



# Ojai Water System Improvements Project

## Draft Initial Study – Mitigated Negative Declaration



*prepared by*

**Casitas Municipal Water District**

1055 Ventura Avenue

Oak View, California 93022

Contact: Julia Aranda

*prepared with the assistance of*

**Rincon Consultants, Inc.**

180 North Ashwood Avenue

Ventura, California 93003

**March 2019**



**RINCON CONSULTANTS, INC.**

Environmental Scientists | Planners | Engineers

[rinconconsultants.com](http://rinconconsultants.com)



# Table of Contents

---

Acronyms and Abbreviations.....	v
Chapter 1: Introduction .....	1
1.1    Project Title .....	1
1.2    Lead Agency Name and Address.....	1
1.3    Contact Person.....	1
1.4    Project Background and Overview.....	1
1.5    Project Location .....	2
1.6    The Ojai Water System Condition Based Assessment and Water Master Plan.....	2
1.7    Existing Setting and Surrounding Land Uses.....	3
1.8    General Plan Land Use Designation .....	3
1.9    Required Approvals.....	4
1.10   Scope and Use of this Document.....	4
1.11   Impact Terminology .....	5
1.12   Recommended Level of Environmental Documentation.....	6
Chapter 2: Project Description.....	7
2.1    Purpose of the Project .....	7
2.2    Pipeline Construction.....	7
2.3    Tank Construction.....	14
2.4    Well Construction .....	16
2.5    Booster Pump Construction.....	17
2.6    Construction Activities, Staging, and Timing .....	18
Environmental Factors Potentially Affected.....	19
Determination .....	19
Chapter 3: Environmental Checklist .....	21
3.1    Aesthetics.....	21
3.2    Agriculture and Forestry Resources.....	27
3.3    Air Quality .....	29
3.4    Biological Resources .....	37
3.5    Cultural Resources .....	49
3.6    Energy .....	55
3.7    Geology and Soils.....	57
3.8    Greenhouse Gas Emissions .....	65

3.9	Hazards and Hazardous Materials .....	69
3.10	Hydrology and Water Quality .....	75
3.11	Land Use and Planning .....	81
3.12	Mineral Resources .....	83
3.13	Noise .....	85
3.14	Population and Housing .....	97
3.15	Public Services.....	99
3.16	Recreation.....	101
3.17	Transportation .....	103
3.18	Tribal Cultural Resources .....	107
3.19	Utilities and Service Systems .....	109
3.20	Wildfire .....	113
3.21	Mandatory Findings of Significance .....	115
Chapter 4:	References .....	117
4.1	Bibliography .....	117
4.2	List of Preparers .....	122

## Tables

Table 1	Summary of Potentially Required Approvals .....	4
Table 2	Well Production Capacity.....	16
Table 3	Pump Plant Capacity .....	18
Table 4	Construction Emissions .....	33
Table 5	Estimated GHG Emissions .....	68
Table 6	Noise Measurements.....	87
Table 7	Noise Sensitive Receptors in Project Area .....	89
Table 8	Exterior Noise Standards.....	90
Table 9	Estimated Noise Levels Generated during Pipeline Replacement.....	93
Table 10	Estimated Noise Levels Generated during Well Construction/Replacement.....	94
Table 11	Estimated Noise Levels Generated During New Tank Construction.....	94
Table 12	Typical Vibration Levels Generated by Construction Equipment .....	96

## Figures

Figure 1	Regional Project Location .....	9
Figure 2	Project Site Vicinity .....	10
Figure 3	Jurisdictional Boundaries .....	11
Figure 4	Ojai System Pressure Zones .....	12
Figure 5	Pipeline Replacement Project Types.....	13

Figure 6	Project Area Photos .....	24
Figure 7	Geologic Units and Paleontological Sensitivity .....	59
Figure 8	Hazardous Sites Located within the Project Area .....	73
Figure 9	Noise Measurement Locations .....	88

## Appendices

Appendix A	CalEEMod Results
Appendix B	Biological Resources Assessment
Appendix C	Cultural Resources Technical Report
Appendix D	Noise Measurement Data Sheets
Appendix E	Roadway Construction Noise Model Worksheets
Appendix F	AB 52 Consultation Letter
Appendix G	Mitigation Monitoring and Reporting Program

