Resources Information System (SCCIC-CHRIS) at California State University, Fullerton. When a new project component was added (proposed air/vacuum relief valves on the existing Lindero Feeder No. 2), a supplemental expedited records search was ordered on April 8, 2019. The records search included a review of all recorded historic-era and prehistoric archaeological sites within a 0.25-mile radius of the proposed project components, as well as a review of known cultural resource surveys and technical reports.

The records search revealed that five archaeological sites and two isolated artifacts have been recorded within 0.25-miles of proposed project components (Table 4.5-1). Two isolated prehistoric artifacts, P-19-100211 and P-19-100212, were recorded within 260 feet and 1,300 feet of the PS/PRS site, respectively.

Table 4.5-1. Previously Recorded Archaeological Sites within 0.25 miles of Proposed Project Components

Site No.	Year Recorded	Description
P-19-100211	1990	Isolated quartzite core
P-19-100212	1990	Isolated quartzite core
CA-VEN-40	1962	Prehistoric milling site with lithic debitage and flake tools
CA-VEN-41	1962	Sparse prehistoric lithic scatter with groundstone artifacts
CA-VEN-42	1962	Prehistoric milling site with sparse scatter of core and flake tools
CA-VEN-43	1962	Prehistoric milling site with manos, metates, and hammerstones
CA-VEN-267	1972	Sparse lithic scatter with quartzite hammerstone and chert biface

4.5.1.7 Archeological Field Survey

On April 11, 2019, Padre Staff Archaeologist Val Kirstine surveyed the project component sites for cultural resources. Due to the presence of existing development, which included paved streets, pedestrian walkways, commercial and residential structures, landscaping, and a golf course, the pedestrian survey was conducted only in areas where exposed native soils could potentially be observed. Specifically, the areas surveyed include the PS/PRS site, the Canyon Oaks Park Lateral recycled water pipeline alignment, the Yerba Buena recycled water pipeline extension alignment, and one of the proposed air/vacuum relief valve sites at the North Ranch Country Club golf course at the south end of Windy Mountain Avenue. Parallel transects spaced at 15-meter (50 foot) intervals were used to ensure complete coverage of the areas surveyed. Mr. Kirstine documented the field survey with color digital photographs. No cultural resources were observed.

PS/PRS Site

The PS/PRS site is located in an undeveloped field on the north side of the Yerba Buena Elementary School, directly east of Lindero Canyon Road. Dense vegetation consisting of scattered shrubs, herbaceous weeds, and annual grasses was observed throughout the survey area. Due to vegetation, surface visibility was generally poor (less than 5 percent) in the center but improved slightly (up to 25 percent) along the margins of the survey area where an unpaved access path provided sufficient opportunities to observe the ground surface. Surface soils consisted of pale to medium-brown sandy clay loam with occasional angular gravels and abundant angular to sub-rounded clasts of shale.

No cultural materials were observed; however, the PS/PRS site is situated on an upper stream terrace adjacent to a riparian woodland corridor. Additionally, two isolated prehistoric artifacts, P-19-100211 and P-19-100212, were recorded within 260 feet and 1,300 feet of the PS/PRS site, respectively. The proximity to the stream, oak woodland, and prehistoric materials increases the potential for buried prehistoric deposits.

Canyon Oaks Park Lateral Recycled Water Pipeline

The Canyon Oaks Park Lateral recycled water pipeline alignment begins near the east side of Landino Drive at Canyon Oaks Park and extends eastwards, down a moderately sloping, undeveloped hillside before terminating at Lindero Canyon Road. Dense vegetation consisting of herbaceous weeds and annual grasses was observed in the hillslope portion of the corridor. Several mature coast live oak trees (*Quercus agrifolia)* were also observed near the survey area. Due to dense vegetation, surface visibility ranged from five to ten percent. Soils observed were of similar composition to those observed at the PS/PRS site and consisted of pale to light brown sandy clay loam with occasional angular clasts of sedimentary shale and small, angular gravel.

No cultural materials were observed; however, the proposed pipeline alignment is located within 1,000 feet of an established stream and a riparian woodland corridor. Additionally, two isolated prehistoric artifacts, P-19-100211 and P-19-100212, were recorded within 1,250 feet and 530 feet of the alignment, respectively.

Yerba Buena Recycled Water Pipeline Extension

The Yerba Buena recycled water pipeline extension alignment is situated along the east margin of Lindero Canyon Road between Hedgewall Drive and Yerba Buena Elementary School. Only the eastern margin of the proposed pipeline extension, which abuts an undeveloped field, was surveyed. Abundant vegetation consisting of summer mustard and a variety of seasonal grasses and weeds was observed throughout the survey area. However, sufficient opportunities for the assessment of surface soils were provided by patches of thinner vegetation and soil piles generated by burrowing mammals. Soils consisted of pale to medium brown sandy claim loam with abundant, angular to sub-rounded gravel and occasional angular clasts of shale.

Air/Vacuum Relief Valves for the Lindero Feeder No. 2 Pipeline

Four air/vacuum relief valves are proposed within the North Ranch Country Club golf course; however, Mr. Kirstine could only access location number one. The presence of dense turfgrass, landscaping, and paved golf cart trackways prevented a visual assessment.

4.5.2 Regulatory Setting

The following regulatory framework describes the applicable state and local statutes, ordinances, and policies pertaining to the protection of cultural resources. These laws must be considered during the planning process for projects that have the potential to affect cultural resources.

4.5.2.1 California Environment Quality Act

The CEQA Statute and 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 National Register of Historic Places (NRHP), 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 NRHP or 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).

4.5.2.2 California Register of Historical Resources

The CRHR is a listing of State of California resources that are significant within the context of California's history, and includes all resources listed in or formally determined eligible for the NRHP. In addition, properties designated under municipal or county ordinances are also 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 four criteria defined in the California Code of Regulations Title 14, Chapter 11.5, Section 4850:

1. 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 (Criterion 1); or
2. It is associated with the lives of persons important to local, California, or national history (Criterion 2); or
3. 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 (Criterion 3); or
4. It has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation (Criterion 4).

A cultural resource's significance must be demonstrated under one of the CRHR criteria described above, and it must retain its historic integrity. Cultural resources integrity is determined using the CRHR's seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association. The CRHR criteria are tied to CEQA, as any resource that meets the above criteria and retains its integrity is considered an historical resource under CEQA.

4.5.2.3 Regulations Concerning Discovery of Human Remains

California Public Resources Code §5097.98 (Notification of Native American human remains, descendants; disposition of human remains and associated grave goods) mandates that the Native American Heritage Commission (NAHC) adhere to the following regulations when identification of Native American human remains occurs:

(a) Whenever the NAHC receives notification of a discovery of Native American human remains from a county coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, it shall immediately notify those persons it believes to be most likely descended from the deceased Native American. The descendants may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The descendants shall complete their inspection and make their recommendation within 48 hours of their notification by the NAHC. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

(b) Whenever the NAHC is unable to identify a descendant, or the descendant identified fails to make a recommendation, or the landowner or his or her authorized representative rejects the recommendation of the descendant, and the mediation provided for in subdivision (k) of Section 5097.94 fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance.

(c) Notwithstanding the provisions of Section 5097.9, the provisions of this section (including those actions taken by the landowner or his or her authorized representative to implement this section), and any action taken to implement an agreement developed pursuant to subdivision (l) of Section 5097.94, shall be exempt from the requirements of the California Environmental Quality Act (Division 13, commencing with Section 21000).

(d) Notwithstanding the provisions of Section 30244, the provisions of this section (including those actions taken by the landowner or his or her authorized representative to implement this section), and any action taken to implement an agreement developed pursuant to subdivision (1) of Section 5097.94 shall be exempt from the requirements of the California Coastal Act of 1976 (Division 20, commencing with Section 30000).

4.5.2.4 Tribal Cultural Resources

No traditionally and culturally affiliated Native American tribes have requested that CMWD informed them of proposed projects pursuant to Public Resources Code Section 21080.3.1. Therefore, it is presumed no tribal resources are present and consultation with Native American tribes is not required.

4.5.3 Impact Analysis

4.5.3.1 Significance Thresholds

Most of the project-related excavation within undeveloped areas would occur at the PS/PRS site, located within Ventura County. Therefore, the thresholds provided in the Ventura County Initial Study Assessment Guidelines have been used as significance thresholds for this project. The Ventura County Initial Study Assessment Guidelines indicate a substantial adverse change in the significance of an archeological resource may have a significant impact on the environment. The Guidelines state the significance of an archaeological resource is materially impaired when a project:

- 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
- 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.

4.5.3.2 Project-Specific Impacts

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

Based on the cultural resources records search and previous archeological field surveys, no previously recorded cultural resources are located within or immediately adjacent to proposed pipeline alignments or facility sites. The PS/PRS site is located near a stream, which are commonly sites of prehistoric occupation by Native Americans. An isolated prehistoric artifact (P-19-100211) was recorded within 260 feet of the PS/PRS site. A prehistoric cultural resources site has been recorded along Lindero Creek within one mile of the PS/PRS site. Construction of the PS, PRS and related facilities would require extensive excavation and cultural resources (isolated artifacts, intact deposits, burials) may be encountered. Impacts are unknown but potentially significant.

4.5.3.3 Cumulative Impacts

The cumulative projects listed in Section 3.5 are mostly located in developed areas where soils have been disturbed and the potential for cultural resources to be adversely affected is low. However, cumulative impacts may occur and the proposed project would incrementally contribute to these impacts. Overall, the proposed project's contribution to impacts to cultural resources may be cumulatively considerable.

4.5.3.4 General Plan Policy Consistency

Ventura County General Plan

Applicable cultural and paleontological resources policies are:

- Discretionary developments shall be assessed for potential paleontological and cultural resource impacts, except when exempt from such requirements by CEQA (Policy 1.8.2-1).
- 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 1.8.2-2).
- Mitigation of significant impacts on cultural or paleontological resources shall follow the Guidelines of the State Office of Historic Preservation, the NAHC, and shall be performed in consultation with professionals in their respective areas of expertise (Policy 1.8.2-3).
- 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 1.8.2-4).

The proposed project is consistent with applicable cultural resources policies because:

- The proposed project has been assessed for potential paleontological (see Section 4.8.3) and cultural resources impacts.
- Project re-design is not required to avoid impacts, and impact assessment and mitigation development has been conducted by a qualified archeological consultant (Padre Associates).
- Mitigation measures are consistent with NAHC guidelines.
- Archeological site information has not been included in this EIR and remains confidential.
- No sites having archeological, architectural, or historical significance have been identified during environmental review.

Oak Park Area Plan

Applicable cultural resources policies are:

- All discretionary permits involving construction or earth movement within the Oak Park Area of Interest shall be reviewed by the County's designated archaeological resource organization and representatives of the local Chumash Indian Community. Where deemed necessary by the Planning Division, a field reconnaissance study shall be conducted by a County approved archaeologist to determine the potential for surface or subsurface cultural remains. Appropriate mitigation of impacts to identified sites, as recommended by the archaeologist and approved by the County, shall be required. Grading shall be monitored within those areas determined by the field survey to be of moderate or higher likelihood to yield buried artifacts. Monitors shall be empowered to halt construction in the immediate vicinity of unearthed artifacts until adequate investigation has occurred (Policy 1.5.2-1).
- All structures/sites designated, or being considered for designation, as County Historical Landmarks shall be preserved or appropriately salvaged as a condition of discretionary development (Policy 1.5.2-2).

The proposed project is consistent with cultural resources policies provided in the Oak Park Area Plan because:

- The proposed project does not require a discretionary permit from Ventura County. In any case, mitigation measures are provided (MM CR-1) to conduct subsurface testing where cultural resources are mostly likely to be found (PS/PRS site), cultural resources sensitivity training of all persons involved in construction, and procedures to follow in case an artifact is discovered.
- County historical landmarks would not be affected.

City of Thousand Oaks

Applicable cultural resources policies of the General Plan are:

- All information or maps on file with the City pertaining to the location of previously recorded archaeological sites within the Thousand Oaks Planning Area shall remain confidential unless specifically authorized to be released to the public by local Native American organizations (Conservation Element Policy CO-33).
- Management of cultural resources such as archaeological sites, historic structures or places shall emphasize resource protection and preservation (Conservation Element Policy CO-34).
- The preferred method for protecting any previously recorded archeological site shall be by deed restriction as permanent "open space", in order to prevent any future development or use that might otherwise adversely impact these resources (Conservation Element Policy CO-35).

- Decisions pertaining to the disposition of archaeological, historical and cultural resources shall be made in concert with recognized public agencies, groups or individuals having jurisdiction, expertise or interest in these matters, including but not limited to the State Office of Historic Preservation, Thousand Oaks Cultural Heritage Board and local Native American organizations, including other designated representatives and affected property owners (Conservation Element Policy CO-36).

The proposed project is consistent with policies of the City's General Plan Conservation Element because:

- Information and maps pertaining to the location of archeological sites will remain confidential.
- The assessment of impacts and development of mitigation focuses on cultural resource protection and preservation.
- Previously recorded archeological sites would not be affected; therefore, a deed restriction is not needed.
- The disposition of any cultural materials discovered during project construction will be decided based on consultation with the State Office of Historic Preservation and local tribes.

4.5.4 Mitigation Measures

4.5.4.1 Proposed Project

MM CR-1. The following mitigation measures are consistent with the guidelines of the State Office of Historic Preservation and shall be implemented during project construction.

- A worker cultural resources sensitivity program shall be implemented for all project components. Prior to any ground-disturbing activity, a qualified archeologist shall provide an initial sensitivity training session to all affected CMWD and LVMWD staff, 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 sensitivity program shall address:
  - ✓ The cultural sensitivity of the affected 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 non-compliance.

- Prior to any ground disturbance at the PS/PRS site, an Extended Phase I Survey shall be completed in all areas of planned excavation and consist of shovel test probes and auger probes to determine whether or not intact subsurface cultural deposits are present. A qualified archaeologist shall oversee the Extended Phase I Survey and a Native American representative shall monitor all excavation.
  - ✓ If intact subsurface cultural deposits are discovered during the Extended Phase I Survey, Phase II subsurface testing and evaluation shall be performed to determine the vertical and horizontal extent and composition of cultural deposits.
  - ✓ If intact subsurface cultural deposits are determined to be significant after Phase II testing, project redesign or Phase III Data Recovery mitigation will be required.
  - ✓ If intact subsurface cultural deposits are not found during the Extended Phase I Survey, no further work or mitigation is required at the PS/PRS site.
- 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. CMWD and LVMWD 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 NAHC.

4.5.4.2 Cumulative Impacts

Same as the proposed project, see Section 4.5.4.1.

4.5.5 Residual Impacts

4.5.5.1 Proposed Project

Mitigation measures provided are anticipated to reduce project-specific cultural resources impacts to a level of less than significant.

4.5.5.2 Cumulative Impacts

Mitigation measures provided are anticipated to reduce cumulative cultural resources impacts to a level of less than significant.

4.6 HAZARDS AND HAZARDOUS MATERIALS

4.6.1 Physical Setting

Two on-line hazardous materials data bases were reviewed (Geotracker by the SWRCB and ENVIROSTOR by the Department of Toxic Substances Control [DTSC]) to identify known hazardous materials issues near proposed project components. Sites identified in close proximity to project components are:

- Yerba Buena Elementary School site: approximately 1,315 cubic yards of soil affected by pesticides (dichloro-diphenyl-dichloroethylene, dichloro-dipheny-ltrichloroethane, chlordane, dieldrin) and arsenic were removed from a 0.99-acre portion of the school site in 2005 under DTSC oversight. Post-removal sampling indicated action standards and objectives had been met and the site no longer poses a significant threat to human health or the environment. This school site is located adjacent to the proposed PS/PRS site.
- Westlake Village Car Wash at 30909 Thousand Oaks Boulevard: Gasoline leakage was detected in 2002, soil remediation was conducted, and the site was closed on May 6, 2015. This site is located adjacent to the proposed South interconnection pipeline tie-in to the LVWMD system.

4.6.2 Regulatory Setting

The management of hazards, hazardous materials, hazardous waste, and public safety is subject to numerous laws and regulations at all levels of government. These regulations are designed to regulate hazardous materials and hazardous wastes, as well as to manage sites contaminated by hazardous waste to limit the risk of upset during the use, transport, handling, storage, and disposal of hazardous materials. Summaries of federal and state laws and regulations related to hazards and hazardous materials management are presented in this section.

4.6.2.1 Regulatory Definitions

The following hazardous materials and hazardous waste definitions provide a simplified overview of a very complicated subject; they are not legal definitions.

Hazardous Material

Any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, and any material which a handler or the administering regulatory agency has a reasonable basis for believing would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment. A number of properties may cause a substance to be considered hazardous, including toxicity, ignitibility, corrosivity, or reactivity.

Hazardous Waste

A waste or combination of waste which, because of its quantity, concentration, or physical, chemical, or infection characteristics, may cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitation-reversible illness; or pose a substantial present or potential hazard to human health or the environment, due to factors including, but not limited to, carcinogenicity, acute toxicity, chronic toxicity, bio-accumulative properties, or persistence in the environment, when improperly treated, stored, transported, or disposed of or otherwise managed.

4.6.2.2 Federal Regulations

U.S. Environmental Protection Agency

The U.S. Environmental Protection Agency (USEPA) is the principal regulatory agency responsible for the safe use and handling of hazardous materials.

Superfund Amendments and Reauthorization Act (SARA) Public Law 99-499 (100 Stats. 1613)

SARA amended the Comprehensive Environmental Response, Compensation, and Liability Act (*CERCLA, 42 U.S.C. § 9601 et seq.*) on October 17, 1986. SARA specifically addresses the management of hazardous materials by requiring public disclosure of information relating to the types and quantities of hazardous materials used at various types of facilities. SARA Title III (*42 U.S.C. § 11001 et seq.*) is referred to as the Emergency Planning and Community Right to Know Act. The Act addresses community emergency planning, emergency release notification, and hazardous materials chemical inventory reporting.

Resource Conservation and Recovery Act (RCRA) 42 U.S.C. §6901 et seq

RCRA gave the USEPA the authority to control hazardous waste from the “cradle-to-grave.” This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA regulates disposal of solid and hazardous waste, adopted by congress on October 21, 1976. Subtitle D of RCRA established the solid waste program, which encourages states to develop comprehensive plans to manage nonhazardous industrial solid waste and municipal solid waste, sets criteria for municipal solid waste landfills and other solid waste disposal facilities, and prohibits the open dumping of solid waste. RCRA encourages environmentally sound solid waste management practices that maximize the reuse of recoverable material and foster resource recovery.

Clean Air Act of 1990, 42 U.S.C. 7401-7671

The Clean Air Act (CAA), as amended in 1990, also requires states to implement a comprehensive system to inform local agencies and the public when a significant quantity of such materials is stored or handled at a facility. It establishes a nationwide emergency planning and response program and imposes reporting requirements for businesses that store, handle, or produce significant quantities of extremely hazardous materials.

Clean Air Act Risk Management Plan, 42 USC § 112(r)

This section of the CAA determines that facilities storing or handling significant amounts of acutely hazardous materials are required to prepare and submit a Risk Management Plan (RMP), codified under 40 CFR 68.

National Fire Protection Association

The National Fire Protection Association (NFPA) sets forth minimum standards to establish a reasonable level of fire safety and property protection from the hazards created by fire and explosion. The standards apply to the manufacture, testing, and maintenance of fire protection equipment. The NFPA also provides guidance on safe selection and design, installation, maintenance, and construction of electrical systems.

U.S. Department of Transportation

The U.S. Department of Transportation (DOT) has the regulatory responsibility for the safe transportation of hazardous materials.

4.6.2.3 State of California Regulations

California Emergency Management Agency

The California Emergency Management Agency Hazardous Materials (HazMat) Section coordinates statewide implementation of hazardous materials accident prevention and emergency response programs for all types of hazardous materials incidents and threats.

California Health and Safety Code § 25500

The California Health and Safety Code (CHSC), Section 25500, requires companies that handle hazardous materials in sufficient quantities to develop a Hazardous Materials Business Plan (HMBP). The HMBP includes basic information on the location, type, quantity, and health risks of hazardous materials handled, stored, used, or disposed of that could be accidentally released into the environment. Each plan includes training for new personnel, and annual training of all personnel in safety procedures to follow in the event of a release of hazardous materials. It also includes an emergency response plan and identifies the business representative able to assist emergency personnel in the event of a release.

California Department of Toxic Substance Control (DTSC)

The objective of the DTSC is to protect human health and the environment from exposure to hazardous material and waste. The DTSC has the authority to respond to and enforce the cleanup of hazardous substance releases. Waste streams at oil production sites are generally considered waste, not substances, and are thus regulated by the DTSC when hazardous. Certain waste streams can be considered as recyclable material, not waste, provided that their ultimate disposal to land does not release contaminants to the environment.

Los Angeles Regional Water Quality Control Board (LARWQCB)

The LARWQCB protects ground and surface water quality of the coastal watersheds of Ventura and Los Angeles counties by the development and enforcement of the Water Quality Control Plan. Specifically, the Plan: (i) designates beneficial uses for surface and ground waters, (ii) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's antidegradation policy, and (iii) describes implementation programs to protect all waters in the Region. In addition, the Plan incorporates (by reference) all applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations. The LARWQCB also issues discharge permits, takes enforcement action against violators, and monitors water quality.

4.6.2.4 Local Authorities and Administering Agencies

The Certified Unified Program Agency (CUPA) is an agency certified by the DTSC to conduct the Unified Program, which consists of hazardous waste generator and onsite treatment programs; aboveground and underground storage tank programs; hazardous materials management, business plans, and inventory statements; and the Risk Management and Prevention Program. In Ventura County, the CUPA is the Ventura County, Environmental Health Division of the Resource Management Agency. In Los Angeles County, the CUPA is the Los Angeles County Public Health Department, Environmental Protection Branch. These CUPAs supervise the remediation of contaminated soil sites. The CUPA will grant closure of an impacted site when confirmatory samples of soil and groundwater taken demonstrate that levels of contaminants are below the standards set by DTSC and LARWQCB.