*This page intentionally left blank.*

# Acronyms and Abbreviations

---

AFY	Acre-Feet per Year
AMSL	Above Mean Sea Level
AQMP	Air Quality Management Plan
BMP	Best Management Practice
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CBA	Condition Based Assessment
CBC	California Building Code
CEQA	California Environmental Quality Act
CIP	Capital Improvement Plan
CMP	Congestion Management Plan
CMWD	Casitas Municipal Water District
CO	Carbon Monoxide
CO <sub>2</sub> e	Carbon Dioxide Equivalent
CY	Cubic Yards
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GHG	Greenhouse Gases
GPM	Gallons per Minute
GSWC	Golden State Water Company
HDD	Horizontal Directional Drilling
HMMSCP	Hazardous Materials Management and Spill Control Plan
IS-MND	Initial Study-Mitigated Negative Declaration
LF	Linear Feet

Casitas Municipal Water District  
**Ojai Water System Improvements Project**

MRZ	Mineral Resource Zone
MT	Metric Tons
NAAQS	National Ambient Air Quality Standards
NOx	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
OSHA	Occupational Safety and Health Administration
OVSD	Ojai Valley Sanitary District
RCNM	Roadway Construction Noise Model
ROC	Reactive Organic Compounds
RWQCB	Regional Water Quality Control Board
SCAQMD	South Coast Air Quality Management District
SR	State Route
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
UBC	Uniform Building Code
USDA	United States Department of Agriculture
VCAPCD	Ventura County Air Pollution Control District
VCTC	Ventura County Transportation Commission
WMP	Water Master Plan



# Chapter 1: Introduction

---

## 1.1 Project Title

Ojai Water System Improvements Project

## 1.2 Lead Agency Name and Address

Casitas Municipal Water District  
1055 Ventura Avenue  
Oak View, California 93022

## 1.3 Contact Person

Julia Aranda, PE  
Engineering Manager  
Casitas Municipal Water District  
Phone: (805) 649-2251 ext. 107; e-mail: [jaranda@casitaswater.com](mailto:jaranda@casitaswater.com)

## 1.4 Project Background and Overview

Casitas Municipal Water District (CMWD) provides potable water to customers throughout its 137.5-square-mile service area in western Ventura County. CMWD serves over 65,000 residential customers and hundreds of agricultural customers throughout its service area. The CMWD service area boundary encompasses the city of Ojai, Upper Ojai, the Ventura River Valley area, the city of Ventura to Mills Road, and the Rincon and beach areas from Solimar to the Santa Barbara County line. The city of Ojai is in the northern portion of CMWD's service area. The Ojai Water System (Ojai system) was formerly owned and operated by Golden State Water Company (GSWC), a private water purveyor, although CMWD provided a portion of water supplies to the city. In June 2017, CMWD acquired the entire system from GSWC.

The Ojai system serves approximately 2,940 residences and businesses through a network of 45 miles of distribution pipeline, six storage reservoirs, five booster stations, and six groundwater wells. Historically, groundwater from the Ojai Valley Basin supplied over 85 percent of water to the Ojai system, with the remainder sourced from surface water in Lake Casitas (GSWC 2011). The Ojai Valley Basin has an operational safe yield of 5,026 acre-feet per year (AFY) with approximately 149 privately and publicly owned wells supplying water for tree crop agriculture, residents, and businesses in Ojai and the surrounding areas (CMWD 2018). Prior to CMWD's acquisition of the Ojai system, GSWC's extractions to supply potable water to the system accounted for approximately 41 percent of the basin's annual extraction, with the remainder extracted for agricultural and individual residential use (CMWD 2016). Other users of the groundwater basin include individual private wells and a number of mutual water companies serving agricultural and residential areas overlying the basin. The Ojai Basin Groundwater Management Agency oversees management and planning efforts for the non-adjudicated basin. CMWD also manages surface water in Lake Casitas.

The Ojai Water System Improvements Project (proposed project) involves the replacement of pipeline segments to improve fire flow and/or pipeline segments approaching the end of their service life. The general purpose of the proposed project is to improve fire flow and replace aging mains, not to increase pipeline capacity to serve additional customers. The proposed project replaces approximately eight miles of pipeline segments throughout the Ojai system service area, and includes plans to rehabilitate two tanks, demolish three existing tanks, and construct one new tank; rehabilitate one booster pump station, upgrade an additional pump station, demolish and construct two new pump stations, and abandon one pump station; and rehabilitate or replace six active wells in the Ojai system. Tank, booster pump station, and well rehabilitation involves replacing existing infrastructure with similar capacity infrastructure. Booster pump station upgrades would occur at the Heidelberger pump station and involve activities similar to pump rehabilitation, such as replacement of existing pumps, but also include installation of an additional pump. The proposed project also includes potential construction of a new well in the Ojai system.