4.6.2.5 Fire Hazards

All project elements would be located within Very High Fire Hazard Severity Zones as designated by the California Department of Forestry and Fire Protection. The PS/PRS site is undeveloped and supports weedy flammable vegetation, primarily annual grasses. The Canyon Oaks Park Lateral recycled water pipeline alignment traverses disturbed areas vegetated with flammable annual grasses. All other project elements would be located in developed areas with vegetation limited to irrigated landscaping.

4.6.3 Impact Analysis

4.6.3.1 Thresholds of Significance

The criteria for determining significant impacts related to hazards and hazardous materials were developed in accordance with Section 15065(a) and Appendix G of the State CEQA Guidelines.

CEQA Guidelines Appendix G

Implementation of the proposed project may have potentially significant adverse impacts if it would result in any of the following:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

- 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.
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school.
- 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, create a significant hazard to the public or environment.
- For a project located within an airport land use plan or where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in safety hazard or excessive noise for people residing or working in the project area.
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.
- Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires.

4.6.3.2 Project-Specific Impacts

Hazardous Materials

Impact HAZ-1: Construction activities associated with the proposed project may result in inadvertent discharge of small quantities of hazardous materials – less than significant.

During construction, small quantities of hazardous materials (e.g., fuel, lubricating oils, hydraulic fluid, engine coolant) would be used at all project construction sites, and transported to and from these sites. Small quantities of these substances could be accidentally released and result in soil contamination. However, hazardous materials handling procedures and worker safety procedures would be implemented as required by applicable regulations. Due to the small amounts of hazardous materials used during construction activities and the implementation of standard spill avoidance measures, potential impacts associated with use of hazardous materials for project construction purposes would be less than significant.

Impact HAZ-2: Excavation associated with construction of the PS and PRS may expose the public and environment to contaminated soil – significant, but mitigable.

Installation of the proposed below-ground PS, PRS, and related components would require extensive excavation in an area adjacent to a previously contaminated site (Yerba Buena Elementary School site) and may result in discovery of soil containing pesticides and/or arsenic associated with historic agricultural land use. Contaminated soil may result in exposure of the public (adjacent residential areas and Wistful Vista Open Space) and the environment (surface water and wildlife habitat in adjacent Lindero Creek) to hazardous materials.

Wildland Fire

Impact HAZ-3: Construction of the PS, PRS, and related components would occur in an area supporting flammable annual grasses and may increase risk of wildland fire – less than significant.

Construction-related sources of ignition may include vehicle exhaust pipes, welders, grinders, and related power tools. Vegetation within the PS/PRS site and temporary construction easement would be removed as part of initial construction activities. In addition, a water truck would be used to reduce fugitive dust by wetting construction areas which would also reduce the potential for project-related fire ignition. Overall, the project-related increase in the risk of wildland fire to adjacent developed areas is considered less than significant.

Emergency Response and Evacuation

Emergency response and evacuation procedures for the project area are coordinated by the Los Angeles County and Ventura County Sheriff's departments and local fire departments. The proposed project would involve short-term lane closures during pipeline installation in Lindero Canyon Road and Kanan Road (Lindero Feeder No. 2 tie-in only). Construction-related traffic congestion is not anticipated because these are four-lane facilities that operate at a high level of service (LOS A or B). Therefore, the proposed project would not adversely affect emergency response or evacuation in the area.

4.6.3.3 Cumulative Impacts

The cumulative projects listed in Section 3.5 are mostly located in developed areas and construction of these projects may encounter soil contamination associated with current or past land uses and result in exposure to the public and the environment. Some of the cumulative projects are located adjacent to areas with flammable vegetation and may increase the risk of wildland fire. The proposed project may incrementally contribute to these cumulative impacts. However, the human population and environment exposed to soil contamination would differ from the cumulative projects such that an additive effect is not anticipated.

4.6.3.4 General Plan Policy Consistency

Ventura County General Plan

Hazardous materials and hazardous waste policies of the General Plan include:

- Hazardous wastes and hazardous materials shall be managed in such a way that waste reduction through alternative technology is the first priority, followed by recycling and on-site treatment, with disposal as the last resort (Policy 2.15.2-1).
- Site plans for discretionary development that will generate hazardous wastes or utilize hazardous materials shall include details on hazardous waste reduction, recycling and storage (Policy 2.15.2-2).
- Any business that handles a hazardous material shall establish a plan for emergency response to a release or threatened release of a hazardous material (Policy 2.15.2-3).

The proposed project is consistent with hazardous materials and hazardous waste policies of the Ventura County General Plan because:

- The proposed project would not involve handling hazardous materials and would not generate hazardous waste requiring disposal. However, if soil contamination is encountered, this material cannot be recycled and would be properly disposed of in compliance with State law.
- Excluding fuels and lubricants used for construction, the proposed project does not involve handling hazardous materials. Therefore, an emergency response plan is not necessary.

Oak Park Area Plan

Fire hazard policies include:

- Discretionary development permits shall be conditioned to provide adequate water and access for firefighting purposes as determined by the Fire Protection District (Policy 2.3.2-1).
- Discretionary development in High Fire Hazard areas shall be required to develop landscape plans utilizing fire retardant plant material, cleared areas or other acceptable means of reducing fire hazards consistent with other policies (Policy 2.3.2-2).
- Cul-de-sac length shall not exceed 800 feet (Policy 2.3.2-3).
- All roads shall conform to the standards of the Fire Protection District (Policy 2.3.2-4).
- Adequate access and fire flow improvements shall be completed prior to combustible construction (Policy 2.3.2-5).

- A fuel modification zone of at least 100 linear feet shall be provided around all residential areas (Policy 2.3.2-6).
- Development in the Oak Park Community shall only occur if such development is found by the Board of Supervisors to be consistent with all Fire Department policies (Policy 2.3.2-7).

The proposed project is consistent with fire hazard policies provided in Section 2.3.2 of the Oak Park Area Plan because:

- The proposed project is not a discretionary development and does not include any combustible structures requiring fire protection (including hydrants or fire water storage) or fuel modification.
- The proposed short access road (about 240 feet) from Lindero Canyon Road would provide easy access for fire equipment, including space for fire trucks to turn-around.

City of Thousand Oaks

Applicable policies of the General Plan Safety Element are:

- Discourage the location of public facilities and above-ground utilities in extreme fire hazard areas. When unavoidable, special precautions should be taken to minimize potential impacts (Policy D-13).
- Strive to locate businesses that utilize hazardous materials in areas which will minimize risk to the public or the environment (Policy E-3).

The proposed project is consistent with applicable policies of the City's General Plan Safety Element because all proposed project components within the City would be buried pipelines or small non-combustible structures (air/vacuum relief valve cabinets) and would not cause or be affected by fire hazards.

City of Westlake Village

Applicable fire hazard policies of the General Plan are limited to:

- Require adequate emergency access (i.e., two viable points of ingress and egress) for emergency vehicles and evacuation in the event of a fire.

Although the PS/PRS site is not located in the City, the proposed access road would allow for ingress and egress of emergency vehicles.

4.6.4 Mitigation Measures

4.6.4.1 Proposed Project

MM HAZ-1: All areas proposed for excavation at the PS/PRS site shall be tested and evaluated to identify soil contamination. A Site Evaluation Plan shall be developed and implemented prior to any soil disturbance. The Site Evaluation Plan shall include as a minimum:

- Identification of soil sampling locations to encompass the entire footprint of proposed facilities.
- Soil testing for organochlorine pesticides, petroleum hydrocarbons, and arsenic to the depth of probable historic agricultural cultivation.
- Identification of soil contamination screening values.

All soil with contamination exceeding California Human Health Screening Levels (or other approved screening levels) shall be segregated, stockpiled, and covered as they are excavated. Contaminated soil shall be removed from the PS/PRS site to an appropriate solid waste disposal facility prior to completion of construction.

Soil testing shall be coordinated with archeological testing (see Section 4.5.4.1) to avoid disturbance of unreported cultural resources. Therefore, any boring or excavation associated with soil testing shall be conducted after archeological testing indicates the lack of any cultural deposits or following Phase II subsurface testing and Phase III data recovery, as appropriate.

4.6.4.2 Cumulative Impacts

Same as the proposed project, see Section 4.6.4.1.

4.6.5 Residual Impacts

4.6.5.1 Proposed Project

Mitigation measures provided are anticipated to reduce project-specific hazardous materials impacts to a level of less than significant.

4.6.5.2 Cumulative Impacts

Mitigation measures provided are anticipated to reduce cumulative hazardous materials impacts to a level of less than significant.

4.7 AESTHETICS

4.7.1 Setting

4.7.1.1 Project Area Overview

The project area consists of the southern slopes of the Simi Hills, extending from the U.S. Highway 101 corridor north towards Simi Peak. Native vegetation along creek corridors (Lindero Creek, Medea Creek) has been preserved in some areas. Open space preserves are located near Lindero Canyon Road in the project area, including Wistful Vista Open Space (Rancho Simi Recreation and Park District) to the east and the North Ranch Open Space (City of Thousand Oaks) to the west. In addition, Oakbrook Regional Park (Conejo Recreation and Park District) is located to the north of the proposed pipeline tie-in at Kanan Road. The presence of abundant parkland and open space and relatively low density of development imparts a park-like atmosphere to residential areas in the project area. In addition, public concerns expressed during initial project scoping meetings indicate the local population has a high regard for scenic resources.

Scenic highways in the project area include:

- U.S. Highway 101 (eligible State scenic highway): 1.6 miles south of the proposed PS/PRS site.
- Kanan Road (eligible Ventura County scenic highway): 1.1 miles north of the proposed PS/PRS site, adjacent to the Lindero Feeder No. 2 tie-in location.
- North Westlake Boulevard (eligible Ventura County scenic highway, City of Thousand Oaks scenic highway): 0.5 miles east of Lindero Pump Station No. 1.
- Erbes Road, Olsen Road to Avenida de los Arboles (City of Thousand Oaks scenic highway): 0.4 miles north of Lindero Pump Station No. 1.
- Thousand Oaks Boulevard, east of Lindero Creek (City of Agoura Hills scenic resource): 0.3 miles east of the South interconnection pipeline alignment.

4.7.1.2 Local Visual Environment

Scenic resources in the vicinity of proposed project components include parklands, open space areas, wide parkways with landscaped medians (Lindero Canyon Road, Kanan Road), and more distant views of undeveloped hillsides such as Simi Peak. Public views of project sites from adjacent roadways include Lindero Canyon Road (PS/PRS site, interconnection pipeline alignments, recycled water pipeline alignments) and Kanan Road (interconnection pipeline alignment tie-in and turn-out). In addition, the public would have views of construction sites from Yerba Buena Elementary School, Canyon Oaks Park, North Ranch Pavilions, Oak Park Center, and the North Ranch Country Club (air/vacuum relief valve locations). Views of the Lindero Pump Station No. 1 from Erbes Road are obscured by intervening vegetation.

Figure 3-9 provides photographs of the PS/PRS site from Lindero Canyon Road (Figure 3-9a) and from the Yerba Buena Elementary School site (Figure 3-9b). This site mostly supports annual grasses and weeds, with small patches of native shrubs to the north and south. The riparian corridor (supporting oaks and willows) along Lindero Creek is located east of the PS/PRS site, and along a tributary to the north. The riparian corridor provides a natural, park-like visual feature to the area. Overall, the visual quality of the PS/PRS site is low, but may be considered moderate with the riparian corridor in the background in views from Lindero Canyon Road.

The only project component site visible from a scenic resource area or scenic highway (Kanan Road) is the proposed new turn-out for the North interconnection pipeline tie-in to the Lindero Feeder No. 2. The buried turn-out would be located at the southeast corner of Lindero Canyon Road and Kanan Road, in a landscaped area supporting turfgrass with trees and an "Oak Park" sign in the background. This area is considered visually sensitive as it represents the gateway to the Oak Park community.

4.7.2 Impact Analysis

4.7.2.1 Significance Thresholds

The evaluation of the project's aesthetic impacts is based upon a review of the project plans, area maps, aerial photographs, and site reconnaissance. For the purposes of this analysis, a significant adverse aesthetic impact would occur if the project would:

- Result in a substantial deterioration of the scenic variety or visual condition of an area with a high to moderate level of visual sensitivity.
- Cause the obstruction of scenic views.
- Damage scenic resources along a scenic highway.
- Create a new source of substantial light or glare that would adversely affect public day or nighttime views.

4.7.2.2 Project-Specific Impacts

Scenic Resource Degradation

Pipeline installation and construction of other project elements may result in temporary removal of landscaping and street trees and may temporarily degrade visual resources from public viewing areas. However, only a small proportion of landscaping along the pipeline alignments would be affected and significant aesthetics impacts are not anticipated. In the long-term, all pipelines (except manholes and air/vacuum relief valves) would be fully buried and not visible to the public, including motorists on Kanan Road (scenic highway). Proposed improvements to the Lindero Pump Station No. 1 would be located within the existing walled enclosure and not visible to the public.

Impact AES-1: The proposed PS and PRS may degrade the visual condition of the site in an area with a high level of visual sensitivity - less than significant.

The proposed PS and PRS would be located below ground in concrete vaults with only manholes, access hatches, and air vents extending from a few inches to approximately one-foot above-ground (see Figure 4.7-1). In addition, a small antenna would be located at the PS/PRS site. These features would be located at finished grade about 12 feet lower in elevation than Lindero Canyon Road, which would limit the visibility of these features to a short segment of the northbound lane. The proposed PS/PRS would not be visible from Yerba Buena Elementary School due to an intervening vegetated berm located along the northern property boundary. Due to the low stature and scale of proposed improvements at the PR/PRS site, project-related degradation of the visual condition would be minor and considered a less than significant impact.

Impact AES-2: Above-ground components of the proposed buried turn-out may degrade the visual condition of this visually sensitive site - less than significant.

The new/relocated turn-out near the tie-in to the Lindero Feeder No. 2 would be located below ground in a concrete vault with only one manhole, one access hatch, two air vents, a control cabinet, and an electrical utility service meter pedestal visible (see Figure 4.7-2). The air vents (cylindrical structures with holes in Figure 4.7-2) would be surrounded by decorative boulders similar to existing boulders at the site to partially conceal and reduce the prominence of these structures. The proposed control cabinet would be screened by landscape plantings. Due to the low stature and concealing boulders and landscaping, these above-ground features would not be noticeable to motorists on this scenic roadway (Kanan Road). Overall, the project-related degradation of the visual condition of this visually sensitive site would be minor and considered a less than significant impact.

Impact AES-3: Air/vacuum relief valve cabinets may degrade the visual condition of the North Ranch Country Club golf course - less than significant.

Up to four above ground metal cabinets (up to two feet by three feet, four feet tall) would be located within the golf course but would be dispersed about 1,000 feet apart. Golfers are accustomed to seeing irrigation valves and controllers along the course, and the addition of four small cabinets is not anticipated to substantially alter the visual quality of the golf course. Therefore, aesthetics impacts are considered less than significant.

4.7.2.3 Cumulative Impacts

The nearest of the cumulative projects listed in Section 3.5 is located 1.3 miles from the nearest project component (South interconnection pipeline). Therefore, the proposed project would not affect the same viewshed and would not incrementally contribute to cumulative aesthetics impacts. Therefore, cumulative impacts would be same as project-specific impacts and less than significant.

4.7.2.4 General Plan Policy Consistency

Ventura County General Plan

Scenic resource policies of the Ventura County General Plan Goals, Policies and Programs document (Section 1.7.2) are applicable to the PS/PRS site and new/relocated turn-out site located within Ventura County (Oak Park) and include:

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.
2. Scenic Resource Areas, which are depicted on the Resource Protection Map, shall be subject to the Scenic Resource Protection (SRP) Overlay Zone provisions and standards set forth in the Non-Coastal Zoning Ordinance, which include the following:
   (1) Any request for grading, structures or vegetation removal per the standards of the SRP Overlay Zone shall be evaluated through a discretionary permit.
   (2) Removal, damaging or destruction of protected trees shall be in compliance with the County's "Tree Protection Regulations" of the Non-Coastal Zoning Ordinance.
   (3) All discretionary development shall be sited and designed to:
      a. Prevent significant degradation of the scenic view or vista;
      b. Minimize alteration of the natural topography, physical features and vegetation;
      c. Utilize native plants indigenous to the area for re-vegetation, whenever possible;
      d. Avoid silhouetting of structures on ridge tops that are within public view;
      e. Use colors and materials that are designed to blend in with the natural surroundings;
      f. Minimize lighting that causes glare, illuminates adjacent properties, or is directed skyward in rural areas.
   (4) No on-site freestanding advertising signs in excess of four feet in height and no freestanding off-site advertising signs shall be permitted.

a. Post-construction visual representation of the PS/PRS site, facing southeast

b. Post-construction visual representation of the PS/PRS site, facing east

padre associates, inc. ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS	PROJECT NAME: CMWD - LVMWD INTERCONNECTION VENTURA AND LOS ANGELES COUNTIES, CA	PROJECT NUMBER: 1802-0331	DATE: April 2019	POST-CONSTRUCTION VISUAL REPRESENTATIONS OF THE PS/PRS SITE	FIGURE 4.7-1

Calleguas Water District\Figure 4.7-1 - Post-Construction Visual Representations.mxd 4/26/2019

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a. Post-construction visual representation of the New Turn-out Site. (South View)

a. Post-construction visual representation of the New Turn-out Site. (Southwest View)

LEGEND:

A Turn-out Vent (2) B Control Cabinet

Notes: CMWD = Calleguas Municipal Water District
LVMWD = Las Virgenes Municipal Water District

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

PROJECT NAME: CMWD - LVMWD INTERCONNECTION VENTURA AND LOS ANGELES COUNTIES, CA
PROJECT NUMBER: 1802-0331
DATE: June 2019

POST-CONSTRUCTION VISUAL REPRESENTATIONS OF THE NEW TURN-OUT SITE

FIGURE 4.7-2

Calleguas Water District\Figure 4.7-2 - Post-Construction Visual Representation of Proposed New Turn-out Site 11x17.mxd 6/12/2019

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Federally-owned land is not subject to the Scenic Resource Protection Overlay Zone and is not subject to any permit requirements as specified under (1) or (2) above. To the extent possible, the agencies responsible for the administration of land use activities on Federally owned land should consider Policies 1.7.2-2(3) and (4) above in the planning and administration of new land uses within Scenic Resource Areas.

3. Proposed undergrounding of overhead utilities within Scenic Resource Areas shall be given first priority by the Public Works Agency in utilizing the County's allocation of Utility Undergrounding Funds.
4. The Planning Division shall continue to implement the landscaping requirements of the Zoning Ordinance and the "Guide to Landscape Plans" to enhance the appearance of discretionary development.

The proposed project is consistent with these scenic resources policies because:

- The proposed project would not significantly degrade visual resources or significantly alter or obscure public views, or adversely affect designated scenic resource areas.
- The proposed project does not involve overhead utilities or landscaping.

Oak Park Area Plan

Scenic resource policies of the Oak Park Area Plan (Section 1.4.2) are applicable to the PS/PRS site and new/relocated turn-out site located within Oak Park Planning Area and include:

1. Discretionary development and grading which will significantly obscure or degrade public views of the natural ridgelines shall be prohibited.
2. Discretionary development shall meet or exceed standards of the Ventura County Guide to Landscape Plans.
3. Reservoirs shall not be sited on prominent ridgelines and shall be well-screened with native vegetation and berms and/or undergrounded if possible.
4. Discretionary development should be designed to conform to the terrain rather than the reverse and shall comply with the following:
    a. Transition Design: The angle of the graded slope shall be gradually adjusted to the angle of the natural terrain.
    b. Angular Forms: Angular forms shall generally not be permitted. The graded form shall reflect the natural rounded terrain, unless exposed rock faces can be used as a desirable visual element.
    c. Exposed Slopes: Graded slopes shall be concealed by landscaping, berms or other measures wherever possible.
    d. The toe and crest of all cut and fill slopes in excess of five (5) feet vertical height shall be rounded with vertical curves.

e. No privately maintained slopes shall exceed 12 vertical feet in height.

f. Where cut or fill slopes exceed 100 feet in horizontal length, the horizontal contours of the slope shall be curved in a continuous, undulating fashion in conformance with natural slopes.

g. Where cut and fill slopes in excess of five feet are created, detailed landscape and irrigation plans shall be submitted to and approved by the Planning Division and Public Works Agency. The plans will be reviewed for type and density of ground cover, seed-mix, hydromulch mix, plant sizes and irrigation systems.

h. All planting and irrigation of manufactured slopes shall be completed and approved by the Planning Division prior to final grading inspection.

i. Extensive grading on slopes exceeding 25% shall be avoided in all but the most unusual circumstances.

j. Grading should be designed to avoid a terrace or staircase effect.

k. Grading shall be avoided on the upper slopes of major hills in order to preserve views.

l. All requirements of the Grading and Maintenance of Slopes Standards continued in the adopted Oak Park Development Plans shall be complied with.

The proposed project is consistent with these scenic resources policies because it does not involve landscaping, construction of structures that could affect public views of ridgelines, graded slopes, cut or fill slopes, or other manufactured slopes visible to the public.

City of Thousand Oaks

Scenic resources policies of the City's General Plan are limited to:

- Future development and redevelopment of the existing built environment within Thousand Oaks should reflect sensitivity to its physical setting and natural scenic resources (Conservation Element Policy CO-1).

The proposed project is consistent with this policy as it does not involve any development that could adversely affect the City's physical setting or natural scenic resources.

City of Westlake Village

Applicable scenic resources policies of the City's General Plan include:

- Encourage private development to provide landscaping themes which are compatible with the existing visual character of their surrounding environment (Natural Resources Policy 2.1).
- Maintain and enhance the existing landscaped medians and parkways within the City's major urban corridors (Natural Resources Policy 2.2).
- Require all developments to adequately maintain all landscape and hardscape areas (Natural Resources Policy 2.3).

- Require new and relocated utilities to be located underground, when possible; all above-ground utilities shall be located and screened to minimize their aesthetic impact (Natural Resources Policy 3.3).

The proposed project is consistent with these policies because:

- Development requiring landscaping is not proposed.
- Lindero Canyon Road includes landscaped medians along the proposed pipeline alignment. Although pipeline installation activities are not anticipated to affect these medians, any loss of median landscaping would be replaced.
- The proposed pipelines would be located below-ground.

4.7.3 Mitigation Measures

4.7.3.1 Proposed Project

Significant aesthetics impacts were not identified; therefore, mitigation measures are not required.

4.7.3.2 Cumulative Impacts

Significant cumulative aesthetics impacts were not identified; therefore, mitigation measures are not required.

4.7.4 Residual Impacts

4.7.4.1 Proposed Project

Significant aesthetics impacts were not identified; therefore, mitigation measures are not required, and residual impacts would be less than significant.

4.7.4.2 Cumulative Impacts

Significant cumulative aesthetics impacts were not identified; therefore, mitigation measures are not required, and residual impacts would be less than significant.

4.8 OTHER IMPACTS NOT CONSIDERED SIGNIFICANT

Sections 4.1 through 4.7 of this EIR focus on potentially significant impacts that may result from project implementation, as identified in the Initial Study prepared for the proposed project (see Appendix A). A discussion of potential impacts to other environmental issue areas is also provided in the Initial Study. The purpose of this section of the EIR is to provide additional discussion to clarify or expand upon the discussion in the Initial Study.

4.8.1 Agricultural and Forestry Resources

4.8.1.1 Setting

Important Farmlands

The Farmland Mapping and Monitoring Program operated by the California Department of Conservation has classified farmland as "Prime," "Statewide Importance," "Unique" and "Local Importance". In the project area, the basis for this classification is the Soil Survey, Ventura Area, California (Edwards et al., 1970) and Soil Survey of Santa Monica Mountains National Recreation Area, California (Natural Resources Conservation Service, 2006).

"Prime" farmlands are defined as farmland with the best combination of physical and chemical features able to sustain long-term production of agricultural crops. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for production of irrigated crops at some time during the four years prior to the most recent mapping date (2016).

"Farmlands of Statewide Importance" are lands similar to "Prime" but with minor shortcomings, such as greater slopes or less soil moisture-holding capacity. Land must have been used for production of irrigated crops at some time during the four years prior to the most recent mapping date (2016).

"Unique Farmlands" are other lands of lesser quality soils used for production of the State's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards. Land must have been used for production of crops at some time during the four years prior to the most recent mapping date (2016).

"Farmland of Local Importance" is considered to be important to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.

Excluding the proposed PS/PRS site and portions of the Canyon Oaks Park Lateral pipeline alignment, all project components would be located in developed areas (mapped as "Urban and Built-up Land"). The proposed PS/PRS site and a portion of the Canyon Oaks Park Lateral pipeline alignment are located in non-farmland areas mapped as "Other Lands" by the California Department of Conservation. The nearest mapped important farmland is Farmland of Local Importance located approximately 0.9 miles north-northeast of the proposed North interconnection pipeline tie-in to Lindero Feeder No. 2.

Forest Land

The nearest forest land (as defined in Public Resources Code Section 12220) or timberland is located within the Los Padres National Forest, at least 19 miles north of the proposed North interconnection pipeline alignment.

Zoning

The proposed North interconnection pipeline would be located within the public right-of-way of roadways in the City of Thousand Oaks. The South interconnection pipeline would be located within the Lindero Canyon Road public right-of-way in the City of Westlake Village (excluding the tie-in to the PS and PRS).

The PS/PRS site has a land use designation of public open space (POS) in the Oak Park Area Plan, and zoned OS-40 ac (open space, 40-acre minimum parcel size). The western portion of the proposed permanent access road and pipeline easement (described in Section 3.2.3) would be located on APN 800-0-180-295 within the City of Thousand Oaks and zoned RPD-1.5U-SP (residential planned development, 1.5 dwellings per net acre, specific plan).

The Canyon Oaks Park Lateral pipeline alignment is located within the City of Westlake Village and zoned OS (open space). The Lindero Pump Station no. 1 and the proposed air/vacuum relief valve locations are located in the City of Thousand Oaks in areas zoned PL (public lands).

4.8.1.2 Impacts

The proposed project would not result in the conversion of farmland to non-agricultural use, not result in any change in agricultural zoning, would be consistent with existing zoning, would not affect any Williamson Act contracts, and would not cause any forest land or timberlands to be converted or rezoned. The project is not anticipated to result in impacts related to agricultural or forestry resources.

4.8.2 Geology and Soils

This analysis is taken from two geotechnical reports prepared for the proposed project by Oakridge Geoscience (2019a, 2019b) and one by Geolabs-Westlake Village (2015).

4.8.2.1 Setting

Local Geology and Faulting

Regional mapping by Dibblee (1993) suggests the project area is predominantly underlain by unconsolidated alluvial sediments consisting of gravel, sand, and clay underlain by bedrock of the Monterey Formation. Monterey Formation bedrock materials are exposed in the slopes west of Lindero Canyon Road, and on the slopes east of Lindero Creek in the project area. Two boreholes advanced at the PS/PRS site indicate alluvium extends to a depth of 24 to 42 feet, where bedrock of the Monterey Formation was encountered. Subsurface exploration along the North interconnection pipeline alignment discovered artificial fill, alluvium, and bedrock of the Monterey Formation. Site inspection and review of geologic maps indicates the South interconnection pipeline alignment supports artificial fill, alluvium, and bedrock of the Monterey Formation and Lower Topanga Formation.

No known active or potentially active faults traverse or trend towards the proposed pipeline alignments or the PS/PRS site. The nearest active fault is the Simi-Santa Rosa Fault, located at least seven miles from any project component.

Liquefaction Hazard

The geotechnical reports prepared for the project indicated that the medium stiff to stiff clay soil and Monterey Formation bedrock that occurs along the pipeline alignments and at the PS/PRS site are not considered susceptible to liquefaction.

Landslide Hazard

Excluding the PS/PRS site, all project components would be located in relatively level developed areas and would not require any earthwork that could result in landslides. The PS/PRS site is located on a gently sloping terrace near Lindero Creek and not near any slopes subject to landslides.

Expansive Soil Hazard

Soil samples from drill holes advanced along the North interconnection pipeline alignment near the Lindero Creek culvert crossing indicate plastic clay is present with a moderate expansion potential. Fine-grained soil found in boreholes at the PS/PRS site also have a medium expansion potential.

4.8.2.2 Impacts

The proposed project would be designed to withstand site-specific geologic conditions, including expansive soils. Based on the lack of geological hazards associated with the project sites, implementation of the proposed project would not result in adverse geologic impacts to the public or nearby properties.

4.8.3 Paleontological Resources

4.8.3.1 Setting

A record search was conducted of the on-line collections data base of the University of California Museum of Paleontology. No fossils have been reported from the project area (southeastern Ventura County, southwestern Los Angeles County). The Ventura County Initial Study Assessment Guidelines indicate the Monterey Formation and Topanga Formations have moderate paleontological importance.

4.8.3.2 Impacts

Excavation required for pipeline installation and construction of the PS and PRS may encounter Monterey Formation and Lower Topanga Formation bedrock. However, virtually all project-related excavation would occur within artificial fill and alluvium, such that the potential to disturb paleontological deposits is considered low.

4.8.4 Land Use and Planning

4.8.4.1 Setting

Most of the pipeline alignments are located within the public right-of-way along roadways. The PS/PRS site is located within unincorporated Ventura County and zoned OS-40 ac (open space, 40-acre minimum parcel size). The Canyon Oaks Park Lateral pipeline alignment is located within the City of Westlake Village and zoned OS (open space). The current land use along the pipeline alignments is primarily residential and commercial, with open space in the vicinity of the PS/PRS site. The Lake Lindero Country Club is located just east of the southern portion of the South interconnection pipeline alignment. The Lindero Pump Station No. 1 and the proposed air/vacuum relief valve locations are located in the City of Thousand Oaks in areas zoned PL (public lands).

4.8.4.2 Impacts

The proposed PS and PRS or other project components would not require a change in zoning, as water distribution facilities are not subject to local zoning ordinances.

The proposed project would not involve the construction of any roads, barriers, or facilities that could potentially physically divide an existing community. The proposed project would not conflict with any policies of the Ventura County General Plan, Oak Park Area Plan, Westlake Village General Plan, or Thousand Oaks General Plan.

4.8.5 Mineral Resources

4.8.5.1 Setting

Aggregate is the only locally important mineral resource and is defined as construction grade sand and gravel. All project elements would be located in areas mapped as MRZ-1 (no significant aggregate deposits) by the California Department of Conservation (1993). No aggregate production sites are located in proximity to any project components.

4.8.5.2 Impacts

The proposed project would not adversely affect the availability of these mineral resources.

4.8.6 Population and Housing

4.8.6.1 Setting

The proposed project would be located within Ventura County (Oak Park Planning Area), City of Thousand Oaks, and City of Westlake Village. Housing inventories in these jurisdictions is regulated in part through implementation of development projects consistent with their respective general plans.

4.8.6.2 Impacts

The proposed potable water system interconnection would increase the reliability and flexibility of both the CMWD and LVMWD systems to minimize potential supply disruptions due to natural disasters, infrastructure failure, or system maintenance. The project would not increase the water supply or extend water service to new areas or users. Therefore, the project is not expected to result in population growth beyond currently forecast levels.

4.8.7 Recreation

4.8.7.1 Setting

Recreational facilities in proximity to proposed project components include Canyon Oaks Park, Russell Ranch Park, North Ranch Playfield, Valley View Park, Indian Springs Park, Lake Lindero Country Club, and North Ranch Country Club. In addition, nearby open space areas used for passive recreation include Wistful Vista Open Space and North Ranch Open Space. Local residents appear to access the Wistful Vista Open Space from Lindero Canyon Road using two routes; one within the southern portion of the PS/PRS site and one immediately to the north. However, RSRPD has posted “Do Not Enter” signs just west of Lindero Creek because these routes are not recognized access points to the Wistful Vista Open Space.

4.8.7.2 Impacts

The proposed PS and PRS would displace the southern access route to the Wistful Vista Open Space. The northern access route is located within the temporary construction easement which would limit public access during the construction period. Since the PS/PRS site and vicinity is not a recognized access point to the Wistful Vista Open Space and authorized access points are nearby at Rockfield Street and Kanan Road, no loss of recreational use would occur. Installation of the Canyon Oaks Park Lateral recycled water pipeline would occur immediately adjacent to Canyon Oaks Park but would not require closure of the Park or loss of recreational use.

The proposed air/vacuum relief valves would be located within the North Ranch Country Club golf course and construction activities could disrupt golf play. However, the construction footprint of these valves would be very small (about 100 square feet each) and would not adversely affect any greens or fairways. Therefore, potential short-term construction-related impacts to golf course use are considered less than significant.

4.8.8 Transportation/Traffic

4.8.8.1 Setting

The quality of traffic service provided by a roadway system can be described through the Level of Service (LOS) concept. LOS is a standardized means of describing traffic conditions by comparing traffic volumes in a roadway system with the system's capacity. A LOS rating of A-C indicates that the roadway is operating efficiently. Minor delays are possible on an arterial with a LOS of D. Level E represents traffic volumes at or near the capacity of the highway, resulting in possible delays and unstable flow.

The project sites would be primarily accessed from Lindero Canyon Road or Kanan Road. Based on a single traffic count by the City of Westlake Village on April 28, 2015, the traffic volume on Lindero Canyon Road north of Thousand Oaks Boulevard is 23,814 vehicles per day. Based on a single traffic count by Ventura County in 2017, traffic volumes on Lindero Canyon Road immediately north of Kanan Road are 4,300 vehicles per day. Traffic counts conducted by the City of Thousand Oaks indicate traffic volumes are 17,000 vehicles per day on Lindero Canyon Road south of Kanan Road. Based on these data and the Ventura County General Plan standards, Lindero Canyon Road operates at LOS B north of Thousand Oaks Boulevard and LOS A north of Kanan Road.

Traffic counts conducted by the City of Thousand Oaks indicate traffic volumes are 12,000 vehicles per day on Kanan Road west of Lindero Canyon Road. Based on Ventura County General Plan standards, Kanan Road operates at LOS A.

4.8.8.2 Impacts

The project would only generate a small number of construction-related vehicle trips (up to 78 one-way trips on a peak day, or about 0.5 percent increase in volumes on Lindero Canyon Road). Most of these trips would not occur during a.m. or p.m. peak hour. Project construction traffic would utilize roadways operating at acceptable LOS and would not cause any roadways to function below an acceptable LOS. Pipeline installation within Lindero Canyon Road and Kanan Road would require temporary lane closures. However, these roadways operate at LOS A or B, and with implementation of standard construction traffic management practices, project-related congestion is not anticipated

The proposed PS/PRS site would be unstaffed, but maintenance activities would generate a few vehicle trips per month with up to four on a peak day. This small amount of long-term vehicle trips would not affect the level of service of affected roadways.

4.8.9 Energy

The proposed project would consume non-renewable energy in the form of fuels for vehicles and equipment used to construct proposed facilities. This energy use would not be wasteful, inefficient, or unnecessary. The proposed project would not conflict with any State or local plan for renewable energy or energy efficiency, including the Los Angeles County Community Climate Action Plan.

5.0 ALTERNATIVES ANALYSIS

This section of the EIR provides a comparative analysis of the merits of alternatives to the proposed project pursuant to Section 15126.6 of the State CEQA Guidelines. According to the Guidelines, the discussion of alternatives should focus on alternatives to a project or its location that would feasibly meet the basic objectives of the project while avoiding or substantially lessening the significant effects of the project. The State CEQA Guidelines indicate that the range of alternatives included in this discussion should be sufficient to allow decision-makers a reasoned choice between alternatives and a proposed project. The alternatives discussion should provide decision-makers with an understanding of the environmental merits and disadvantages of various project alternatives.

The range of alternatives in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to make a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project (State CEQA Guidelines Section 15126.6 [f]). Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision-making. When addressing feasibility, the State CEQA Guidelines state that "among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)." The State CEQA Guidelines also state that the alternatives discussion need not be presented in the same level of detail as the assessment of the proposed project.

Therefore, based on the State CEQA Guidelines, several factors need to be considered in determining the range of alternatives to be analyzed in an EIR and the level of detail of analysis that should be provided. These factors include:

- The extent to which the alternative would accomplish most of the basic objectives of the project.
- The extent to which the alternative would avoid or lessen any of the identified significant adverse environmental effects of the project.
- The feasibility of the alternative, taking into account site suitability, economic viability, availability of infrastructure, consistency with regulatory limitations, and the reasonability of the project proponent controlling the site.
- The appropriateness of the alternative in contributing to a "reasonable range" of alternatives necessary to permit a reasoned choice.

As required by the State CEQA Guidelines, this analysis focuses on alternatives that could avoid or substantially reduce significant effects of the project. Impacts of the alternatives considered are summarized in Section 5.3. In addition, Section 5.4 identifies the environmentally superior alternative as required by the State CEQA Guidelines.

5.1 NO PROJECT ALTERNATIVE

The purpose of describing and analyzing the No Project Alternative is to allow the decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. Under the No Project Alternative, none of the proposed facilities would be constructed.

The No Project Alternative does not meet the purpose and need of the project or any of the project objectives. In addition, the project benefits would not be realized, including reducing the potential for shortages of potable water to existing communities in the event of natural disasters or infrastructure failure.

5.2 ALTERNATIVES CONSIDERED

5.2.1 Alternatives Selection Methodology

The selection of alternatives is consistent with Section 15126.6 of the State CEQA Guidelines and focuses on those that would meet most of project's basic objectives, avoid or reduce environmental impacts, and provide a reasonable range of alternatives for analysis and comparison.

5.2.1.1 Alternative Pipeline Alignments

The selection of alternatives is limited by the fact that the project would link two existing water systems with discrete service areas and distribution system end points. Therefore, alternative pipeline alignments are very limited. Although utility conflicts may occur, pipeline alignments within a public right-of-way are preferred as they do not require acquisition of easements on private property which can be a lengthy and costly process. In addition, pipeline installation outside public rights-of-way is more likely to result in land use conflicts and environmental impacts. Therefore, pipeline alternatives crossing undeveloped areas were not considered in this analysis. Lindero Canyon Road is the only public right-of-way that could be used to link the two systems. Therefore, pipeline alignment alternatives are based on Lindero Canyon Road and intersecting streets.

5.2.1.2 Alternative Pump Station Sites

The selection of alternative pump station sites is also limited by the existing layout of the CMWD and LVMWD potable water distribution systems. Therefore, the pump station site needs to be located in the vicinity of the water distribution system end points. A facility siting study was prepared by Phoenix Civil Engineering (2016), which identified four pump station sites based on four factors:

1. Site is vacant (no structures or active agriculture).
2. Large enough to accommodate the pump station, pressure regulating station, and related components.

3. Relatively level.
4. Sufficiently distant from schools and residences to minimize construction and operational noise impacts.

Site 2 identified in the facility siting study was selected as the proposed PS/PRS site. The other three sites are located within 1,220 feet of the proposed PS/PRS site are considered as alternative pump station sites.

5.2.1.3 Alternative Pump Station Designs

The draft Preliminary Design Report (PDR) prepared by Phoenix Civil Engineering in January 2018 recommended a standard above-ground pump station housed in a masonry building. A conceptual architectural plan and landscaping plan were then developed to address aesthetic considerations. Following completion of the draft PDR, CMWD staff attended a series of meetings to present the project to the RSRPD Oak Park Committee, RSRPD Board of Directors, and Oak Park Municipal Advisory Council (MAC). Based on feedback at these meetings, CMWD staff determined it was necessary to evaluate the feasibility of constructing the PS and PRS underground (similar to the CMWD's Lake Sherwood Pump Station). The proposed project is based on an underground pump station; therefore, an above-ground pump station is considered as an alternative.

5.2.2 North Interconnection Pipeline Alignment Alternatives

A pipeline alignment study was prepared for the project by Phoenix Civil Engineering (2019) which identified several alignments for the North interconnection pipeline, including the proposed project. Three of these pipeline alignments (see Figure 5-1) are utilized as alternatives for the purposes of this EIR:

- Alternative Alignment A leaves the proposed alignment along Lindero Canyon Road at Lakeview Canyon Road, extends west to Falling Star Avenue where it turns north and ends at the alternative tie-in to Lindero Feeder No. 2 at Kanan Road.
- Alternative Alignment B leaves the proposed alignment along Lindero Canyon Road near the North Ranch Pavilions driveway, extends west and northwest through parking lots, then extends northeast along Falling Star Avenue and ends at the tie-in to Lindero Feeder No. 2 at Kanan Road. This alignment may require nighttime pipeline installation to reduce disruption of vehicle traffic, parking, and access to businesses within the North Ranch Pavilions shopping center.
- Alternative Alignment C extends from the proposed alignment west on Kanan Road to connect to Lindero Feeder No. 2 at the Kanan Road/Falling Star Avenue intersection.

An alternative alignment was also considered through the greenbelt area bordering the North Ranch Pavilions shopping center on the east (Lindero Canyon Road side); however, this alignment was determined to be infeasible due to restrictions in use due to Southern California Edison utility easements that prevent a water pipeline from being installed in this area.

An alternative pipeline alignment located west of Lindero Canyon Road between Rockfield Street and Lakeview Canyon Road was initially considered within an undeveloped area underneath high-voltage power lines (greenbelt alternative). Due to required clearance distance between the power lines and construction equipment and underground utility congestion, this alternative was determined to be infeasible and not considered further.

5.2.3 Pump Station Site Alternatives

Three alternative pump station locations meeting the selection criteria of the facility siting study are utilized as alternatives for the purposes of this EIR:

- Pump Station Site A: located in Ventura County immediately east of Lindero Canyon Road and approximately 200 feet north of the proposed PS/PRS site on parcel numbers 800-0-180-285 and -295.
- Pump Station Site B: located in the City of Westlake Village immediately west of Lindero Canyon Road and approximately 350 feet southwest of the proposed PS/PRS site on parcel number 2056-002-900.
- Pump Station Site C: located in the City of Westlake Village immediately east of Lindero Canyon Road and approximately 1,000 feet south of the proposed PS/PRS site on parcel number 2056-002-900.

Each of these pump station sites would be served by the North and South interconnection pipelines as shown in Figure 3-3 and 3-4. However, the lengths of the pipelines would be different to suit the changed location of connection to the pump station.

5.2.4 Above-ground Pump Station Alternative

This alternative is based on preliminary designs developed in 2017, in which the pumps would be housed in a masonry building and pressure regulating control valves would be located outside the building. The building would consist of three rooms: one for the pumps, one for the electrical equipment, and a small restroom for staff working at this remote facility. The building would be approximately 70 feet by 40 feet and 20 to 30 feet tall and be constructed of concrete masonry block in the Mediterranean architectural style with a stucco finish, arches, and wrought-iron style decorative elements. The 103 foot by 194 foot facility (pump building, pressure regulating control valves, fire department access, flow meters) would be surrounded by fencing and landscaping.

5.3 IMPACTS OF THE ALTERNATIVES

5.3.1 No Project Alternative

The No Project Alternative represents abandonment of the proposed project by CMWD and LVMWD, such that proposed facilities would not be constructed and operated. No direct environmental impacts would occur under the No Project Alternative. However, infrastructure failure or disaster-related water shortages could occur in the absence of the project which may be considered a significant indirect impact to public water supplies.

5.3.2 North Interconnection Pipeline Alignment Alternatives

The basic differences as compared to the proposed project are greater pipeline length (1,175 feet for Alternative Alignment A, 875 feet for Alternative Alignment B, 730 feet for Alignment C) and nighttime pipeline installation at the North Ranch Pavilions parking lot under Alternative Alignment B. Only environmental issue areas where impacts would vary from the proposed project are addressed in the following discussion.

5.3.2.1 Air Quality

Construction-related air pollutant emissions would be greater for all three alternatives due to the longer pipeline required. Similar to the proposed project, overall alternative project construction-related air pollutant emissions (including the South interconnection pipeline) would exceed local significance thresholds and considered significant. Although air quality impacts would be greater for all three pipeline alternatives as compared to the proposed project, implementation of proposed mitigation measures would reduce air quality impacts to a level of less than significant. Operational emissions would be the same as the proposed project and considered less than significant.

5.3.2.2 Noise and Vibration

Installation of the North interconnection pipeline within Alternative Alignment A would adversely affect a greater number of residences (along the south side of Lakeview Canyon Road and west side of Falling Star Avenue). In addition, short-term nighttime construction activities (several days) associated with tie-in to Lindero Feeder No. 2 at the Falling Star Avenue/Kanan Road intersection would be closer to residences as compared to the proposed tie-in at Lindero Canyon Road. Although noise impacts would be greater under Alternative Alignment A than the proposed project, implementation of proposed mitigation measures would reduce noise impacts to a level of less than significant.