Chapter 2, *Project Description*, provides a detailed description of the proposed project, including figures showing the proposed pipeline replacement and supporting infrastructure rehabilitation.

## 1.5 Project Location

The proposed project includes the potable water distribution system service area for the city of Ojai in western Ventura County. This system also serves unincorporated areas north and south of the city of Ojai and a small portion of the unincorporated Meiners Oaks community, west of Ojai. Ojai is approximately 15 miles inland from the city of Ventura and is bounded generally by San Antonio Creek to the east and south, State Route (SR) 33 to the west, and the Topa Topa Mountains to the north. Figure 1 shows the regional location of the Ojai system service area.

## 1.6 The Ojai Water System Condition Based Assessment and Water Master Plan

In November 2018, CMWD finalized the *Ojai Water System Condition Based Assessment (CBA) and Water Master Plan (WMP)* to “assist CMWD in long-term planning and budgeting for water system projects” (CMWD 2018). CMWD prepared the CBA and WMP to assess the ability of the system to meet the needs of current and future customers and evaluate the system condition and remaining useful life of Ojai system assets. The CBA and WMP identified a list of improvements to the Ojai system necessary to ensure existing and projected demands, including fire flow demands, are met. The Capital Improvement Plan (CIP) includes these projects and ranks them based on priority for completion.

### Existing Potable Water Facilities

The Ojai Water System consists of approximately 45 miles of distribution pipelines and transmission mains. Transmission mains are large pipelines conveying raw water from supply sources to treatment and storage facilities; distribution pipelines connect to the transmission mains and transport water to customers in much smaller piping infrastructure. The CBA and WMP found most areas in the distribution system have adequate pressures across a range of demand scenarios, but the assessment identified four locations with low or high pressure due to their elevation in relation to the gravity reservoir in each zone. Many water mains are recommended for upgrade to improve system fire flow and pipeline velocities, and to replace aging infrastructure currently beyond its useful life.

The CBA and WMP evaluated pipeline condition using pipe age, material, historical leak reports, and CMWD operations staff knowledge. Approximately four miles of pipeline included in the CIP are recommended for replacement or abandonment based on condition. A pipeline replacement curve was generated based on when pipelines and assets will reach the end of their useful lives. Findings indicate over three miles of pipeline are close to exceeding their useful life, excluding pipes identified in a capacity or condition project. The CBA and WMP recommends CMWD budget \$0.72 million for pipeline replacements annually to replace aging infrastructure and maintain reliable service to existing customers (CMWD 2018).

CMWD maintains and operates five booster pump stations in the Ojai system. The CBA and WMP determined all stations are sized adequately to meet system demands except the Heidelberger Pump Station. This facility must meet maximum day demand plus fire flow. The CBA and WMP analysis recommended construction of a fire pump at the Heidelberger Pump Station to meet the requirements for fire flow. The condition of all booster pump stations ranged from poor to fair. The CBA and WMP determined all pump stations would require at least minor rehabilitation within the next ten years, with some needing major replacements (CMWD 2018). Subsequent technical memoranda prepared for CMWD recommend demolition of existing and construction of new Arbolada and Signal pump stations, and abandonment of the Valley View pump station.

The CBA and WMP included an evaluation of existing storage infrastructure in the Ojai system, specifically six storage tanks maintained by CMWD to provide operational, emergency, and fire flow storage. Diving inspection of these tanks revealed three tanks in poor condition: two Running Ridge tanks and the Signal tank. The CBA and WMP and subsequent technical memoranda prepared for CMWD recommend demolition of the Running Ridge tanks and Signal tank. The CBA and WMP predicts the Ojai system will face a storage deficit of 0.5 million gallons by 2027 and proposes more detailed technical evaluation of potential solutions, including abandonment and replacement of existing storage facilities or improvements in reliable pumping capacity and zone connections to increase storage throughout the system (CMWD 2018). An additional 0.6-million gallon (MG) tank at the Arbolada facility or a vacant parcel to be acquired by CMWD may be constructed to meet storage demands.

## 1.7 Existing Setting and Surrounding Land Uses

Land uses in and around the project area are predominantly residential with some commercial, mixed-use, and public facilities zoning. The pipeline alignments primarily traverse public roads through residential and commercial areas.