Installation of the North interconnection pipeline within Alternative Alignment B would involve short-term nighttime construction activities associated with tie-in to Lindero Feeder No. 2 at the Falling Star Avenue/Kanan Road intersection which would be closer to residences as compared to the proposed tie-in at Lindero Canyon Road. Pipeline installation within the North Ranch Pavilions shopping center would require several months of nighttime work and would significantly impact residences along Lakeview Canyon Road and Falling Star Avenue. This impact would not occur under the proposed project. Additional mitigation would be required (temporary noise barriers, acoustic shielding for stationary equipment, limitations on hours of materials delivery) for this alternative, and may not reduce nighttime noise impacts to a level of less than significant.

Installation of the North interconnection pipeline within Alternative Alignment C would involve short-term nighttime construction activities associated with tie-in to Lindero Feeder No. 2 at the Falling Star Avenue/Kanan Road intersection which would be closer to residences as compared to the proposed tie-in at Lindero Canyon Road. Although noise impacts would be greater under Alternative Alignment C than the proposed project, implementation of proposed mitigation measures would reduce noise impacts to a level of less than significant.

5.3.2.3 Aesthetics

All three alternative alignments include tie-in to Lindero Feeder No. 2 at the Falling Star Avenue/Kanan Road intersection and would not require a new/relocated turn-out. Therefore, these pipeline alternatives would avoid the less than significant aesthetics impact of above-ground components of the turn-out at the Kanan Road/Lindero Canyon Road intersection (at "Oak Park" gateway sign).

5.3.3 Pump Station Site Alternatives

Only environmental issue areas where impacts would vary from the proposed project are addressed in the following discussion.

5.3.3.1 Air Quality

Construction of the PS and PRS at Pump Station Site A would involve additional earthwork as compared to the proposed project and require retaining wall construction. This additional construction work would result in greater air pollutant emissions. Similar to the proposed project, overall alternative project construction-related air pollutant emissions (including pipelines) would exceed local significance thresholds and be considered significant. Although air quality impacts would be greater under the Pump Station Site A alternative as compared to the proposed project, implementation of proposed mitigation measures would reduce air quality impacts to a level of less than significant. Operational emissions would be the same as the proposed project and considered less than significant.

Similar to the proposed PS/PRS site, Pump Station Sites B and C are relatively level and provide suitable area for PS and PRS construction. Therefore, construction activities and associated air pollutant emissions would be same as the proposed project. Operational emissions would be the same as the proposed project and considered a less than significant impact to air quality.

5.3.3.2 Biological Resources

Pump Station Sites A and C are closer to Lindero Creek than the proposed PS/PRS site and may result in greater impacts to western pond turtle, two-striped garter snake, and breeding birds. Construction of the PS and PRS at Pump Station Site A would require the removal of a greater area of purple sage scrub (potentially suitable habitat for special-status species) as compared to the proposed PS/PRS site. Although biological resources impacts would be greater under the Pump Station Site A and C alternatives as compared to the proposed project, implementation of proposed mitigation measures would reduce impacts to a level of less than significant.

Pump Station Site B is located in a grassy area west of Lindero Canyon Road and further from Lindero Creek. Therefore, construction of the PS and PRS at this site would avoid impacts to western pond turtle and two-striped garter snake associated with the proposed PS/PRS site.

5.3.3.3 Noise and Vibration

Pump Station Site A is closer to a larger number of residences (Concerto Drive, Rhapsody Drive) as compared to the proposed PS/PRS site and may result in greater construction noise impacts. Depending on the precise location of the PS and PRS within Pump Station Site B, construction noise may occur closer to a larger number of residences (Golden Knoll Court, Landino Drive) as compared to the proposed PS/PRS site. Depending on the precise location of the PS and PRS within Pump Station Site C, construction noise may occur closer to a larger number of residences (Lake Nadine Place, Dovetail Drive, Hackers Lane) as compared to the proposed PS/PRS site. However, noise impacts associated with PS and PRS construction would remain less than significant.

5.3.3.4 Cultural Resources

All three alternative pump station sites are located in proximity to Lindero Creek and reported locations of isolated prehistoric artifacts. Therefore, extensive excavation associated with construction of proposed underground facilities has a similar potential as the proposed project to discover unreported cultural resources.

5.3.3.5 Hazards and Hazardous Materials

All three alternative pump station sites are located in areas of historic agricultural land use which may have resulted in similar soil contamination as found at the Yerba Buena Elementary School site (pesticides, arsenic). Therefore, extensive excavation associated with construction of proposed underground facilities has a similar potential to result in exposure of the public and the environment to hazardous materials.

5.3.3.6 Aesthetics

The three alternative pump station sites have not been evaluated to determine if they are suitable for a below-ground pump station and PRS. As this analysis is focused on assessing alternatives that would reduce impacts, it is assumed that it is feasible to construct and operate a below-ground pump station and PRS at each of the three alternative sites. In this case, aesthetics impacts would be the virtually the same because all three sites are visible to motorists on Lindero Canyon Road and visible components would be same (hatches, manholes, air vents). Aesthetics impacts at the proposed turn-out site would also be the same.

5.3.4 Above-ground Pump Station Alternative

5.3.4.1 Air Quality

The above-ground design of this alternative would substantially reduce the amount of excavation required, which would reduce construction-related air pollutant emissions. Some of this reduction would be offset by emissions associated with building pad grading/compaction and pump building construction. Similar to the proposed project, overall alternative project construction-related air pollutant emissions (including pipelines) would exceed local significance thresholds and considered significant but mitigable. Operational emissions would be the same as the proposed project and considered a less than significant impact to air quality.

5.3.4.2 Water Resources

The above-ground design of this alternative would substantially reduce excavation depths such that groundwater is unlikely to be encountered. Therefore, this alternative would avoid potential groundwater contamination associated with the proposed project. Proposed landscaping surrounding the facility would require irrigation, which would utilize potable water. This very limited potable water usage would not have any effect on local water supplies.

5.3.4.3 Noise and Vibration

The above-ground design of this alternative would substantially reduce the amount of excavation required, which would reduce construction-related noise. Some of this reduction would be offset by noise generated by building pad grading/compaction and pump building construction. Similar to the proposed project, overall alternative project construction noise impacts (including pipelines) are considered significant. Implementation of proposed mitigation measure MM N-1 would reduce noise impacts to a level of less than significant.

Due to the above-ground design, operational noise generated by the PS, PRS, and related components would be greater than the proposed project. However, noise attenuation by the masonry building and appropriate noise reduction measures incorporated into design would avoid significant noise impacts at nearby residences.

5.3.4.4 Cultural Resources

The above-ground design of this alternative would substantially reduce the amount of excavation required, which may reduce the potential for discovery of cultural resources. However, excavation and compaction of the building pad and excavation for other components would be required. The depths of these excavations are likely to be sufficient for the discovery of cultural resources (isolated artifacts, intact deposits, burials). Therefore, the potential for discovery of cultural resources would be similar to the proposed project.

5.3.4.5 Hazards and Hazardous Materials

The above-ground design of this alternative would substantially reduce the amount of excavation required. However, excavation and compaction of the building pad and excavation for other components would be required. The depths of these excavations are likely to be sufficient for the discovery of contaminated soil. Therefore, this alternative has a similar potential to result in exposure of the public and the environment to hazardous materials.

5.3.4.6 Aesthetics

The pump building design would include architectural treatments compatible with the nearby land uses and landscape screening would surround the facility. The local community has a high regard for visual resources and the pump building may be considered to degrade views of Lindero Creek from Lindero Canyon Road. Although architectural treatments and landscape screening would substantially reduce aesthetics impacts, community meetings indicate an above-ground pump station is not acceptable.

5.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The No Project Alternative is considered environmentally superior due its lesser impacts overall (see Table 5-1). If the No Project Alternative is considered environmentally superior, Section 15126.6(e)(2) of the State CEQA Guidelines requires identification of the environmentally superior alternative among the other alternatives.

Based on the impact scores presented in Table 5-1, the proposed project would have the same or lesser impacts as any of the alternative analyzed. Therefore, the proposed project is considered the environmentally superior project.

Table 5-1. Comparison of the Impacts of the Alternatives

Issue Area	No Project	Proposed Project	North Interconnection Pipeline Alternatives		Pump Station Site Alternatives			Above-ground Pump Station Alternative
			Alignments A and C	Alignment B	Site A	Site B	Site C	
Air Quality	N	LSM	LSM+	LSM+	LSM+	LSM*	LSM*	LSM-
Water Resources	PS	LSM	LSM*	LSM*	LSM*	LSM*	LSM*	LS
Biological Resources	N	LSM	LSM*	LSM*	LSM+	LSM-	LSM+	LSM*
Noise & Vibration	N	LSM	LSM+	PS	LSM+	LSM+	LSM+	LSM=
Cultural Resources	N	LSM	LSM*	LSM*	LSM=	LSM=	LSM=	LSM=
Hazards & Hazardous Materials	N	LSM	LSM*	LSM*	LSM=	LSM=	LSM=	LSM=
Aesthetics	N	LS	LS-	LS-	LS*	LS*	LS*	LSM
Impact Score Total	**3**	**13**	**13+**	**14**	**13+**	**13=**	**13+**	**13=**

LS Less than significant (impact score = 1)
LSM Less than significant with mitigation (impact score = 2)
PS Potentially significant and unmitigable (impact score = 3)
N No impact
- Less than the proposed project
+ Greater than the proposed project
= Very similar to the proposed project
* Same as the proposed project

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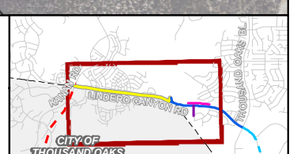
LEGEND:

- Pump Station/PRS Site
- City Limit
- County Boundary
- Proposed New Turn-Out
- North Interconnection Pipeline
- Existing Lindero Feeder No.2
- South Interconnection Pipeline
- Canyon Oaks Park Lateral Recycled Water Pipeline
- Yerba Buena Recycled Water Pipeline Extension
- Connector Pipeline to New Turn-Out
- Pipeline Alternative A
- Pipeline Alternative B
- Pipeline Alternative C
- Alternative Pump Station Site

MAP EXTENT:



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FEET

Source: NAIP Imagery 2016
Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet
Notes: CMWD = Calleguas Municipal Water District
LVMWD = Las Virgenes Municipal Water District
This map was created for informational and display purposes only.

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

PROJECT NAME: CMWD - LVMWD INTERCONNECTION VENTURA AND LOS ANGELES COUNTIES, CA
PROJECT NUMBER: 1802-0331
DATE: June 2019

ALTERNATIVES LOCATION MAP

FIGURE 5-1

Calleguas Water District\Figure 5-1 - Alternatives Location Map.mxd 6/11/2019

Back of Figure 5-1

6.0 GROWTH INDUCEMENT

6.1 INTRODUCTION

This section discusses whether the proposed project would foster economic growth or population growth in the surrounding area. A project may foster economic or population growth in a geographic area if it would meet any of the following criteria:

- The project would result in the urbanization of land in a remote location, creating an intervening area of open space which then experiences pressure to be developed.
- The project removes an impediment to growth through the establishment of an essential public service or the provision of new access to an area.
- Economic expansion, population growth or the construction of additional housing occurs in the surrounding environment in response to economic characteristics of the project.
- The project establishes a precedent-setting action, such as a change in zoning or general plan amendment approval that makes it easier for future projects to gain approval.

Should the project meet any one of these criteria, it is to be considered growth-inducing. An increase in population may require construction of new facilities which could cause significant environmental impacts. Section 15126.2 of the State CEQA Guidelines states that growth in an area is not necessarily beneficial, detrimental or of little significance to the environment.

6.2 URBANIZATION OF LAND IN ISOLATED LOCALITIES

The proposed project does not involve any new habitable structures, urbanization, other land development, or increased access to parcels that may be developed. The project would provide temporary employment opportunities during the construction period. However, it is anticipated that project-related construction work would be primarily conducted by existing employees of southern California construction companies, with little to no new jobs created. The project would not create a need for new housing or associated urbanization of land; therefore, the project would not be growth-inducing under this criterion.

6.3 REMOVAL OF AN IMPEDIMENT TO GROWTH

In the project area, population growth is generally limited by available housing and employment opportunities. The proposed project would improve the flexibility of local water purveyors to meet the needs of their existing customers in case of infrastructure failure or natural disaster, but does not involve expanding service areas or increasing water supplies. The project would not provide water to support new development or otherwise remove any impediments to growth by providing housing, long-term employment opportunities or extension of infrastructure (roads, water, sewer, etc.) to any new areas. Overall, the project would not be considered growth-inducing under this criterion.

6.4 ECONOMIC GROWTH

The project would not directly result in the construction of any homes or facilities that would attract people to the area. Due to the relatively small number and temporary nature of employment opportunities provided, it is not expected that the project would facilitate economic expansion, population growth, or the construction of additional housing.

6.5 PRECEDENT SETTING ACTION

The proposed project would not result in a precedent-setting action such as a General Plan Amendment and would not require a change in zoning. The proposed project would result in a change in land use at the PS/PRS site (vacant to water distribution facilities) but would not foster growth. Therefore, the project would not be growth-inducing under this criterion.

6.6 CONCLUSIONS

As indicated in the above discussion, the proposed project is not growth-inducing under any of the criteria listed in the State CEQA Guidelines. Therefore, the project would not induce growth.

7.0 LIST OF PREPARERS

This document was prepared for the Calleguas Municipal Water District by Padre Associates, Inc. Persons involved in its preparation include:

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APPENDIX A

NOTICE OF PREPARATION AND INITIAL STUDY CHECKLIST

web site: www.calleguas.com

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October 31, 2018

TO RESPONSIBLE AGENCIES, TRUSTEE AGENCIES, AND INTERESTED PARTIES:

Notice of Preparation (NOP) of a Draft Environmental Impact Report (EIR) for the Calleguas MWD / Las Virgenes MWD Interconnection Project

The Calleguas Municipal Water District (Calleguas) will serve as Lead Agency and prepare an Environmental Impact Report addressing the potentially significant environmental impacts of the subject project. The document will also assess the potential environmental impacts of several alternatives and specify mitigation measures designed to minimize any identified effects.

The purpose of the NOP is to inform responsible and trustee agencies, other potentially affected agencies, and other interested parties of the proposed project and to solicit comments as to the scope and content of the EIR. Responsible agencies will use the EIR when considering any approvals for the project. Calleguas requests the views of any affected agency as to the scope and content of environmental information germane to that agency's statutory responsibilities in connection with the proposed project. All others are also welcome to submit comments for consideration by Calleguas.

An Initial Study including a project description, location, and probable environmental effects is either attached hereto or available on-line at www.calleguas.com/CMWD-LVProjNOP-IS.pdf. Due to the time limits mandated by State law, your response must be sent at the earliest possible date, but not later than 30 days after receipt of the NOP. Comments should provide specific detail as to the scope and content of the DEIR. Responsible and trustee agencies should limit comments to issues within the limits of their jurisdiction.

Please submit comments to:

Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, California 91360

Attention: Eric Bergh, Manager of Resources

For further information, please call 805-579-7128 or e-mail ebergh@calleguas.com.

A public meeting to discuss the project will be held at the Oak Park Community Center, 1000 North Kanan Road, Oak Park, California on November 14, 2018 at 7:00 p.m. Staff will provide an overview of the project including project objectives, pipeline alignment alternatives, pump station siting considerations, and environmental issue areas to be addressed in the EIR.

1.0 PROJECT DESCRIPTION

1.1 PROJECT BACKGROUND

Both the Calleguas Municipal Water District (CMWD) and Las Virgenes Municipal Water District (LVMWD) own and operate potable water systems largely dependent on imported water supply from the Metropolitan Water District of Southern California. Both agencies are also vulnerable to supply outages that can adversely impact their ability to deliver potable water to their respective customers. To improve water reliability, CMWD and LVMWD propose to interconnect their systems.

The project is of mutual benefit and would improve system reliability for both agencies. For both agencies, the interconnection is considered a cost-effective means of receiving potable water for their customers, if either agency experiences either a complete or partial supply outage not significantly affecting the supply of the other agency. Additionally, the interconnection would facilitate LVMWD's filling of their Westlake Reservoir during the winter months. The project would also enable LVMWD to expand recycled water service within its service area through construction of new pipeline laterals and service connections.

1.2 PROJECT ELEMENTS

The proposed project is comprised of the following primary components:

- Interconnection pipeline – North segment (CMWD).
- Interconnection pipeline – South segment (LVMWD).
- Co-located pump station (PS) and pressure regulating station (PRS) (combined PS/PRS) (CMWD/LVMWD).
- Lindero Pump Station No. 1 reverse flow valve upgrade (CMWD).
- Yerba Buena recycled water pipeline extension (LVMWD).
- Canyon Oaks Park Lateral recycled water pipeline (LVMWD).

An overview map of project elements is provided as Figure 1. A map of multiple pipeline alignments under consideration by CMWD between the Lindero Canyon Road/Lakeview Canyon Road intersection and the Lindero Feeder No. 2 connection point is provided as Figure 2. A map of the CMWD interconnection pipeline alignment and location of the PS/PRS site is provided as Figure 3. A map of the LVMWD interconnection pipeline alignment and recycled water pipeline alignments is provided as Figure 4. The proposed PS/PRS site plan is provided as Figure 5. Visual representations of the appearance of the PS/PRS site after construction are provided as Figure 6. Photographs of the proposed PS/PRS site and pipeline alignments are provided as Figures 7 and 8.

1.2.1 Interconnection Pipeline – North Segment

This project component consists of the pipeline segment between the connection with CMWD's existing Lindero Feeder No. 2 pipeline located near the intersection of Kanan Road and Falling Star Avenue and the proposed PS/PRS site (see Figures 2 and 3). The proposed pipeline segment would be buried under the traffic lanes of Lindero Canyon Road northward from the PS/PRS site to Lakeview Canyon Road. The alignment from Lakeview Canyon Road to the point of interconnection with Lindero Feeder No. 2 has yet to be determined. Alignments under consideration include Lakeview Canyon Road and Falling Star Avenue, Kanan Road, and through the adjacent North Ranch Pavilions shopping center at the southwest corner of Lindero Canyon Road and Kanan Road (see Figure 2). A preferred alignment will be identified and evaluated in the Draft EIR along with alternatives.

This pipeline segment would be composed of approximately 7,500 linear feet of 30 inch inside diameter cement mortar-lined and coated welded steel pipe. Blow-offs would be provided at low points to enable draining of the pipeline when necessary and air/vacuum relief valves would be provided to allow for safe draining and filling of the pipeline and to protect the pipeline from damage from surge (water hammer). Isolation valves would be provided at the connection with Lindero Feeder No. 2 and at the PS/PRS site. Pipeline access manholes would be provided about every 1,000 feet along the alignment.

1.2.2 Interconnection Pipeline – South Segment

This project component consists of the pipeline segment between LVMWD's system (at the Thousand Oaks Boulevard/Lindero Canyon Road intersection) and the proposed PS/PRS site (see Figure 4). The proposed pipeline segment would be installed under the southbound lanes of Lindero Canyon Road within the City of Westlake Village, southward from the PS/PRS site to Thousand Oaks Boulevard.

This pipeline segment would be composed of approximately 5,000 linear feet of 30 inch inside diameter cement mortar-lined and coated welded steel pipe. Blow-offs would be provided at low points to enable draining of the pipeline when needed and air/vacuum relief valves would be provided to allow for safe draining and filling of the pipeline and to protect the pipeline from damage from surge (water hammer). Isolation valves would be provided at the connection with existing potable water pipelines at Thousand Oaks Boulevard and Lindero Canyon Road and within the proposed PS/PRS site. LVMWD would also provide the City of Westlake Village the opportunity to install a new fiber optics conduit and associated appurtenances in the trench with the new pipeline.

1.2.3 Pump Station (PS) and Pressure Regulating Station (PRS)

The interconnection PS, PRS, and related facilities would be constructed on a single site. A proposed site has been identified just north of the Ventura County boundary and east of Lindero Canyon Road based on distance from residences/schools, existing easement encumbrances, sufficient space for the facility, constructability requirements, and geologic characteristics.

The 0.77-acre PS/PRS site would be purchased in fee from the Rancho Simi Recreation and Park District. CMWD would also obtain a 0.55-acre permanent access and pipeline easement immediately west of the PS/PRS site to accommodate a proposed access road, pipelines, and utility services. The footprint of the PS, PRS, and related facilities would cover approximately 17 percent of the 0.77-acre PS/PRS site. The PS/PRS site would include:

- Pumps, electrical equipment, metering equipment, and surge control equipment located within underground vaults. The pumping system would include two vertical turbine pumps with 350 horsepower motors and variable frequency drives to provide the required range of flow rates (8 cubic feet per second [cfs] to 21 cfs) within the expected range of system pressures.
- PRS control valves located in a vault. The PRS would include two parallel pressure regulating control valves to provide the required range of flow rates (6.2 cfs to 30 cfs) within the expected range of system pressures.
- Southern California Edison (SCE) electrical service equipment located within a vault (if allowed by SCE).
- An unpaved access road from Lindero Canyon Road.

A permanent standby electrical generator is not proposed; however, sufficient room at the site would be provided should a mobile generator be needed. Once construction has been completed, the only visible surface features would be manholes, hatches, air vents, and possibly a small antenna.

1.2.4 Lindero Pump Station No. 1 Reverse Flow Valve Upgrade

The proposed project includes upgrades to CMWD's existing Lindero Pump Station No. 1 reverse flow valve to facilitate conveying potable water from CMWD's Oak Park region to its Conejo Valley region during operation of the proposed interconnection. Lindero Pump Station No. 1 is located approximately 650 feet southeast of the Erbes Road/Avenida De Las Flores intersection in the City of Thousand Oaks (see Figure 1). The proposed upgrade is comprised of one upsized control valve and related piping improvements.