## 1.8 General Plan Land Use Designation

The proposed project is in the vicinity of the following City of Ojai and County of Ventura General Plan land use designations: Agriculture, Open Space/Resource, Institutional/Recreational, Very Low Density Residential, Low Density Residential, Medium Density Residential, Medium High Density Residential, High Density Residential, General Commercial, Downtown Commercial, Commercial Manufacturing, Manufacturing Planned Development, Public/Quasi-Public, Village Mixed-Use, and Rural/ Urban Reserve.

## 1.9 Required Approvals

CMWD is the lead agency under the California Environmental Quality Act (CEQA) with responsibility for approving the project. Table 1 lists the other approvals potentially required for the project.

**Table 1 Summary of Potentially Required Approvals**

Regulating Agency	Potential Permit/Approval	Reason for Permit/Approval
State Water Resources Control Board, Los Angeles Regional Water Quality Control Board	National Pollutant Discharge Elimination System (NPDES) Stormwater Construction General Permit, Clean Water Act Water Quality Certification	Construction activities resulting in ground disturbance exceeding one acre
Caltrans	Encroachment Permit	Pipeline replacement along Ojai Avenue (SR 150)
County of Ventura Department of Transportation	Encroachment Permit	Pipeline replacement in County rights-of-way, including along County-managed segments of Country Club Drive and Verano Drive
City of Ojai	Encroachment Permit	Pipeline replacement along roadway segments in the city of Ojai
Ventura County Air Pollution Control District	Authority to Construct and Permit to Operate	Ensure all replacements of and modifications to existing CMWD facilities comply with Ventura County Air Pollution Control District rules, as well as state and federal new source review requirements
State Water Resources Control Board Division of Drinking Water	Domestic Water Supply Permit/Permit Amendment	Potential new well construction and operation
California Department of Fish and Wildlife	Lake and Streambed Alteration Agreement	Potential disturbance of riparian habitat <sup>1</sup>

<sup>1</sup> As described in Section 3.4, *Biological Resources*, the California Native Diversity Database (CNDDB) lists three sensitive plant communities in the nine quadrangles surrounding the BSA. One of these communities, southern California steelhead stream, is present in the BSA (i.e., San Antonio Creek). The other two communities, southern coast live oak riparian forest and southern sycamore alder riparian woodland, were not observed within the BSA.

## 1.10 Scope and Use of this Document

This Initial Study-Mitigated Negative Declaration (IS-MND) provides an assessment of the potential impacts to environmental resources resulting from implementation of the proposed project. The discussion and level of analysis are commensurate with the expected magnitude and severity of each impact to environmental resources. This document addresses the environmental effects of constructing, replacing, and operating potable water conveyance and storage infrastructure. The analyses in Chapter 3 are based on technical reports and studies prepared for the project, supplemented with other public information sources, provided in the list of references. This IS-MND evaluates the potential impacts to resources areas in Appendix G of the *State CEQA Guidelines*.

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

Mitigation measures have been developed where necessary to reduce potential impacts to a less than significant level. The Mitigation Monitoring and Reporting Program (Appendix G) specifies the conditions of approval necessary for the proposed project to mitigate or avoid significant effects on the environment.

## 1.11 Impact Terminology

The anticipated environmental impacts are identified for each of the resource areas listed above. The level of significance for each resource area uses CEQA terminology as specified below:

- **Potentially Significant.** Adverse environmental consequences with the potential to be significant according to the threshold criteria identified for the resource, even after mitigation strategies are applied and/or a potentially significant adverse for which no mitigation has been identified. If any potentially significant impacts are identified, an Environmental Impact Report (EIR) must be prepared to meet the requirements of CEQA.
- **Potentially Significant Unless Mitigation is Incorporated.** Adverse environmental consequences with the potential to be significant but can be reduced to less than significant levels through the application of identified mitigation strategies not already incorporated into the proposed project.
- **Less than Significant.** Potential adverse environmental consequences have been identified, but they are not so adverse as to meet the significance threshold criteria for the resource. Therefore, no mitigation measures are required.
- **No Impact.** No adverse environmental consequences have been identified for the resource or the consequences are negligible or undetectable. Therefore, no mitigation measures are required.

## 1.12 Recommended Level of Environmental Documentation

Based on the analysis presented herein, an MND is the appropriate level of environmental documentation for the project.