1.2.5 Yerba Buena Recycled Water Pipeline Extension

Currently, the Yerba Buena Elementary School utilizes recycled water provided by LVMWD for landscape irrigation. LVMWD proposes to install approximately 1,300 linear feet of buried 6-inch diameter polyvinyl chloride (PVC) pipe under the northbound lanes of Lindero Canyon Road (see Figure 4). This pipeline would replace the existing service lateral to the Yerba Buena Elementary School and formalize their connection with a new meter location closer to the school campus.

1.2.6 Canyon Oaks Park Lateral Recycled Water Pipeline

LVMWD proposes to install up to 800 linear feet of buried 4-inch diameter PVC pipe to connect the existing recycled water pipeline along Lindero Canyon Road to Canyon Oaks Park to provide recycled water for irrigation purposes (see Figure 4). Currently, the park is irrigated with potable water.

1.3 CONSTRUCTION

Construction of LVMWD's project components (interconnection pipeline, recycled water pipelines) would be conducted separately from CMWD's components but is anticipated to occur somewhat concurrently.

Construction would be primarily limited to normal construction working hours, between the hours of 7 a.m. and 4:30 p.m., Monday through Friday. However, work may be required during other times and on weekends as determined necessary to maintain reliable water system operations, accommodate traffic control restrictions, or for other reasons. Pipeline tie-in to the Lindero Feeder No. 2 is anticipated to be conducted in the winter when water demand is lower.

1.3.1 Interconnection Pipeline – North Segment

Installation of the CMWD portion of the interconnection pipeline is anticipated to require approximately 12 months, including pavement repair and installation of manholes, blow-offs air/vacuum relief valves, and isolation valves. A minimum of one traffic lane in each direction would be open during pipeline installation. Roadways disturbed during pipeline installation would be restored following construction. Generally, trench spoils would be temporarily stockpiled within the construction staging and storage area, then backfilled to the trench after pipeline installation or hauled away for re-use or disposal.

Based upon an installation rate of approximately 40 feet per day, the average amount of excess spoils requiring removal would be about 70 cubic yards per day. This would require approximately seven truck round trips per day. The average daily number of heavy-duty trucks hauling material to and from the construction crew (including the delivery of pipe sections and miscellaneous supplies, hauling of pipe bedding and backfill materials, and removal of excess spoils) would be approximately 14 truck round trips per day.

Storage of materials and equipment would be dependent upon the contractor and subcontractors. Typically, pipe material would be stored at the PS/PRS site. If the contractor is local, they may store equipment and materials in their own yard.

1.3.2 Interconnection Pipeline – South Segment

Excluding the pipeline termination point at the proposed PS/PRS site, installation of this pipeline would be within the roadway right-of-way. Installation of this segment is anticipated to require approximately six months, including pavement repair and installation of blow-offs, air/vacuum relief valves, and isolation valves. Both northbound lanes and one southbound lane would remain open on Lindero Canyon Road during pipeline installation. Bike lanes in both directions would be maintained during construction. Portions of Lindero Canyon Road disturbed during pipeline installation would be restored following construction. Generally, trench spoils would be temporarily stockpiled within the construction staging and storage area, then backfilled to the trench after pipeline installation or hauled away for re-use or disposal.

Based upon an installation rate of approximately 40 feet per day, the average amount of excess spoils requiring removal would be about 115 cubic yards per day. This would require approximately 12 truck round trips per day. The average daily number of heavy-duty trucks hauling material to and from the construction crew (including the delivery of pipe sections and miscellaneous supplies, hauling of pipe bedding and backfill materials and removal of excess spoils) would be approximately 24 truck round trips per day.

Storage of materials and equipment would be dependent upon the contractor and subcontractors. If the contractor is local, they may store equipment and materials in their own yard.

1.3.3 Pump Station/PRS Site

A 0.93-acre temporary construction easement to the north and east of the PS/PRS site would be acquired by CMWD to be used as a construction staging and storage area. Oak tree canopies overhang the northern portion of the proposed construction staging and storage area. However, removal of oak trees is not proposed. It is anticipated that construction of the PS, PRS, and associated facilities would require approximately 18 months. The average daily number of heavy-duty truck trips associated with hauling equipment and materials to and from the site would be about 20 truck round trips per day.

1.3.4 Lindero Pump Station No. 1 Reverse Flow Valve Upgrade

Construction of this component would involve replacement of the reverse flow valve and installation of related piping. It is anticipated to require four weeks to complete this component, with an average of two heavy-duty truck round trips per day.

1.3.5 Yerba Buena Recycled Water Pipeline Extension

Due to traffic control concerns, it is not anticipated that this component would be constructed concurrently with the LVMWD interconnection pipeline. Installation of this pipeline would be restricted to the Lindero Canyon Road right-of-way. Installation of this segment is anticipated to require approximately one month, including pavement repair. Both southbound lanes and one northbound lane would remain open on Lindero Canyon Road during pipeline installation. Bike lanes in both directions would be maintained during construction. Portions of Lindero Canyon Road disturbed during pipeline installation would be restored following construction. Generally, trench spoils would be temporarily stockpiled within the construction staging and storage area, then backfilled to the trench after pipeline installation or hauled away for re-use or disposal.

Based upon a pipe installation rate of approximately 80-100 feet per day, the average amount of excess spoils requiring removal would be approximately 30 cubic yards per day. This would require approximately three heavy-duty truck round trips per day. The average daily number of trucks hauling material to and from the construction crew (including the delivery of pipe sections and miscellaneous supplies, hauling of pipe bedding, and backfill materials and removal of excess spoils) would be approximately 36 truck round trips per day.

1.3.6 Canyon Oaks Park Lateral Recycled Water Pipeline

This component would be constructed following the completion of the Yerba Buena recycled water pipeline extension. Installation of this pipeline would occur within the public right-of-way and on private property within an easement. Installation of this segment is anticipated to require approximately two weeks. Generally, trench spoils would be temporarily stockpiled within the work area, then backfilled to the trench after pipeline installation or hauled away for re-use or disposal.

Based upon a pipe installation rate of approximately 160 feet per day, the average amount of excess spoils requiring removal would be approximately 30 cubic yards per day. This would require approximately three heavy-duty truck round trips per day. The average daily number of trucks hauling material to and from the construction crew (including the delivery of pipe sections and miscellaneous supplies, hauling of pipe bedding and backfill materials and removal of excess spoils) would be approximately six truck round trips per day.

1.4 OPERATION

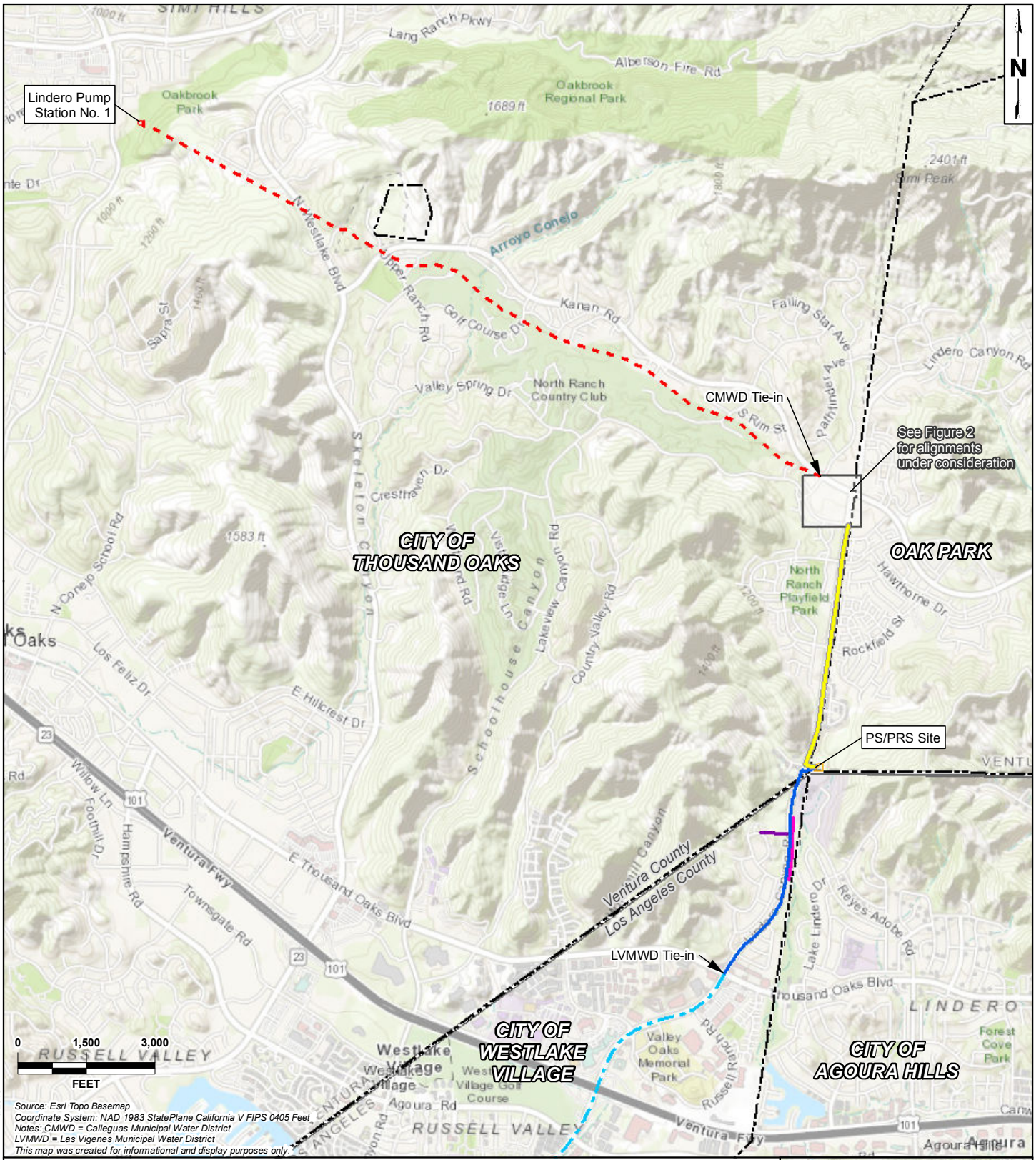
The proposed project facilities would only be used during periods of water transfer between systems. The PS/PRS site would be unstaffed, but maintenance would occur by CMWD and LVMWD staff on a periodic basis.

The operation of the PS and PRS would require coordination between the two agencies. There are specific hydraulic parameters and operating criteria that have to be met on both sides of the facility. When the proposed PS or PRS discharge is not operating, the 30-inch diameter pipelines between the PS and the connection to the Lindero Feeder No. 2 and between the PRS and the connection to LVMWD's existing system would remain full. The water in the pipeline would require management to prevent it from becoming stagnant and losing disinfection residual. Several water quality management strategies may be considered for implementation:

1. Operate the PS on a regular basis to ensure water is circulated from the LVMWD system into the Calleguas system.
2. Operate the PRS on a regular basis to ensure water is circulated from the Calleguas system into the LVMWD system.
3. Discharge the water into an existing sewer or storm drain facility, if water loses disinfection residual and cannot be delivered to customers.

The preferred operational strategy includes operation of the PS and the PRS (one at a time) as described under 1 and 2 above, on a predetermined alternating schedule. This would help to ensure that water is circulated between both systems to mitigate water quality concerns.

The two agencies would communicate directly with one another regarding the operation of the PS and PRS facilities. The Interconnection Agreement specifies basic communication protocols between both agencies, however, more specific requirements (if determined necessary by CMWD and LVMWD) would be included in a future Operations Agreement.



Source: Esri Topo Basemap
Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet
Notes: CMWD = Calleguas Municipal Water District
LVMWD = Las Vigenes Municipal Water District
This map was created for informational and display purposes only.

LEGEND:

- CMWD Interconnection Pipeline (North Segment)
- Existing CMWD Lindero Feeder No.2
- LVMWD Existing Pipeline
- LVMWD Interconnection Pipeline (South Segment)
- Canyon Oaks Park Lateral Recycled Water Pipeline
- Yerba Buena Recycled Water Pipeline Extension
- Lindero Pump Station No.1
- Pump Station/PRS Site
- City Limit
- County Boundary

MAP EXTENT:

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

PROJECT NAME:
CMWD - LVMWD INTERCONNECTION
VENTURA AND LOS ANGELES COUNTIES, CA

PROJECT NUMBER: 1802-0331

DATE: October 2018

PROJECT OVERVIEW

FIGURE 1

Calleguas Water District\Figure 1 - Project Overview.mxd 10/16/2018

LEGEND:

- CMWD Interconnection Pipeline (North Segment)
- Existing CMWD Lindero Feeder No.2

Possible Tie-In Alignments

- Falling Star Ave & Lakeview Canyon Rd
- Kanan Rd & Lindero Canyon Rd
- Shopping Center

MAP EXTENT:

0 75 150
FEET

Source: NAIP Imagery 2016
Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet
Notes: CMWD = Calleguas Municipal Water District
LVMWD = Las Virgenes Municipal Water District
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PROJECT NAME: CMWD - LVMWD INTERCONNECTION VENTURA AND LOS ANGELES COUNTIES, CA
PROJECT NUMBER: 1802-0331
DATE: October 2018

POTENTIAL LINDERO FEEDER NO.2 TIE-IN ALIGNMENTS

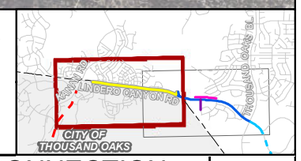
FIGURE 2

Calleguas Water District\Figure 2 - Potential Lindero Feeder No2 Tie-In Alignments.mxd 10/16/2018

LEGEND:

- Pump Station/PRS Site
- City Limit
- County Boundary
- CMWD Interconnection Pipeline (North Segment)
- Existing CMWD Lindero Feeder No.2
- LVMWD Interconnection Pipeline (South Segment)

MAP EXTENT:



0 250 500
FEET

Source: NAIP Imagery 2016
Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet
Notes: CMWD = Calleguas Municipal Water District
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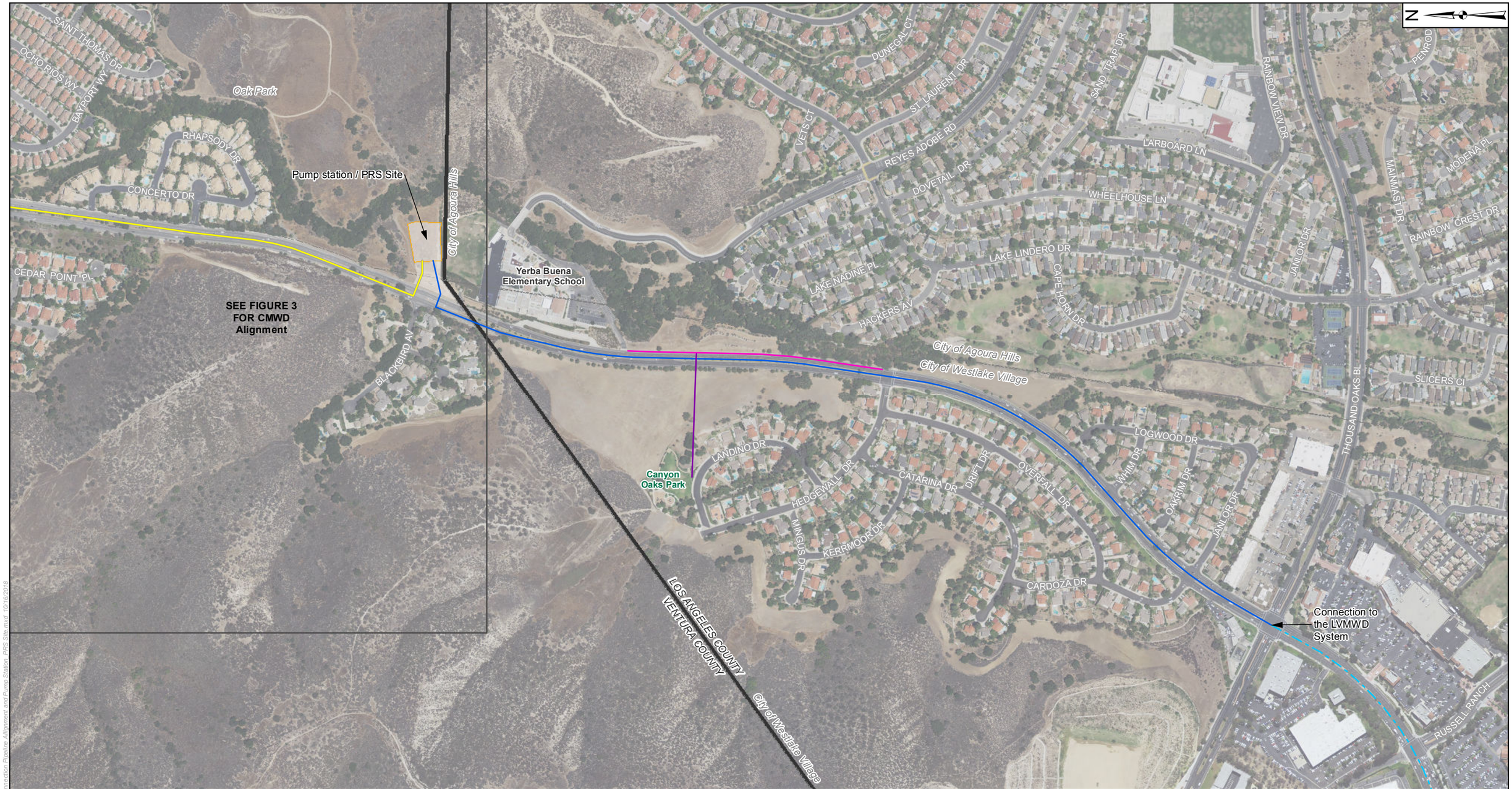
PROJECT NAME: CMWD - LVMWD INTERCONNECTION VENTURA AND LOS ANGELES COUNTIES, CA
PROJECT NUMBER: 1802-0331
DATE: October 2018

CMWD INTERCONNECTION PIPELINE ALIGNMENT AND PUMP STATION/PRS SITE

FIGURE 3

Calleguas Water District\Figure 3_4 - CMWD Interconnection Pipeline Alignment and Pump Station_PRS Site.mxd 10/16/2018



LEGEND:

- Pump Station/PRS Site
- City Limit
- County Boundary
- CMWD Interconnection Pipeline (North Segment)
- LVMWD Existing Pipeline
- LVMWD Interconnection Pipeline (South Segment)
- Canyon Oaks Park Lateral Recycled Water Pipeline
- Yerba Buena Recycled Water Pipeline Extension

MAP EXTENT:

0 250 500
FEET

Source: NAIP Imagery 2016
Coordinate System: NAD 1983 StatePlane California V FIPS 0405 Feet
Notes: CMWD = Calleguas Municipal Water District
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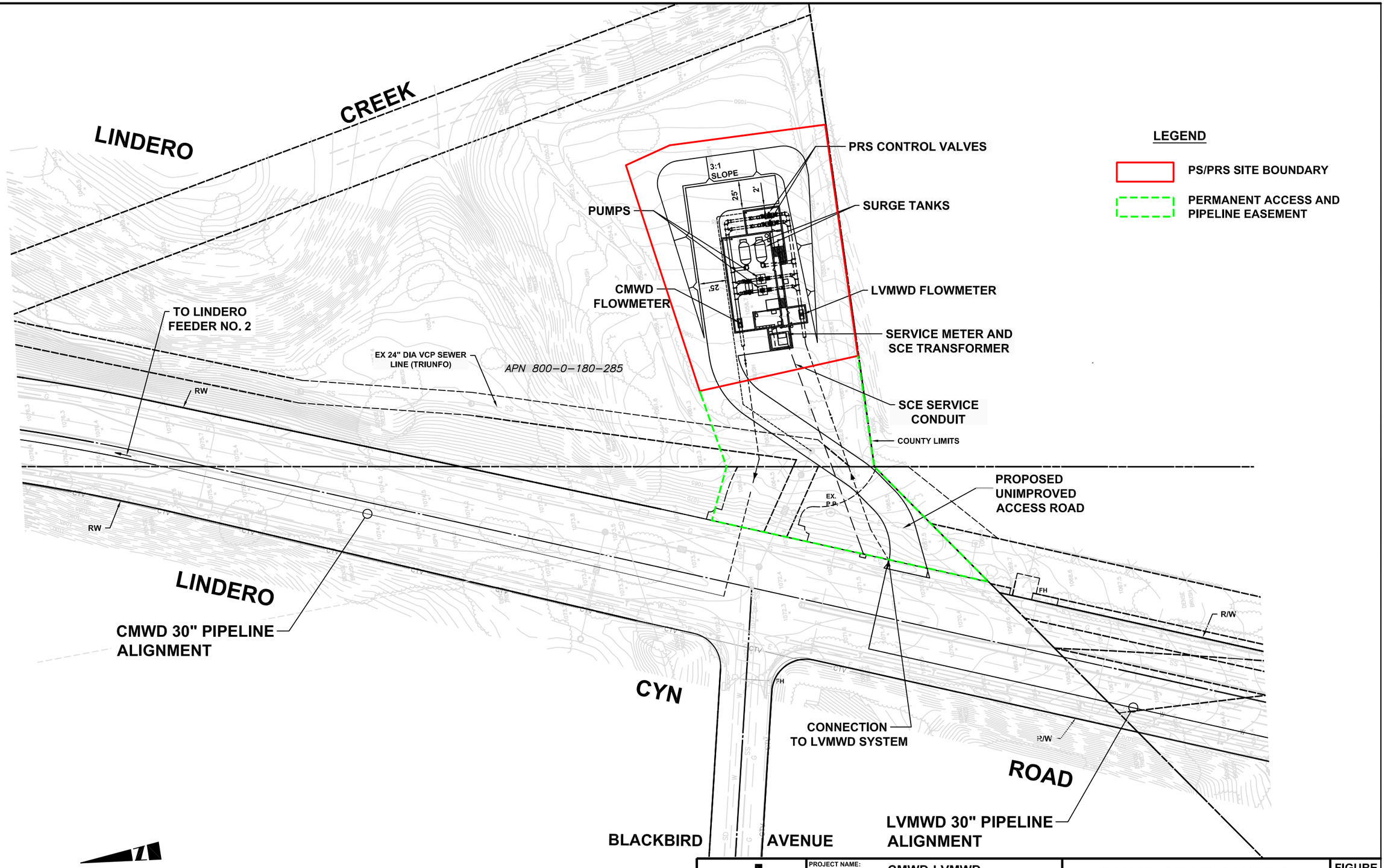
PROJECT NAME: CMWD - LVMWD INTERCONNECTION VENTURA AND LOS ANGELES COUNTIES, CA
PROJECT NUMBER: 1802-0331
DATE: October 2018

LVMWD INTERCONNECTION PIPELINE ALIGNMENTS

FIGURE 4

Calleguas Water District\Figure 3_4 - CMWD Interconnection Pipeline Alignment and Pump Station_PRS Site.mxd 10/16/2018



Source: Phoenix Civil Engineering, Inc. Document Dated 07-05-18

padre associates, inc.
ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

PROJECT NAME: CMWD-LVMWD INTERCONNECTION PROJECT		PUMP STATION/PRS SITE PLAN	FIGURE 5
PROJECT NUMBER: 1802-0331	DATE: August 2018		

a. Post-construction visual representation of the PS/PRS site, facing southeast

b. Post-construction visual representation of the PS/PRS site, facing east

padre associates, inc. ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS	PROJECT NAME: CMWD - LVMWD INTERCONNECTION VENTURA AND LOS ANGELES COUNTIES, CA		POST-CONSTRUCTION VISUAL REPRESENTATIONS OF THE PS/PRS SITE	FIGURE 6
	PROJECT NUMBER: 1802-0331	DATE: October 2018		

a. LVMWD pipeline alignment at Janlor Drive, facing south

b. LVMWD pipeline alignment at Hedgewall Drive, facing south

c. LVMWD pipeline alignment from Lindero Canyon Road to PS/PRS Site (left)

d. Canyon Oaks Park Lateral alignment, facing east

Notes: CWMD = Calleguas Municipal Water District;
LVMWD = Las Virgenes Municipal Water District

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PROJECT NAME:
CMWD - LVMWD INTERCONNECTION
VENTURA AND LOS ANGELES COUNTIES, CA

PROJECT NUMBER: 1802-0331

DATE: October 2018

PHOTOGRAPHS OF THE LVMWD PIPELINE ALIGNMENTS

FIGURE 7

a. Pump station/PRS site, facing east

b. Pump station/PRS site from Yerba Buena Elementary School

c. CMWD pipeline alignment at Rockfield Street, facing north

Notes: CWMD = Calleguas Municipal Water District;
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ENGINEERS, GEOLOGISTS & ENVIRONMENTAL SCIENTISTS

PROJECT NAME:
CMWD - LVMWD INTERCONNECTION
VENTURA AND LOS ANGELES COUNTIES, CA

PROJECT NUMBER: 1802-0331

DATE: October 2018

PHOTOGRAPHS OF THE CMWD PIPELINE ALIGNMENT AND PS/PRS SITE

FIGURE 8

2.0 INITIAL STUDY CHECKLIST

This checklist provides a preliminary analysis of the potential environmental impacts associated with the proposed project. The analysis is organized by environmental issue area (e.g., aesthetics, agricultural resources, air quality). Each issue area begins with its own checklist, which identifies criteria that have been used to assess the significance or insignificance of each potential impact. The checklists used in this Initial Study were taken from the 2018 update to the State CEQA Guidelines prepared by the Association of Environmental Professionals. The checklists also indicate the conclusions made regarding the potential significance of each impact. Potentially significant impacts will be addressed in the Environmental Impact Report (EIR).