## Chapter 2: Project Description

---

The proposed project involves the trenching and replacement of pipelines to improve fire flow and/or which are approaching the end of their service life. The general purpose of the proposed project is to improve fire flow and replace aging mains, not to increase pipeline capacity for additional customers. The proposed project would replace approximately eight miles of pipeline segments throughout the Ojai system service area. Project implementation would occur over approximately ten years, with the first phase of project construction in the first three years and the second phase of construction in the subsequent seven years. The pipelines identified in the CMA and WMP represent the initial scope of pipeline replacements. Over the course of project implementation, more pipelines may be identified as having multiple leaks or breaks, or for which replacement makes sense because they are close to other planned replacements. This work will be performed at the discretion of CMWD. The details of additional pipeline improvements are unknown; thus pipeline or other water system improvements not described in this document will require separate environmental review under CEQA.

The proposed project includes plans to rehabilitate two tanks, demolish three existing tanks, and construct up to one new tank; rehabilitate one booster pump station, upgrade an additional pump station, demolish and construct two new pump stations, and abandon one pump station; and rehabilitate or replace six active wells in the Ojai system. The proposed project also includes potential construction of a new well in the Ojai system.

The project site is in the city of Ojai and in surrounding unincorporated areas in west Ventura County. Figure 1, Regional Project Location, Figure 2, Project Site Vicinity, and Figure 3, Jurisdictional Boundaries, show the project site in a regional and local context, including in relation to city and county boundaries.

### 2.1 Purpose of the Project

CMWD finalized a CBA and updated the WMP for the Ojai system in November 2018. The CBA and WMP identified a prioritized list of improvements to the Ojai system necessary to meet existing potable water demand and existing and projected fire flow demands for continued reliable water service. The WMP recommended projects to correct existing and anticipated future deficiencies in the Ojai system. Several of these projects include pipeline replacement, storage tank rehabilitation, well improvements, potential well construction, and booster pump rehabilitation and upgrades.

The proposed project consists of recommended construction included in the CIP and would result in improved water system function, improved fire flow, and replacement of aging infrastructure and pipelines. The proposed project would replace undersized pipelines and associated infrastructure or infrastructure approaching the end of service utility. It would not increase pipeline capacity to serve additional customers.

### 2.2 Pipeline Construction

The proposed project would replace approximately 42,000 linear feet (LF) of potable water pipeline in public rights-of-way in the city of Ojai and surrounding unincorporated areas of Ventura County

(Figure 2). The majority of the pipeline replacement would be in Ojai, with approximately 0.5 miles of pipeline repairs and replacement extending into unincorporated Ventura County. The new pipeline would only replace and rehabilitate existing infrastructure to ensure effective use. It would not expand the water system network and would only increase service distribution capacity to improve fire flow. Most of the pipeline repairs and replacement would occur in the Main Zone, one of six pressure zones for the Ojai system indicated in Figure 4. The following streets contain pipelines needing improvements due to age, leaks, and condition decay. Figure 5 shows streets where improvements will be done.