Impact classifications used in the checklists are the following:

- **Potentially Significant Impact.** An impact that could be significant, and requires further study in an EIR.
- **Less than Significant Impact with Mitigation.** An impact that is potentially significant, but can feasibly be mitigated to a less than significant level with measures to be identified in the EIR.
- **Less than Significant Impact.** An impact that would not be significantly adverse.
- **No Impact.** Applied when the project would not result in any impact to a specific issue area.

2.1 AESTHETICS

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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. Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

The public would have views of construction sites from public roadways, Yerba Buena Elementary School, Canyon Oaks Park, North Ranch Pavilion, and Oak Park Center. Pipeline installation and construction of other project elements may result in temporary removal of landscaping and street trees and may temporarily degrade visual resources from public viewing areas. However, only a small proportion of landscaping along the pipeline alignments would be affected and significant aesthetics impacts are not anticipated.

The proposed PS/PRS would be located below ground with only manholes, access hatches, and air vents extending from a few inches to approximately one-foot above-ground (see Figure 6). In addition, a small antenna (height to be determined) would be located at the PS/PRS site. These features would be located about 13 feet lower in elevation than Lindero Canyon Road, which would limit the visibility of these features to a short segment of the northbound lane. The proposed PS/PRS would not be visible from Yerba Buena Elementary School due to an intervening vegetated berm located along the northern property boundary. Pipelines would be fully buried and not visible to the public. The project is not anticipated to result in significant impacts related to aesthetics; however, additional discussion will be provided in the EIR.

2.2 AGRICULTURAL AND FORESTRY RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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 or timberland?	☐	☐	☐	☒
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 to non-forest use?	☐	☐	☐	☒

Excluding the proposed PS/PRS site and portions of the Canyon Oaks Park Lateral pipeline alignment, the project sites are located in developed areas. The proposed PS/PRS site and the Canyon Oaks Park Lateral pipeline alignment are located in non-farmland areas mapped as “Other Lands” by the California Department of Conservation. The proposed PS/PRS site is zoned as open space with a 40-acre minimum parcel size (OS-40 ac).

The proposed project would not result in the conversion of farmland to non-agricultural use, would be consistent with existing zoning and would not affect any Williamson Act contracts, and would not cause any forest land or timberlands to be converted or rezoned. The project is not anticipated to result in impacts related to agricultural or forestry resources.

2.3 AIR QUALITY

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☒	☐	☐
d. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e. Create objectionable odors affecting a substantial number of people?	☐	☐	☒	☐

Fugitive dust would be generated by the operation of heavy equipment and motor vehicles during pipeline installation and construction of other project elements. Exhaust emissions would be generated during the construction phase by heavy equipment, heavy-duty trucks, and construction worker passenger vehicles. These construction-related emissions would occur within the jurisdiction of both the Ventura County Air Pollution Control District (VCAPCD) and the South Coast Air Quality Management District (SCAQMD). The VCAPCD does not apply significance thresholds to construction emissions. Peak day construction emissions have the potential to exceed SCAQMD significance thresholds, which would be considered a significant air quality impact. Numerous residences are located along the pipeline alignments, and diesel exhaust odors from construction equipment may be considered objectionable. The project may result in potentially significant but likely mitigable, temporary air quality impacts, which will be fully addressed in the EIR, including mitigation measures if required.

2.4 BIOLOGICAL RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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 California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Excluding the proposed PS/PRS site and portions of the Canyon Oaks Park Lateral pipeline alignment, the project sites are located in developed areas. Based on an initial site visit, the PS/PRS site and a portion of the Canyon Oaks Park Lateral pipeline alignment are located in previously disturbed areas that do not support native vegetation. Vegetation affected by construction activities would be primarily landscaping and non-native plant species typically found along roadways and in disturbed areas. However, proposed construction activities adjacent to sensitive riparian habitat along Lindero Canyon Creek at the PS/PRS site and pipeline installation along Lindero Canyon Road (across from Hedgewall Drive) may result in indirect impacts to special-status species and nesting birds. The project may result in potentially significant but likely mitigable impacts to biological resources, which will be fully addressed in the EIR, including mitigation measures if required.

2.5 CULTURAL RESOURCES

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines?	☐	☐	☐	☒
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines?	☐	☒	☐	☐
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

Most project elements are located in previously disturbed areas along roadways, and intact cultural resources sites are unlikely to be significantly affected. However, a cultural resources record search has not been conducted to date such that the potential for impacts is not fully known. Ground disturbance associated with construction of the PS/PRS would occur as close as 80 feet from the top of bank of Lindero Canyon Creek, which could contain pre-historic archeological resources. Installation of the proposed pipelines and construction of the underground PS/PRS has the potential to disturb known or unreported archeological sites and result in significant impacts to cultural resources. These impacts will be fully addressed in the EIR, including mitigation measures if required.

2.6 GEOLOGY AND SOILS

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a. Expose people or structures to 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? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
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 risks to life or property?	☐	☐	☒	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

Most of the proposed pipeline alignments are located within previously excavated, compacted and stabilized roadbeds. The preliminary geologic investigation for the PS/PRS site indicates potential geologic hazards may include expansive soil, liquefaction, shallow groundwater, and seismically-induced settlement.

Due to the presence of faults in the immediate project area, the potential exists for fault rupture to damage the proposed pipelines and PS/PRS during the design life of the project. However, the pipelines and other facilities would be designed and installed to be resistant to seismic-related damage, including ground-shaking.

Pipeline installation and construction of other facilities would involve temporary removal of vegetation and could result in soil erosion. However, project construction activities would be subject to the State's general construction storm water permit (Water Quality Order 2009-0009-DWQ), which would require implementation of best management practices to minimize soil erosion. Overall, significant impacts related to geology and soils are not anticipated. However, additional discussion and analysis of geologic hazards will be provided in the EIR.

2.7 GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or directly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

Pipeline installation and construction of other project elements would result in temporary greenhouse gas emissions, primarily in the form of CO_2 exhaust emissions from the use of off-road construction equipment and on-road vehicles. In addition, the electrical demand of the proposed PS would result in greenhouse gas emissions associated with power generation. However, greenhouse gas emissions are anticipated to be less than the 10,000 metric ton CO_2E per year threshold adopted by the SCAQMD for industrial projects. Therefore, greenhouse gas emissions are anticipated to be less than significant. However, additional discussion and analysis will be provided in the EIR as required by Section 15064.4 of the State CEQA Guidelines.

2.8 HAZARDS AND HAZARDOUS MATERIALS/RISK OF UPSET

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

The proposed project would not use, transport, or dispose of hazardous materials and no hazardous materials would be involved with construction and operation of the project. Pipeline installation and PS/PRS construction activities would not occur within a known hazardous materials site; however, contaminated soil could be encountered during excavation/trenching and may result in a hazard to the public or the environment. Although flammable grassy vegetation occurs at the PS/PRS site, standard fire prevention precautions would be used during construction activities to prevent wildfire. Based on a preliminary investigation of land use along the pipeline alignments, significant impacts associated with exposure of contaminated soils is not anticipated. However, additional analysis and discussion regarding exposure of contaminated soils will be provided in the EIR if appropriate.

2.9 HYDROLOGY AND WATER QUALITY

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☒
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☒
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	☒
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems?	☐	☐	☐	☒
f. Otherwise substantially degrade water quality?	☐	☐	☐	☒
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j. Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

The proposed PS/PRS site is located approximately 100 feet from Lindero Canyon Creek but is not within the flood hazard area (Zone A) indicated on Flood Insurance Rate Map No. 06111C0995E. Storm water runoff from construction sites could impact water quality, but construction would be conducted in compliance with State's general storm construction water permit (Water Quality Order 2009-0009-DWQ), which would require implementation of best management practices to minimize water quality degradation.

Groundwater may be encountered during excavation at the PS/PRS site or in trenches excavated to install the pipeline. This water would not be discharged to surface waters, but would be pumped from the excavation or trench, solids would be settled out, and the water would be used for dust control at the construction site or elsewhere. The area of impervious surfaces at the PS/PRS site would be minimal, such that an increase in storm water runoff is not anticipated. Overall, water resources impacts are anticipated to be less than significant. However, additional discussion and analysis will be provided in the EIR.

2.10 LAND USE AND PLANNING

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	☐	☒
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Most of the pipeline alignments are located within the public right-of-way along roadways. The PS/PRS site is located within unincorporated Ventura County and zoned OS-40 ac (open space, 40-acre minimum parcel size). The Canyon Oaks Park Lateral pipeline alignment is located within the City of Westlake Village and zoned OS (open space). The current land use along the pipeline alignments is primarily residential and commercial, with open space in the vicinity of the PS/PRS site. The Lake Lindero Country Club is located just east of the southern portion of the LVMWD interconnection pipeline alignment.

The proposed project would not involve the construction of any roads, barriers, or facilities that could potentially physically divide an existing community. The proposed project would not conflict with any policies of the Ventura County General Plan, Westlake Village General Plan, or Thousand Oaks General Plan.

2.11 MINERAL RESOURCES

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a. Result in the loss or 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?	☐	☐	☐	☒

Aggregate is the only locally important mineral resource and is defined as construction grade sand and gravel. All project elements would be located in areas mapped as MRZ-1 (no significant aggregate deposits) by the California Department of Conservation. No aggregate production sites are located in proximity to any project elements. The proposed project would not adversely affect the availability of these mineral resources.

2.12 NOISE

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☒	☐

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
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 expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

The dominant source of noise in the project area is vehicle traffic on major roadways, primarily U.S. Highway 101, Lindero Canyon Road, Thousand Oaks Blvd. and Kanan Road. Noise sensitive receptors near project elements may include Yerba Buena Elementary School and residences located on or adjacent to Lindero Canyon Road, Kanan Road, Landino Drive, Lakeview Canyon Road, and Falling Star Avenue.

Short-term noise would be generated by heavy equipment and heavy-duty trucks associated with construction. Evening and nighttime construction work may exceed local noise standards. The proposed pumps and PRS would be located in underground vaults and are unlikely to produce noise levels above existing ambient levels. Construction noise is considered a potentially significant but likely mitigable impact and will be fully addressed in the EIR, including mitigation measures if required.

2.13 POPULATION AND HOUSING

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a. Induce substantial 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)?	☐	☐	☐	☒
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

The proposed potable water system interconnection would increase the reliability and flexibility of both the CMWD and LVMWD systems to minimize potential supply disruptions due to natural disasters, infrastructure failure or system maintenance. The project would not increase the water supply or extend water service to new areas or users. Therefore, the project is not expected to result in population growth beyond currently forecast levels. Additional discussion will be provided in the EIR.

2.14 PUBLIC SERVICES

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a. Would the project 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?				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

Police protection services, fire protection services, schools, parks, and other public facilities are normally required to be augmented as a result of projects that increase an area's population (e.g., new residential, commercial, and industrial development). The proposed project would not increase the local population. The proposed pipelines and PS/PRS would be buried and would not require fire protection or police protection services. Therefore, no impacts to police protection services, fire protection services, schools, parks, and other public facilities are expected.

2.15 RECREATION

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a. Would the project 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?	☐	☐	☐	☒
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

The project would not increase the use of existing neighborhood parks, regional parks, or any other recreational facilities. As such, the project would not result in the accelerated physical deterioration of any recreational facilities. The project would not involve the construction or expansion of any recreational facilities. Therefore, the project would not have any impacts on the physical environment associated with the construction or use of recreational facilities. However, the potential loss of recreational opportunities associated with locating the PS/PRS on land owned by the Rancho Simi Recreation and Park District will be addressed in the EIR.

2.16 TRANSPORTATION/TRAFFIC

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☒	☐
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☒
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
e. Result in inadequate emergency access?	☐	☐	☐	☒
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

The project sites would be primarily accessed from Lindero Canyon Road or Kanan Road. Based on a single traffic count by Ventura County in 2017, traffic volumes on Lindero Canyon Road immediately north of Kanan Road are 4,300 vehicles per day. This value equates to level of service (LOS) A based on the Ventura County General Plan standards. Traffic counts conducted by the City of Thousand Oaks indicate traffic volumes are 12,000 vehicles/day on Kanan Road (west of Lindero Canyon Road) and 17,000 vehicles/day on Lindero Canyon Road (south of Kanan Road). Based on Ventura County General Plan standards, both Kanan Road and Lindero Canyon Road operate at LOS A.

The project would only generate a small number of construction-related vehicle trips and would not contribute to a lowered level of service on public roadways. Project construction traffic would utilize roadways operating at acceptable LOS and would not cause any roadways to function below an acceptable LOS. However, additional discussion and analysis related to construction traffic will be provided in the EIR.

The proposed PS/PRS site would be unstaffed, but maintenance activities would generate a few vehicle trips per month with up to four on a peak day. This small amount of long-term vehicle trips would not affect the level of service of affected roadways.

2.17 UTILITIES AND SERVICE SYSTEMS

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation	Less than Significant Impact	No Impact
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	☒
e. 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?	☐	☐	☐	☒
f. Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs?	☐	☐	☒	☐
g. Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

Project-related construction activities may generate excess earth material that would be offered for use at local construction sites. However, solid waste generated by project construction may require landfill disposal, either in Ventura County or Los Angeles County.

Any project that generates solid waste would have an impact on the demand for solid waste disposal capacity in Ventura County. The Ventura Countywide Siting Element approved by the California Integrated Waste Management Board on June 20, 2001 demonstrates that the approval of extension of the existing Solid Waste Facility Permit for the Simi Valley Landfill and Recycling Center, combined with the existing permitted capacity of the Toland Road Landfill, would provide Ventura County with sufficient disposal capacity beyond the 15-year planning period mandated by State law. Therefore, no individual project would have a significant impact on the demand for solid waste capacity.

The project sites (both in Ventura and Los Angeles counties) are located within the wasteshed of the Calabasas Landfill, and any solid waste generated by the project may be disposed at this landfill. The 2035 Los Angeles County General Plan indicates the Calabasas Landfill has 5.51 million tons and 16 years of remaining permitted capacity (as of 2012). Considering the very small amount of solid waste that would be generated following recycling of materials, the Calabasas Landfill has sufficient permitted capacity to accommodate the project's needs.

APPENDIX B

RESPONSES TO THE NOTICE OF PREPARATION

STATE OF CALIFORNIA Edmund G. Brown Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION
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November 20, 2018

Eric Bergh
Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, CA 91360-6800

RE: SCH# 2018111008 Calleguas MWS/ Las Virgenes MWD Interconnection Project, Ventura and Los Angeles County

Dear Mr.Bergh:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements**. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
   a. A brief description of the project.
   b. The lead agency contact information.
   c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
   d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).
   a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
   a. Alternatives to the project.
   b. Recommended mitigation measures.
   c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
   a. Type of environmental review necessary.
   b. Significance of the tribal cultural resources.
   c. Significance of the project's impacts on tribal cultural resources.
   d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
   a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
   b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:
    a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
    b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
    a. Avoidance and preservation of the resources in place, including, but not limited to:
        i. Planning and construction to avoid the resources and protect the cultural and natural context.
        ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
    b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
        i. Protecting the cultural character and integrity of the resource.
        ii. Protecting the traditional use of the resource.
        iii. Protecting the confidentiality of the resource.
    c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
    d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).
    e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
    f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
    a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
    b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
    c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
    b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
    a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
    b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
    a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
    b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
    c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Katy.Sanchez@nahc.ca.gov.

Sincerely,

for Nancy Gonzalez

Katy Sanchez
Associate Enviromental Planner

cc: State Clearinghouse

Department of Toxic Substances Control

Matthew Rodriquez
Secretary for
Environmental Protection

Barbara A. Lee, Director
9211 Oakdale Avenue
Chatsworth, California 91311

Edmund G. Brown Jr.
Governor

November 27, 2018

Eric Bergh
Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, CA 91360-6800

DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE CALLEGUAS MWD-LAS VIRGENES MWD INTERCONNECTION PROJECT (PROJECT)

Dear Mr. Bergh:

The Department of Toxic Substances Control (DTSC) has received your Notice of Availability of a Draft Environmental Impact Report (EIR) for the above-mentioned project.

Based on the review of the document, the DTSC comments are as follows:

1) The draft EIR needs to identify and determine whether current or historic uses at the project site have resulted in any release of hazardous wastes/substances at the project area.

2) The draft EIR needs to identify any known or potentially contaminated site within the proposed project area. For all identified sites, the draft EIR needs to evaluate whether conditions at the site pose a threat to human health or the environment.

3) The draft EIR should identify the mechanism to initiate any required investigation and/or remediation for any site that may require remediation, and which government agency will provide appropriate regulatory oversight.

4) If during construction of the project, soil contamination is suspected, construction in the area should stop and appropriate health and safety procedures should be implemented. If it is determined that contaminated soil exists, the draft EIR should identify how any required investigation or remediation will be conducted, and which government agency will provide appropriate regulatory oversight.

DTSC provides guidance for Preliminary Endangerment Assessment (PEA) preparation, and cleanup oversight through the Voluntary Cleanup Program (VCP). For additional information on the VCP, please visit DTSC's web site at www.dtsc.ca.gov. If you would like to meet and discuss this matter further, please contact me at (818) 717-6555 or Pete.Cooke@dtsc.ca.gov.

Sincerely,

Pete Cooke
Site Mitigation and Restoration Program - Chatsworth Office

cc: Governor's Office of Planning and Research
State Clearinghouse
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CEQA Tracking
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City of Thousand Oaks
Community Development Department
2100 Thousand Oaks Boulevard • Thousand Oaks, CA 91362
Planning Division • Phone 805/449.2323 • Fax 805/449.2350 • www.toaks.org
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Mark A. Towne
Community Development Director

November 28, 2018

Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, CA 91360
Attention: Eric Bergh, Manager of Resources

Subject: Draft EIR Notice of Preparation (NOP) for the Calleguas MWD/ Las Virgenes MWD Interconnection Project

This is in response to the October 31, 2018, NOP concerning the EIR for the Calleguas/Las Virgenes Interconnection Project. Thank you for this opportunity to comment.

Please change the text of Section 2.10 Land Use and Planning of the NOP to reflect the following information:

The northern segment of the interconnect pipeline is located within Thousand Oaks right-of-way. In addition, a small portion of the pump station site (APN 80018029) is within Thousand Oaks. The parcel is within the North Ranch Specific Plan area. It is zoned RPD-1.5U-SP (Residential Planned Development -1.5 dwellings per net acre- Specific Plan).

Please call me or send me an email if you have questions or concerns.