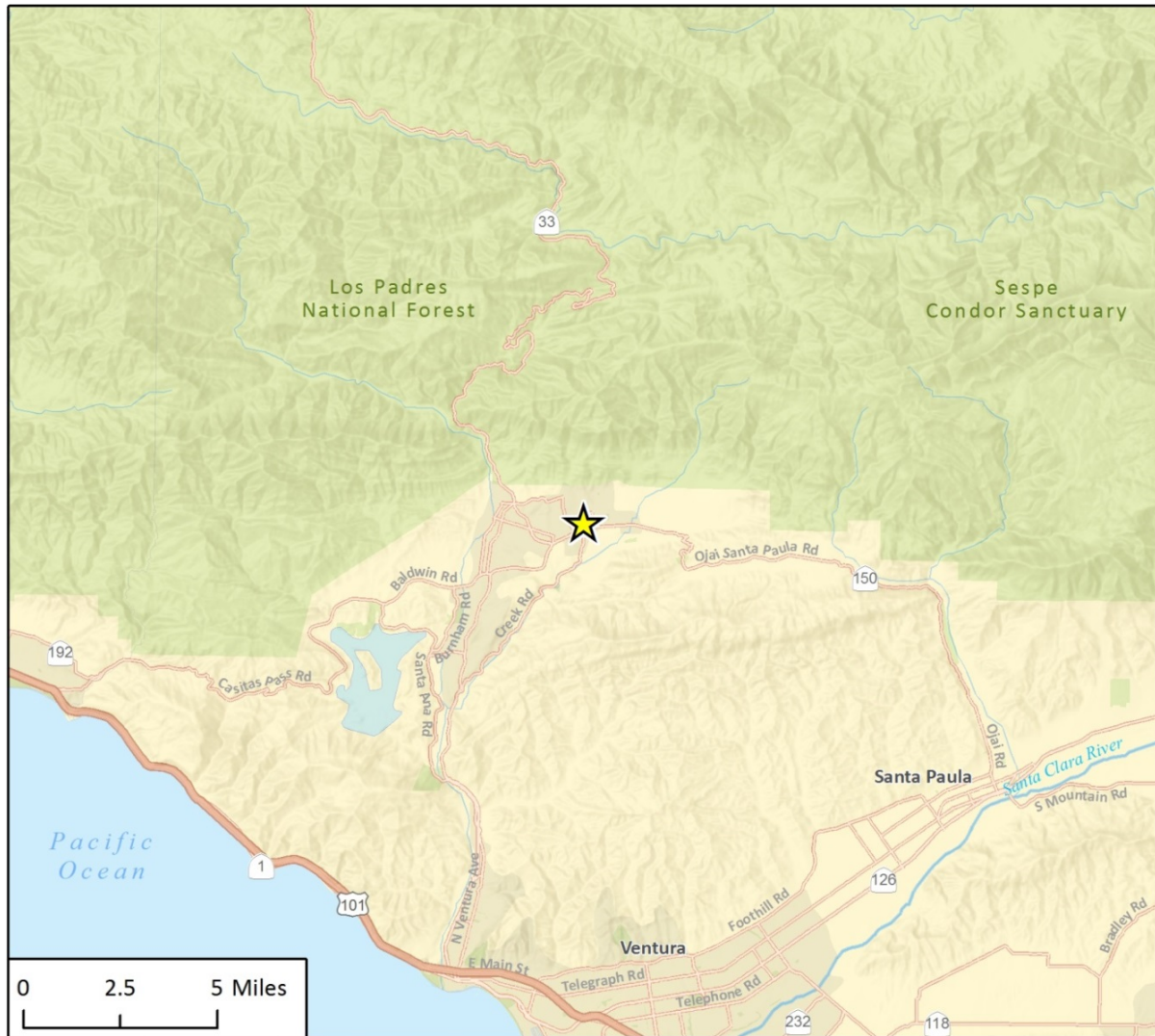
1. Grand Avenue (from Montgomery Street to near San Antonio Creek)
2. Aliso Street (from Foothill Road to Montgomery Street)
3. Foothill Road (from El Toro Road to Aliso Street)
4. Palomar Road (from northern terminus to El Camino Road)
5. Montgomery Street (from Aliso Street to Grand Avenue)
6. Del Norte Road (below Arbolada Reservoir)
7. Emily Street (from East Summer Street to Raymond Street)
8. Ventura Street (from Ojai Avenue to Summer Street)

The following streets contain pipelines needing replacement for fire flow improvements. Figure 5 shows them as well.

1. Cuyama Road (from Sierra Road to El Paseo Road)
2. El Paseo Road (from Sierra Road to Cuyama Road)
3. Topa Topa Drive (from Ojai Avenue to San Antonio Street)
4. San Antonio Street (from Topa Topa Drive to unnamed drive at 411 San Antonio Street)
5. Crestview Drive (from Santa Ana Street to approximately 300 feet south of Santa Ana Street – eastern intersection)
6. Canada Street (from Matilija Street to Summer Street)
7. Sunset Place (from Mountain View Avenue to Grandview Avenue)
8. Country Club Drive (from Ojai Valley Inn and Spa to approximately 400 feet south of Oak Drive)
9. West and East Ojai Avenue (from Bristol Road/San Antonio Street to El Paseo Road; from Ventura Street to Oak Glen Avenue)
10. Lion Street (from Aliso Street to Grand Avenue)
11. Pleasant Avenue (from Drown Avenue to Daly Road)
12. Daly Road (from Pleasant Avenue to Montgomery Street)
13. Verano Drive (from Cuyama Road to terminus)
14. Park Avenue (from Signal Street to Olive Street)
15. Blanche Street (from West Topa Topa Street to Santa Ana Street)
16. Santa Ana Street (from Blanche Street to Ventura Street)
17. Fairway Lane (from Ojai Avenue to terminus)



Figure 1 Regional Project Location



Imagery provided by Esri and its licensors © 2018.

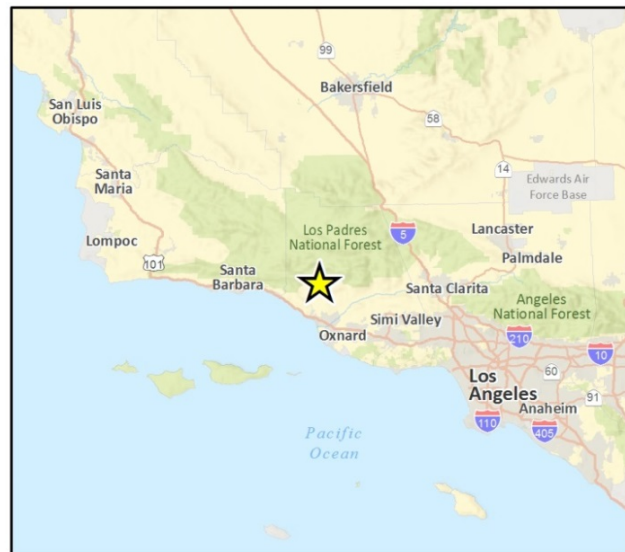
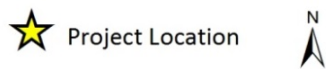
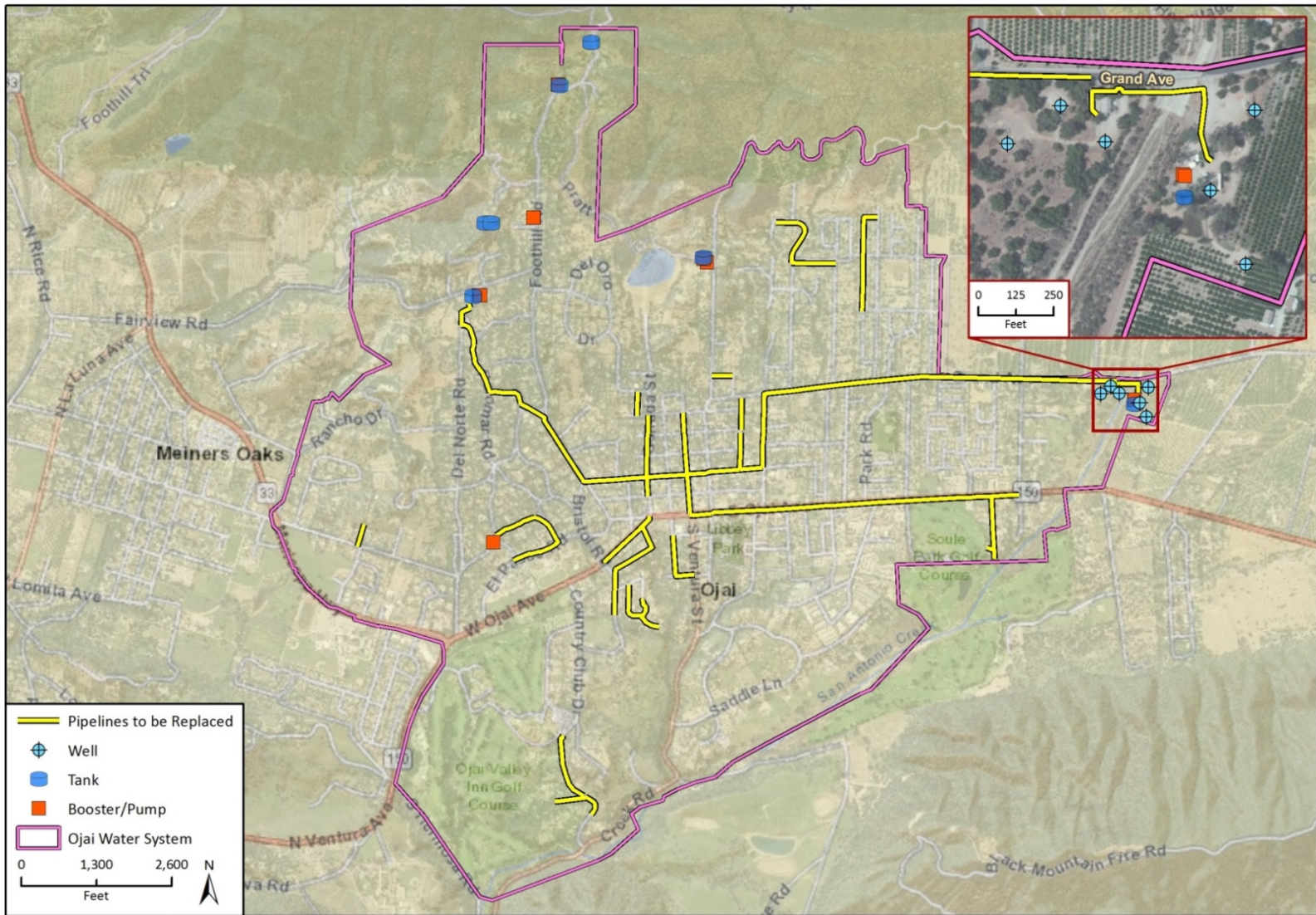