Jeffrey Specter
Senior Planner
805 449-2325
jspecter@toaks.org

cdd:js\421-70\Interagency Referral\IRO 2018-70585

SCAG
INNOVATING FOR A BETTER TOMORROW

SOUTHERN CALIFORNIA
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November 30, 2018

Mr. Eric Bergh, Manager of Resources
Calleguas Municipal Water District
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Phone: (805) 579-7128
E-mail: ebergh@calleguas.com

RE: SCAG Comments on the Notice of Preparation of a Draft Environmental Impact Report for the Calleguas MWD/Las Virgenes MWD Interconnection Project [SCAG NO. IGR9776]

Dear Mr. Bergh,

Thank you for submitting the Notice of Preparation of a Draft Environmental Impact Report for the Calleguas MWD/Las Virgenes MWD Interconnection Project ("proposed project") to the Southern California Association of Governments (SCAG) for review and comment. SCAG is the authorized regional agency for Inter-Governmental Review (IGR) of programs proposed for Federal financial assistance and direct Federal development activities, pursuant to Presidential Executive Order 12372. Additionally, SCAG reviews the Environmental Impact Reports of projects of regional significance for consistency with regional plans pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.

SCAG is also the designated Regional Transportation Planning Agency under state law, and is responsible for preparation of the Regional Transportation Plan (RTP) including the Sustainable Communities Strategy (SCS) pursuant to Senate Bill (SB) 375. As the clearinghouse for regionally significant projects per Executive Order 12372, SCAG reviews the consistency of local plans, projects, and programs with regional plans.[1] SCAG's feedback is intended to assist local jurisdictions and project proponents to implement projects that have the potential to contribute to attainment of Regional Transportation Plan/Sustainable Community Strategies (RTP/SCS) goals and align with RTP/SCS policies.

SCAG staff has reviewed the Notice of Preparation of a Draft Environmental Impact Report for the Calleguas MWD/Las Virgenes MWD Interconnection Project in Los Angeles County. The proposed project is the interconnection of the Calleguas MWD and Las Virgenes MWD potable water systems, facilitating the fill of LVMWD's Westlake Reservoir and expanding the recycled water service.

When available, please send environmental documentation to *SCAG's Los Angeles office in Los Angeles (900 Wilshire Boulevard, Ste. 1700, Los Angeles, California 90017) or by email to au@scag.ca.gov* providing, at a minimum, the full public comment period for review.

If you have any questions regarding the attached comments, please contact the Inter-Governmental Review (IGR) Program, attn.: Anita Au, Associate Regional Planner, at (213) 236-1874 or au@scag.ca.gov. Thank you.

Sincerely,

Ping Chang

Ping Chang
Acting Manager, Compliance and Performance Monitoring

[1] Lead agencies such as local jurisdictions have the sole discretion in determining a local project's consistency with the 2016 RTP/SCS for the purpose of determining consistency for CEQA. Any "consistency" finding by SCAG pursuant to the IGR process should not be construed as a determination of consistency with the 2016 RTP/SCS for CEQA.

COMMENTS ON THE NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE CALLEGUAS MWD/LAS VIRGENES MWD INTERCONNECTION PROJECT [SCAG NO. IGR9776]

CONSISTENCY WITH RTP/SCS

SCAG reviews environmental documents for regionally significant projects for their consistency with the adopted RTP/SCS. For the purpose of determining consistency with CEQA, lead agencies such as local jurisdictions have the sole discretion in determining a local project's consistency with the RTP/SCS.

2016 RTP/SCS GOALS

The SCAG Regional Council adopted the 2016 RTP/SCS in April 2016. The 2016 RTP/SCS seeks to improve mobility, promote sustainability, facilitate economic development and preserve the quality of life for the residents in the region. The long-range visioning plan balances future mobility and housing needs with goals for the environment, the regional economy, social equity and environmental justice, and public health (see http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx). The goals included in the 2016 RTP/SCS may be pertinent to the proposed project. These goals are meant to provide guidance for considering the proposed project within the context of regional goals and policies. Among the relevant goals of the 2016 RTP/SCS are the following:

SCAG 2016 RTP/SCS GOALS	
RTP/SCS G1:	*Align the plan investments and policies with improving regional economic development and competitiveness*
RTP/SCS G2:	*Maximize mobility and accessibility for all people and goods in the region*
RTP/SCS G3:	*Ensure travel safety and reliability for all people and goods in the region*
RTP/SCS G4:	*Preserve and ensure a sustainable regional transportation system*
RTP/SCS G5:	*Maximize the productivity of our transportation system*
RTP/SCS G6:	*Protect the environment and health for our residents by improving air quality and encouraging active transportation (e.g., bicycling and walking)*
RTP/SCS G7:	*Actively encourage and create incentives for energy efficiency, where possible*
RTP/SCS G8:	*Encourage land use and growth patterns that facilitate transit and active transportation*
RTP/SCS G9:	*Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies**
	**SCAG does not yet have an agreed-upon security performance measure.*

For ease of review, we encourage the use of a side-by-side comparison of SCAG goals with discussions of the consistency, non-consistency or non-applicability of the goals and supportive analysis in a table format. Suggested format is as follows:

SCAG 2016 RTP/SCS GOALS		
	Goal	Analysis
RTP/SCS G1:	*Align the plan investments and policies with improving regional economic development and competitiveness*	*Consistent: Statement as to why;* *Not-Consistent: Statement as to why;* *Or* *Not Applicable: Statement as to why;* *DEIR page number reference*
RTP/SCS G2:	*Maximize mobility and accessibility for all people and goods in the region*	*Consistent: Statement as to why;* *Not-Consistent: Statement as to why;* *Or* *Not Applicable: Statement as to why;* *DEIR page number reference*
etc.		etc.

2016 RTP/SCS STRATEGIES

To achieve the goals of the 2016 RTP/SCS, a wide range of land use and transportation strategies are included in the 2016 RTP/SCS. Technical appendances of the 2016 RTP/SCS provide additional supporting information in detail. To view the 2016 RTP/SCS, please visit: http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx. The 2016 RTP/SCS builds upon the progress from the 2012 RTP/SCS and continues to focus on integrated, coordinated, and balanced planning for land use and transportation that the SCAG region strives toward a more sustainable region, while the region meets and exceeds in meeting all of applicable statutory requirements pertinent to the 2016 RTP/SCS. These strategies within the regional context are provided as guidance for lead agencies such as local jurisdictions when the proposed project is under consideration.

DEMOGRAPHICS AND GROWTH FORECASTS

Local input plays an important role in developing a reasonable growth forecast for the 2016 RTP/SCS. SCAG used a bottom-up local review and input process and engaged local jurisdictions in establishing the base geographic and socioeconomic projections including population, household and employment. At the time of this letter, the most recently adopted SCAG jurisdictional-level growth forecasts that were developed in accordance with the bottom-up local review and input process consist of the 2020, 2035, and 2040 population, households and employment forecasts. To view them, please visit http://www.scag.ca.gov/Documents/2016GrowthForecastByJurisdiction.pdf. The growth forecasts for the region and applicable jurisdictions are below.

	Adopted SCAG Region Wide Forecasts			Adopted Ventura County Forecasts			Adopted Los Angeles County Forecasts		
	Year 2020	Year 2035	Year 2040	Year 2020	Year 2035	Year 2040	Year 2020	Year 2035	Year 2040
Population	19,663,000	22,091,000	22,138,800	886,400	945,100	965,400	10,326,200	11,145,100	11,514,800
Households	6,458,000	7,325,000	7,412,300	285,300	305,600	312,300	3,493,700	3,809,300	3,946,600
Employment	8,414,000	9,441,000	9,871,500	374,300	409,600	419,800	4,662,500	5,062,100	5,225,800

MITIGATION MEASURES

SCAG staff recommends that you review the Final Program Environmental Impact Report (Final PEIR) for the 2016 RTP/SCS for guidance, as appropriate. SCAG's Regional Council certified the Final PEIR and adopted the associated Findings of Fact and a Statement of Overriding Considerations (FOF/SOC) and Mitigation Monitoring and Reporting Program (MMRP) on April 7, 2016 (please see: http://scagrtpscs.net/Pages/FINAL2016PEIR.aspx). The Final PEIR includes a list of project-level performance standards-based mitigation measures that may be considered for adoption and implementation by lead, responsible, or trustee agencies in the region, as applicable and feasible. Project-level mitigation measures are within responsibility, authority, and/or jurisdiction of project-implementing agency or other public agency serving as lead agency under CEQA in subsequent project- and site- specific design, CEQA review, and decision-making processes, to meet the performance standards for each of the CEQA resource categories.

DEPARTMENT OF TRANSPORTATION
DISTRICT 7 – Office of Regional Planning
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 897-6536
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TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life.

November 30, 2018

Eric Bergh
Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, CA 91360

RE: Calleguas MWD/ Las Virgenes MWD
Interconnection Project
SCH # 2018111008
GTS # 07-Multiple-2018-00093

Dear Mr. Bergh:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The project includes installation of a 30" diameter portable water supply pipeline primarily along Lindero Canyon Rd in Thousand Oaks, CA from Thousand Oaks Blvd to the intersection of Kanan Rd and Falling Star Ave. A new underground pump station and pressure reducing station will also be constructed on public land adjacent to Lindero Canyon Rd to facilitate the flow of water to and from Calleguas MWD and Las Virgenes MWD. In addition, the project will include installation of small diameter (4"-6") pipeline related to Las Virgenes' recycled water system. The primary objective of the project is to provide greater water reliability for the Oak Park, North Ranch, Westlake Village, and Agoura Hills communities and surrounding areas through a system interconnection between the region's primary water suppliers.

The nearest State facility to the proposed project is US 101. After reviewing the Notice of Preparation (NOP), Caltrans does not expect project approval to result in a direct adverse impact to the existing State transportation facilities.

As a reminder, any transportation of heavy construction equipment and/or materials which requires use of oversized-transport vehicles on State highways will need a Caltrans transportation permit. We recommend large size truck trips be limited to off-peak commute periods.

Also, storm water run-off is a sensitive issue for Los Angeles and Ventura counties. The project needs to be designed to discharge clean run-off water. The completed project should incorporate green design elements that can capture storm water. Incorporating measures such as permeable pavement, landscaping, and trees to reduce urban water run-off should be considered.

In the spirit of mutual cooperation, Caltrans staff is available to work with your planners and traffic

engineers for this project, if needed. If you have any questions, please contact Carlo Ramirez, the project coordinator, at carlo.ramirez@dot.gov.ca, and refer to GTS #07-Multiple-2018-00093.

Sincerely,

MIYA EDMONSON
IGR/CEQA Branch Chief

cc: Scott Morgan, State Clearinghouse

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director

December 7, 2018

Mr. Eric Bergh
Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, CA 91360-6800
(805) 579-7128
ebergh@calleguas.com

Subject: Comments on the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the Calleguas-Las Virgenes Municipal Water District(s) Interconnection Project, Ventura County (SCH# 2018111008)

Dear Mr. Bergh:

The California Department of Fish and Wildlife (CDFW) has reviewed the NOP of a DEIR for the Calleguas-Las Virgenes Municipal Water District(s) Interconnection Project (Project) pursuant to the California Environmental Quality Act (CEQA; Public Resource Code 21000 et. seq.) with Calleguas Municipal Water District (MWD) acting as CEQA lead agency.

The Project would involve improve interconnection between the region's primary water suppliers and communities by constructing pipelines and facilities to provide greater water reliability, including a north segment, south segment, a co-located pump station (PS) and pressure regulating system (PRS), and pipeline extensions for recycled water. The Project includes installation of a 30" diameter potable water supply pipeline primarily along Lindero Canyon Road to the intersection of Kanan Road and Falling Star Avenue in Thousand Oaks. A new underground PS and PRS will also be constructed on public land adjacent to Lindero Canyon Road to facilitate the flow of water to and from Calleguas MWD and Las Virgenes MWD. In addition, the Project will include installation of small diameter (4" to 6") pipeline related to Las Virgenes MWD's recycled water system. Project activities include undergrounding an 800-foot portion of pipeline within Canyon Oaks Park and undergrounding infrastructure adjacent riparian areas of Conejo Creek along Lindero Canyon Road just north of Ventura County line.

The following comments and recommendations have been prepared pursuant to CDFW's authority as a Responsible Agency under CEQA (Public Resources Code § 21069; Guidelines section 15381) over those aspects of the proposed Project that come under the purview of the California Endangered Species Act (CESA, Fish and Game Code § 2050 *et seq.*), California Native Plant Protection Act (NPPA, Fish and Game Code §1900 et seq.), Lake and Streambed Alteration (LSA, Fish and Game Code section 1600 *et seq.*), and pursuant to CDFW's authority as Trustee Agency with jurisdiction over natural resources affected by the Project (CEQA Guidelines § 15386) to assist the Lead Agency in avoiding or minimizing potential Project impacts on biological resources.

Specific Comments

1) Oak Tree Woodlands *(Quercus agrifolia)*. The NOP describes Project-related impacts associated with the PS/PRS and Canyon Oaks Park pipeline to biological resources from placement of construction equipment for staging, access roads, and Project-related

infrastructure in and adjacent to oak tree woodlands. This may pose a significant threat to riparian bird species and other terrestrial wildlife. CDFW recommends the lead agency avoid placement heavy construction equipment within the active dripline of any oak tree. Also, CDFW recommends the lead agency comply with and evaluate the Project for consistency with the Ventura County Tree Protection Ordinance. This ordinance applies to the pruning (beyond specified limits), removal, trenching, excavation, or other encroachment into the protected zone (5-feet outside the canopy's edge and a minimum of 15-feet from the trunk) of protected trees in unincorporated areas. Protected trees include all oaks and sycamores 9.5-feet in circumference or larger (measured 4.5-feet above ground), trees of any species with a historical designation, trees of any species 90-feet in circumference or larger, and most 9.5-foot native trees in the County's Scenic Resources Protection Zone.

2) Least Bell's Vireo (*Vireo bellii pusillus*) and Southwestern Willow Flycatcher (*Empidonax traillii extimus*), The Project may impact areas adjacent Lindero Canyon road and within Canyon Oaks Park that provide foraging, nesting, and roosting habitat for two California endangered species, the least Bell's vireo and southwestern willow flycatcher. Both species historically nest in and are known to occupy habitat in and adjacent the Canyon Oak Parks area. CDFW recommends that all Project-related activities avoid known occupied habitat of these species. Project-related losses to foraging habitat for these species could result in incidental take. If the Project, Project construction, or any Project-related activity during the life of the Project will result in take of a species designated as rare, endangered or threatened, or a candidate for listing under CESA, CDFW recommends that the Project proponent seek appropriate take authorization under CESA prior to implementing the Project.

   Foraging habitat for least Bell's vireo and southwestern flycatcher is critical for reproductive success during the nesting season. Foraging habitat continues to be in decline due to urbanization. Loss of foraging habitat within these species locations regardless of the time of year should be considered a direct and cumulative significant impact under CEQA because these areas will no longer be available for future nesting seasons and species recovery purposes. CDFW recommends that Project impacts to these species foraging habitat be avoided or mitigated to below a significant level under CEQA. Project impacts should be further quantified and discussed with potential mitigation measures in the DEIR. Potential mitigation measures for unavoidable impacts may include acquisition, protection and management in perpetuity of suitable foraging habitat near known least Bell's vireo and southwestern flycatcher nesting colonies. Areas proposed as mitigation should have a recorded conservation easement and be dedicated to an entity which has been approved to hold/manage lands pursuant to AB 1094 (2012), which amended Government Code Sections 65965-65968.

General Comments

3) Project Description and Alternatives. To enable CDFW to adequately review and comment on the proposed Project from the standpoint of the protection of plants, fish, and wildlife, we recommend the following information be included in the DEIR:

   a) A complete discussion of the purpose and need for, and description of, the proposed Project, including all staging areas and access routes to the construction and staging areas; and,

   b) A range of feasible alternatives to Project component location and design features to ensure that alternatives to the proposed Project are fully considered and evaluated. The

alternatives should avoid or otherwise minimize direct and indirect impacts to sensitive biological resources and wildlife movement areas.

4) CESA-listed Species. CDFW considers adverse impacts to special status species protected by CESA and the federal Endangered Species Act (ESA, 16 U.S.C. §1531 *et seq.*), for the purposes of CEQA, to be significant without mitigation. As to CESA, take of any state endangered, threatened, candidate species, or listed rare plant species pursuant to the NPPA that results from the Project is prohibited, except as authorized by state law (Fish and Game Code, §§ 2080, 2085; Cal. Code Regs., tit. 14, §786.9). Take is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill". Consequently, if the Project, Project construction, or any Project-related activity during the life of the Project will result in take of a species designated as rare, endangered or threatened, or a candidate for listing under CESA, CDFW recommends that the Project proponent seek appropriate take authorization under CESA prior to implementing the Project. Appropriate authorization from CDFW may include an Incidental Take Permit (ITP) or a consistency determination in certain circumstances, among other options (Fish and Game Code §§ 2080.1, 2081, subds. [b] and [c]). Early consultation is encouraged, as significant modification to the Project and mitigation measures may be required to obtain CESA authorization. Revisions to the Fish and Game Code, effective January 1998, may require CDFW issue a separate CEQA document for the issuance of an ITP unless the Project CEQA document addresses all Project impacts to CESA-listed species and specifies a mitigation monitoring and reporting program that will meet the fully mitigated requirements of an ITP. For these reasons, biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for an ITP.

5) Activities Subject to Notification under Fish and Game Code 1602. As a Responsible Agency under CEQA, CDFW has authority over activities in streams and/or lakes that will divert or obstruct the natural flow; or change the bed, channel, or bank (including vegetation associated with the stream or lake) of a river or stream; or, use material from a streambed. For any such activities, the Project applicant (or "entity") must provide written notification to CDFW pursuant to Fish and Game Code Section 1600 *et seq*. Based on this notification and other information, CDFW determines whether a LSA Agreement with the applicant is required prior to conducting the proposed activities. CDFW's issuance of a LSA for a project that is subject to CEQA will require related environmental compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the CEQA document of the lead agency for the Project. To minimize additional requirements by CDFW pursuant to section 1600 *et seq.* and/or under CEQA, the DEIR should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for issuance of the LSA.[1]

   a) The project area supports aquatic, riparian, and wetland habitats; therefore, a preliminary delineation of the streams and their associated riparian habitats should be included in the DEIR. The delineation should be conducted pursuant to the U. S. Fish and Wildlife Service (FWS) wetland definition adopted by CDFW.[2] Be advised that some wetland and riparian habitats subject to CDFW's authority may extend beyond the jurisdictional limits of the U.S. Army Corps of Engineers' Section 404 permit and Regional Water

[1] A notification package for a LSA may be obtained by accessing the Department's web site at www.wildlife.ca.gov/habcon/1600.
[2] Cowardin, Lewis M., et al. 1970. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Department of the Interior, FWS.

Quality Control Board Section 401 Certification.

b) In areas of the Project which may support ephemeral or episodic streams, herbaceous vegetation, woody vegetation, and woodlands also serve to protect the integrity of these resources and help maintain natural sedimentation processes; therefore, CDFW recommends effective setbacks be established to maintain appropriately-sized vegetated buffer areas adjoining ephemeral drainages.

c) Project-related changes in upstream and downstream drainage patterns, runoff, and sedimentation should be included and evaluated in the DEIR.

6) Wetland Resources. As described in Fish & Game Code Section 703(a), CDFW is guided by the Fish and Game Commission's policies. The Commission's Wetlands Resources policy "...seek[s] to provide for the protection, preservation, restoration, enhancement and expansion of wetland habitat in California. Further, it is the policy of the Fish and Game Commission to strongly discourage development in or conversion of wetlands. It opposes, consistent with its legal authority, any development or conversion which would result in a reduction of wetland acreage or wetland habitat values. To that end, the Commission opposes wetland development proposals unless, at a minimum, project mitigation assures there will be "no net loss" of either wetland habitat values or acreage. The Commission strongly prefers mitigation which would achieve expansion of wetland acreage and enhancement of wetland habitat values" (see http://www.fgc.ca.gov/policy/).

a) The Wetlands Resources policy provides a framework for maintaining wetland resources and establishes mitigation guidance. CDFW encourages avoidance of wetland resources as a primary mitigation measure and activities that would avoid the reduction of wetland acreage, function, or habitat values, and discourages the development or type conversion of wetlands to uplands. Once avoidance and minimization measures have been exhausted, the Project must include mitigation measures to assure a "no net loss" of either wetland habitat values, or acreage, for unavoidable impacts to wetland resources. Such impacts may include (but are not limited to) conversion to subsurface drains, placement of fill or building of structures within the wetland, and channelization or removal of materials from the streambed. All wetlands and watercourses (whether ephemeral, intermittent, or perennial) should be retained and provided with substantial setbacks to enable preservation of the riparian and aquatic values/functions for the benefit of on-site and off-site wildlife. CDFW recommends the DEIR include mitigation measures to compensate for unavoidable wetland impacts, including loss of function and value.

b) The Commission's Water policy guides CDFW to ensure the quantity and quality of the waters of this state should be apportioned and maintained respectively so as to produce and sustain maximum numbers of fish and wildlife; to provide maximum protection and enhancement of fish and wildlife and their habitat; encourage and support programs to maintain or restore a high quality of the waters of this state, and prevent the degradation thereof caused by pollution and contamination; and endeavor to keep as much water as possible open and accessible to the public for the use and enjoyment of fish and wildlife (see http://www.fgc.ca.gov/policy/). CDFW recommends avoidance of Project-related practices and structures that use excessive amounts of water and minimization of impacts that negatively affect water quality, to the maximum extent feasible.

7) Biological Baseline Assessment. To provide a complete assessment of the flora and fauna within and adjacent to the project area, with emphasis upon identifying endangered,

threatened, sensitive, regionally and locally unique species, and sensitive habitats, the DEIR should include the following information:

a) Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region (CEQA Guidelines § 15125[c]);

b) A thorough, recent, floristic-based assessment of special status plants and natural communities, following CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (see http://www.dfg.ca.gov/habcon/plant/);

c) An assessment of the presence of rate/listed plant species conducted at the appropriate time of year. Under Section 1913(c) of the NPPA, the owner of land where a rare or endangered native plant is growing is required to notify the CDFW at least 10 days in advance of changing the land use, to allow for salvage of rare or endangered plants;

d) Floristic, alliance- and/or association-based mapping and vegetation impact assessments conducted at the Project site and within the neighboring vicinity. *The Manual of California Vegetation*, second edition, should be used to inform this mapping and assessment to fully allow CDFW to comment on Project impact significance to vegetative communities (Sawyer et al. 2009[3]). Adjoining habitat areas should be included in this assessment where site activities could lead to direct or indirect impacts off-site. Habitat mapping at the alliance level will help establish baseline vegetation conditions;

e) A complete, recent, assessment of the biological resources associated with each habitat type on site and within adjacent areas that could also be affected by the Project. CDFW's California Natural Diversity Data Base (CNDDB) in Sacramento should be contacted to obtain current information on any previously reported sensitive species and habitat. CDFW recommends that CNDDB Field Survey Forms be completed and submitted to CNDDB to document survey results. Online forms can be obtained and submitted at http://www.dfg.ca.gov/biogeodata/cnddb/submitting_data_to_cnddb.asp;

f) A complete, recent assessment of rare, threatened, and endangered, and other sensitive species on site and within the area of potential effect, including California SSC and California Fully Protected Species (Fish and Game Code §§ 3511, 4700, 5050 and 5515). Species to be addressed should include all those which meet the CEQA definition (see CEQA Guidelines § 15380). Impacts to California species of special concern (SSC) should be considered a significant direct and cumulative adverse effect under CEQA without implementing appropriate avoid and/or mitigation measures (CEQA Guidelines §§ 15064, 15065, 15125[c] and 15380). CDFW recommends that the DEIR include a full evaluation of potential direct and indirect impacts to SSC from construction and operation of the Project. Seasonal variations in use of the project area should also be addressed. Focused species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with CDFW and FWS; and,

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[3]Sawyer, J. O., Keeler-Wolf, T., and Evens J.M. 2009. A manual of California Vegetation, 2nd ed. ISBN 978-0-943460-49-9.

g) A recent, wildlife and rare plant survey. CDFW generally considers biological field assessments for wildlife to be valid for a one-year period and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of the proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if build-out could occur over a protracted period, or in phases.

8) Biological Direct, Indirect and Cumulative Impacts. To provide a thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts, the following should be addressed in the DEIR:

a) A discussion of potential adverse impacts from lighting, noise, human activity, exotic species, and drainage. The latter subject should address Project-related changes on drainage patterns and downstream of the Project site; the volume, velocity and frequency of existing and post-Project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and, post-Project fate of runoff from the Project site. The discussion should also address the proximity of the extraction activities to the water table, whether dewatering would be necessary and the potential resulting impacts on the habitat (if any) supported by the groundwater. Mitigation measures proposed to alleviate such impacts should be included;

b) A discussion regarding indirect Project impacts on biological resources, including resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed or existing reserve lands (e.g., preserve lands associated with a Natural Community Conservation Plan (NCCP, Fish and G .Code § 2800 et. seq.). Impacts on, and maintenance of, wildlife corridor/movement areas, including access to undisturbed habitats in adjacent areas, should be fully evaluated in the DEIR;

c) An analysis of impacts from land use designations and zoning located nearby or adjacent to natural areas that may inadvertently contribute to wildlife-human interactions. A discussion of possible conflicts and mitigation measures to reduce these conflicts should be included in the environmental document; and,

d) A cumulative effects analysis, as described under CEQA Guidelines section 15130. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.

9) Avoidance, Minimization, and Mitigation for Sensitive Plants. The DEIR should include measures to fully avoid and otherwise protect sensitive plant communities from Project-related direct and indirect impacts. CDFW considers these communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S-1, S-2, S-3 and S-4 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by querying the CNDDB and are included in *The Manual of California Vegetation* (Sawyer et al. 2009).

10) Compensatory Mitigation. For any impacts that have been adequately demonstrated to be unavoidable, CDFW believes that the City should require a scientifically rigorous monitoring and management program as part of the Project's CEQA mitigation, monitoring and reporting program (MMRP) that would include adaptive management strategies (Public Resources

Code 21081.6 and CEQA Guidelines Section 15097). The DEIR should include mitigation measures for adverse Project-related impacts to sensitive plants, animals, and habitats. Mitigation measures should emphasize avoidance and reduction of Project impacts. For unavoidable impacts, on-site habitat restoration or enhancement should be discussed in detail. If on-site mitigation is not feasible, or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, off-site mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed. Areas proposed as mitigation lands should be protected in perpetuity with a conservation easement, financial assurance and dedicated to a qualified entity for long-term management and monitoring. Under Government Code section 65967, the lead agency must exercise due diligence in reviewing the qualifications of a governmental entity, special district, or nonprofit organization to effectively manage and steward land, water, or natural resources on mitigation lands it approves.

11) Long-Term Management of Mitigation Lands. For proposed preservation and/or restoration, the DEIR should include measures to protect the targeted habitat values from direct and indirect negative impacts in perpetuity. The objective should be to offset the Project-induced qualitative and quantitative losses of wildlife habitat values. Issues that should be addressed include (but are not limited to) restrictions on access, proposed land dedications, monitoring and management programs, control of illegal dumping, water pollution, and increased human intrusion. An appropriate non-wasting endowment should be set aside to provide for long-term management of mitigation lands. Areas proposed as mitigation should have a conservation easement and be dedicated to an entity, which has been approved to hold/manage lands.

12) Nesting Birds. To avoid impacts to nesting birds, the DEIR should require that clearing of vegetation and construction occur outside of the peak avian breeding season, which generally runs from February 1st through September 1st (as early as January 1 for some raptors). If avoidance of the avian breeding season is not feasible, a qualified biologist with experience in conducting bird breeding surveys should conduct weekly bird surveys for nesting birds within three days prior to the work in the area and ensure that no nesting birds in the project area would be impacted by the Project. If an active nest is identified, a buffer shall be established between the construction activities and the nest so that nesting activities are not interrupted. The buffer should be a minimum width of 300-feet (500-feet for raptors), be delineated by temporary fencing, and remain in effect if construction is occurring or until the nest is no longer active. No Project construction shall occur within the fenced nest zone until the young have fledged, are no longer being fed by the parents, have left the nest, and will no longer be impacted by the Project. Reductions in the nest buffer distance may be appropriate depending on the avian species involved, ambient levels of human activity, screening vegetation, or possibly other factors.

13) Translocation/Salvage of Plants and Animal Species. Translocation and transplantation is the process of moving an individual from the Project site and permanently moving it to a new location. CDFW generally does not support the use of, translocation or transplantation as the primary mitigation strategy for unavoidable impacts to rare, threatened, or endangered plant or animal species. Studies have shown that these efforts are experimental and the outcome unreliable. CDFW has found that permanent preservation and management of habitat capable of supporting these species is often a more effective long-term strategy for conserving sensitive plants and animals and their habitats.

14) Move Out of Harm's Way. The proposed Project is anticipated to result in clearing of natural habitats that support many species of indigenous wildlife. To avoid direct mortality to wildlife,

we recommend that a qualified biological monitor approved by CDFW be on-site prior to and during ground and habitat disturbing activities to move out of harm's way special status species or other wildlife of low mobility that would be injured or killed by grubbing or Project-related construction activities. It should be noted that the temporary relocation of on-site wildlife does not constitute effective mitigation for the purposes of offsetting Project impacts associated with habitat loss. If the Project requires species to be removed, disturbed, or otherwise handled, we recommend that the DEIR clearly identify that the designated entity shall obtain all appropriate state and federal permits.

15) Wildlife Movement and Connectivity. The project area supports significant biological resources and contains habitat connections that facilitate local and regional movement across the broader landscape, sustaining both transitory and permanent wildlife populations. The Project could impact wildlife movement from direct or indirect Project-related activities such as grading, lighting, noise, dust, and increased human activity that may displace wildlife. The DEIR should evaluate on-site features that contribute to habitat connectivity, evaluate Project impacts, and include measures to protect/maintain those resources.

16) Revegetation/Restoration Plan. Plans for restoration and re-vegetation should be prepared by persons with expertise in southern California ecosystems and native plant restoration techniques. Plans should identify the assumptions used to develop the proposed restoration strategy. Each plan should include, at a minimum: (a) the location of restoration sites and assessment of appropriate reference sites; (b) the plant species to be used, sources of local propagules, container sizes, and seeding rates; (c) a schematic depicting the mitigation area; (d) a local seed and cuttings and planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity. Monitoring of restoration areas should extend across a sufficient time frame to ensure that the new habitat is established, self-sustaining, and capable of surviving drought.

    a) CDFW recommends that local on-site propagules from the project area and nearby vicinity be collected and used for restoration purposes. On-site seed collection should be initiated soon to accumulate sufficient propagule material for subsequent use in future years. On-site vegetation mapping at the alliance and/or association level should be used to develop appropriate restoration goals and local plant palettes. Reference areas should be identified to help guide restoration efforts. Specific restoration plans should be developed for various Project components as appropriate.

    b) Restoration objectives should include providing special habitat elements where feasible to benefit key wildlife species. These physical and biological features can include, for example, retention of woody material, logs, snags, rocks and brush piles (see Mayer and Laudenslayer, 1988[4], for a more detailed discussion of special habitat elements).

We appreciate the opportunity to comment on the NOP for the Calleguas-Las Virgenes Municipal Water District(s) Interconnection Project. Questions regarding this letter and further coordination on these issues should be directed to Ms. Jamie Jackson, Senior Environmental

[4]Mayer, K. E. and W. F. Laudenslayer, Jr. 1988. Editors: A guide to wildlife habitats of California. State of California, The Resources Agency, Department of Forestry and Fire Protection, Sacramento, CA.

Scientist (Specialist), at (805) 382-6906 or jamie.jackson@wildlife.ca.gov.

Sincerely,

Erinn Wilson
Environmental Program Manager I

ec: Randy F. Rodriguez, CDFW, Los Alamitos
Sarah Rains, CDFW, Thousand Oaks
Office of Planning and Research, State Clearinghouse, Sacramento
Steve Henry, UFWS Ventura, steve_henry@fws.gov

From: Toan Duong [mailto:TDUONG@dpw.lacounty.gov]
Sent: Wednesday, December 12, 2018 3:10 PM
To: Eric Bergh <EBergh@calleguas.com>
Cc: Jose Suarez <JSUAREZ@dpw.lacounty.gov>; Long Thang <LTHANG@dpw.lacounty.gov>; Giles Coon <GCOON@dpw.lacounty.gov>
Subject: CALLEGUAS MWD / LAS VIRGENES MWD INTERCONNECTION PROJECT NOP

Mr. Bergh,

NOTICE OF PREPARATION OF A
DRAFT ENVIRONMENTAL IMPACT REPORT
CALLEGUAS MWD / LAS VIRGENES MWD INTERCONNECTION PROJECT

The Los Angeles County Public Works (LACPW) received the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) and Initial Study dated October 31, 2018 for the subject project. There were no clear due date on the NOP and LACPW reviewed the initial study within 30 days of receiving it. Please accept this email as LACPW comments for this project. Also a signed letter from LACPW with the same content will be sent under separate cover.

To improve water reliability, Calleguas Municipal Water District (CMWD) and the Las Virgenes Municipal Water District (LVMWD) propose to interconnect their water systems. The project spans both Los Angeles County and Ventura County. There will be new connections between existing water supply pipes, new pump and pressure regulating stations, and new water supply pipes. There is also potential discharge to existing local sewer or storm drain facilities.

The Los Angeles County Consolidated Sewer Maintenance District (CSMD) is responsible for the maintenance of the local sewers within the project area and the Los Angeles County Flood Control District (LACFCD) is responsible for the maintenance of the local storm drains within the project area. The proposed LVMWD interconnection alignment along Lindero Canyon Road from the Ventura/Los Angeles County line to Thousand Oaks Boulevard as shown in Figure 4 will cross several LACFCD storm drains. Maps of existing storm drain and sewer systems are available online at the following links:

https://dpw.lacounty.gov/fcd/StormDrain/index.cfm
https://dpw.lacounty.gov/smd/sewernetwork/

The following comments from LACPW are for your consideration:

1. If the project proposes any new connection to existing LACFCD/CSMD owned storm drain/sewer facilities, or if the project proposes to construct new storm drain/sewer facilities that are intended to be transferred to the LACFCD or CSMD for maintenance upon completion, or if the project creates an impact to the existing storm drain/sewer systems, a permit from LACPW is required prior to construction. Plans must be submitted to LACPW for review and approval. Contact LACPW, Land Development Division, Permits Section for submittal requirements and permit fees at (626) 458-3129.

2. Page 6, Section 1.4, Operation, Item 3 states "Discharge the water into an existing sewer or storm drain facility, if water loses disinfection residual and cannot be delivered to customers."

Page 30, Section 2.9, Hydrology and Water Quality, Item e indicates that the proposed project would have "no impact" on the capacity of existing or planned stormwater drainage systems.

Page 37, Section 2.17, Utilities and Service Systems, Item e indicates that the proposed project would have "no impact" on the capacity of existing sewer systems.

We cannot substantiate the initial study findings for both Sections 2.9 and 2.17. The DEIR should provide discussion on impacts for both sections and provide mitigations as needed should any of LACFCD/CSMD facilities are affected. The discussion should address the capacity of the existing local storm drain and sewer systems that may be used for the project operation. An approved hydrology study and/or sewer area study from LACPW is required.

If you have any questions regarding comment Nos. 1 and 2, please contact Mr. Long Thang of Public Works' Stormwater Management Division at (626) 458-5119.

We request the opportunity to review the future environmental document when it is available. If you have any other questions or require additional information, please contact me or Mr. Jose Suarez of LACPW's Land Development Division at (626) 458-4921.

Thank you.

Toan Duong
Civil Engineer
Los Angeles County Public Works
Office: (626) 458-4921

APPENDIX C

MITIGATION MONITORING & REPORTING PROGRAM

MITIGATION MONITORING AND REPORTING

Section 15097(a) of the State Guidelines for the Implementation of the California Environmental Quality Act and Section 21081.6 of the Public Resources Code, requires the lead agency (CMWD) to adopt a monitoring program to ensure mitigation measures are complied with during implementation of the project. In compliance with these requirements, a Mitigation Monitoring and Reporting Program Implementation Table is attached. This Table identifies the timing, monitoring methods, responsibility and compliance verification method for all mitigation measures identified in this EIR. Monitoring would be conducted by the CMWD's construction inspectors and qualified specialists under contract to the CMWD.

CALLEGUAS MWD-LAS VIRGENES MWD INTERCONNECTION PROJECT
MITIGATION MONITORING & REPORTING PROGRAM – IMPLEMENTATION TABLE

Mitigation Measure	Implementation Timing	Monitoring Methods	Monitoring Frequency	Party Responsible for Monitoring	Method of Compliance Verification	Verification of Compliance		
						Signature	Date	Remarks
AIR QUALITY								
MM AQ-1: Applicable construction mitigation measures listed in Section 7.4 of the VCAPCD Air Quality Assessment Guidelines and applicable Best Available Control Measures listed in SCAQMD Rule 403 would be implemented.	During all project construction activities	The construction inspector will ensure measures are implemented	Daily during construction activities	Calleguas Municipal Water District and Las Virgenes Municipal Water District	CMWD or LVMWD staff will review monitoring reports			
BIOLOGICAL RESOURCES								
MM BIO-1: Aquatic Reptile Surveys and Exclusion Measures. Focused surveys for western pond turtle and two-striped garter snake shall be conducted in Lindero Creek adjacent to the PS/PRS site no more than seven days prior to any earthwork or vegetation removal. If any of these species are detected, exclusion fencing (Ertec special-status species fencing, or equivalent) shall be installed along the eastern boundary of the temporary construction easement area near Lindero Creek.	No more than 7 days prior to the initiation of vegetation removal or earthwork at the PS/PRS site	The construction inspector will ensure surveys are completed and fencing is installed (if needed)	Fencing (if needed) will be monitored weekly to ensure its integrity	Calleguas Municipal Water District	CMWD staff will review monitoring reports			

CALLEGUAS MWD-LAS VIRGENES MWD INTERCONNECTION PROJECT
MITIGATION MONITORING & REPORTING PROGRAM – IMPLEMENTATION TABLE

Mitigation Measure	Implementation Timing	Monitoring Methods	Monitoring Frequency	Party Responsible for Monitoring	Method of Compliance Verification	Verification of Compliance		
						Signature	Date	Remarks
BIOLOGICAL RESOURCES (Continued)								
MM BIO-2: Breeding Migratory Bird Avoidance Measures. Vegetation removal and pipeline installation and related construction activity adjacent to tree windrows or native vegetation 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 earlier than 14 days and no later 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) shall be established around the nest. The buffer area may be reduced if nest monitoring by a qualified biologist indicates construction activities are not adversely affecting nesting success. No construction activity shall occur within the buffer area until a biologist determines that the nest is abandoned, or fledglings are adequately independent from the adults.	Prior to any vegetation removal or earthwork near tree windrows or native vegetation, if conducted between February 15 and August 15	The construction inspector will ensure surveys are completed as needed and construction does not occur with active nest buffer areas	Daily, if active nests are found	Calleguas Municipal Water District and Las Virgenes Municipal Water District	CMWD or LVMWD staff will review monitoring reports			

CALLEGUAS MWD-LAS VIRGENES MWD INTERCONNECTION PROJECT
MITIGATION MONITORING & REPORTING PROGRAM – IMPLEMENTATION TABLE

Mitigation Measure	Implementation Timing	Monitoring Methods	Monitoring Frequency	Party Responsible for Monitoring	Method of Compliance Verification	Verification of Compliance		
						Signature	Date	Remarks
NOISE								
MM N-1. The project shall comply with applicable municipal codes restricting nighttime construction work: • Obtain a permit for nighttime (after 7 p.m.) pipeline tie-in work to the Lindero Feeder No. 2 from the City of Thousand Oaks Public Works Director in accordance with Section 8-11.01 of the City's Municipal Code. • Obtain written permission from the Westlake Village City Manager for nighttime (after 7 p.m.) pipeline tie-in work to the LVMWD potable water system in accordance with Section 4.4.050(D) of the City's Municipal Code.	Contact the affected city official at least two weeks prior to any planned nighttime work within the cities of Thousand Oaks or Westlake Village	CMWD staff will ensure permission is obtained from affected cities prior to any nighttime work	Initially, prior to nighttime work	Calleguas Municipal Water District (Thousand Oaks) and Las Virgenes Municipal Water District (Westlake Village)	CMWD and LVMWD staff will review city documentation granting permission for nighttime work			

CALLEGUAS MWD-LAS VIRGENES MWD INTERCONNECTION PROJECT
MITIGATION MONITORING & REPORTING PROGRAM – IMPLEMENTATION TABLE

Mitigation Measure	Implementation Timing	Monitoring Methods	Monitoring Frequency	Party Responsible for Monitoring	Method of Compliance Verification	Verification of Compliance		
						Signature	Date	Remarks
CULTURAL RESOURCES								
MM CR-1. The following mitigation measures are consistent with the guidelines of the State Office of Historic Preservation and shall be implemented during project construction. A worker cultural resources sensitivity program shall be implemented for all project components. Prior to any ground-disturbing activity, a qualified archeologist shall provide an initial sensitivity training session to all affected CMWD and LVMWD staff, 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 sensitivity program shall address the cultural sensitivity of the affected 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 non-compliance.	Prior to any ground disturbing activities	The construction inspector will ensure all construction workers attend the cultural resources sensitivity program	Weekly, or as needed to ensure all workers attend the cultural resources sensitivity program	Calleguas Municipal Water District	CMWD staff will review attendance records			

CALLEGUAS MWD-LAS VIRGENES MWD INTERCONNECTION PROJECT
MITIGATION MONITORING & REPORTING PROGRAM – IMPLEMENTATION TABLE

Mitigation Measure	Implementation Timing	Monitoring Methods	Monitoring Frequency	Party Responsible for Monitoring	Method of Compliance Verification	Verification of Compliance		
						Signature	Date	Remarks
CULTURAL RESOURCES (Continued)								
An Extended Phase I Survey shall be completed in all areas of planned excavation and consist of shovel test probes and auger probes to determine whether or not intact subsurface cultural deposits are present. A qualified archaeologist shall oversee the Extended Phase I Survey and a Native American representative shall monitor all excavation. If intact subsurface cultural deposits are discovered during the Extended Phase I Survey, Phase II subsurface testing and evaluation shall be performed to determine the vertical and horizontal extent and composition of cultural deposits. If intact subsurface cultural deposits are determined to be significant after Phase II testing, project redesign or Phase III Data Recovery mitigation will be required. If intact subsurface cultural deposits are not found during the Extended Phase I Survey, no further work or mitigation is required at the PS/PRS site. 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. CMWD and LVMWD 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 (NAHC).	Prior to any ground disturbance at the PS/PRS site	CMWD staff will ensure archeological testing and evaluation is completed prior to excavation at the PS/PRS site	Initially, prior to construction at the PS/PRS site	Calleguas Municipal Water District	CMWD staff will review archeological survey reports			

CALLEGUAS MWD-LAS VIRGENES MWD INTERCONNECTION PROJECT
MITIGATION MONITORING & REPORTING PROGRAM – IMPLEMENTATION TABLE

Mitigation Measure	Implementation Timing	Monitoring Methods	Monitoring Frequency	Party Responsible for Monitoring	Method of Compliance Verification	Verification of Compliance		
						Signature	Date	Remarks
HAZARDOUS MATERIALS								
MM HAZ-1: All areas proposed for excavation at the PS/PRS site shall be tested and evaluated to identify soil contamination. A Site Evaluation Plan shall be developed and implemented prior to any soil disturbance. The Site Evaluation Plan shall include as a minimum: • Identification of soil sampling locations to encompass the entire footprint of proposed facilities. • Soil testing for organochlorine pesticides, petroleum hydrocarbons, and arsenic to the depth of probable historic agricultural cultivation. • Identification of soil contamination screening values. All soil with contamination exceeding California Human Health Screening Levels (or other approved screening levels) shall be segregated, stockpiled and covered as they are excavated. Contaminated soil shall be removed from the PS/PRS site to an appropriate solid waste disposal facility prior to completion of construction. Soil testing shall be coordinated with archeological testing to avoid disturbance of unreported cultural resources. Therefore, any boring or excavation associated with soil testing shall be conducted after archeological testing indicates the lack of any cultural deposits or following Phase II subsurface testing and Phase III data recovery, as appropriate.	Prior to any ground disturbance at the PS/PRS site and following completion of archeological testing and evaluation	CMWD staff will ensure soil testing and evaluation is completed prior to excavation at the PS/PRS site	Initially, prior to construction at the PS/PRS site	Calleguas Municipal Water District	CMWD staff will review soil contamination evaluation reports			