Fig 1 Regional Location

Figure 2 Project Site Vicinity

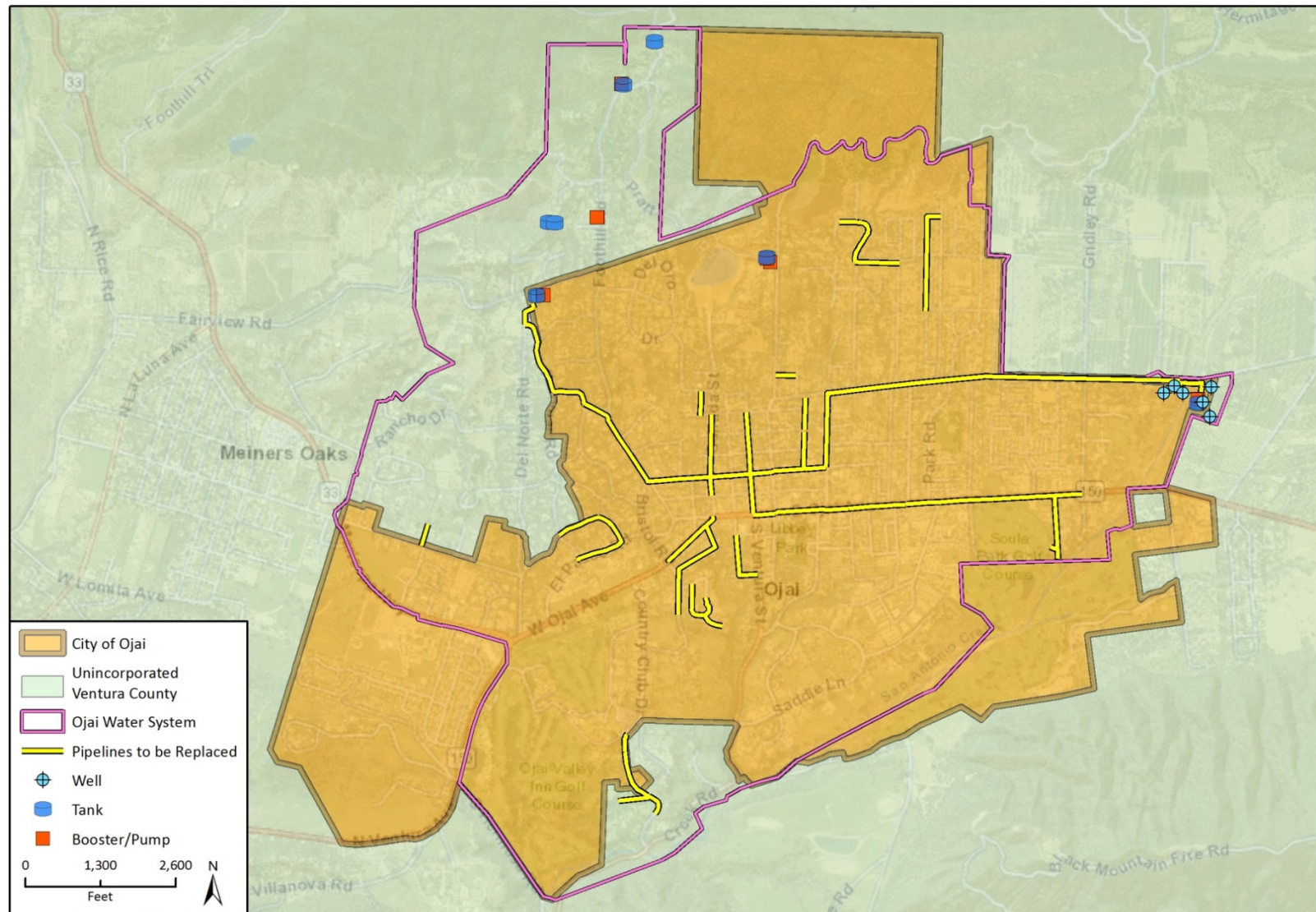


Imagery provided by Esri, Microsoft Bing and their licensors © 2018.  
fCMWD, 2018.

Fig 2 Project Location



Figure 3 Jurisdictional Boundaries

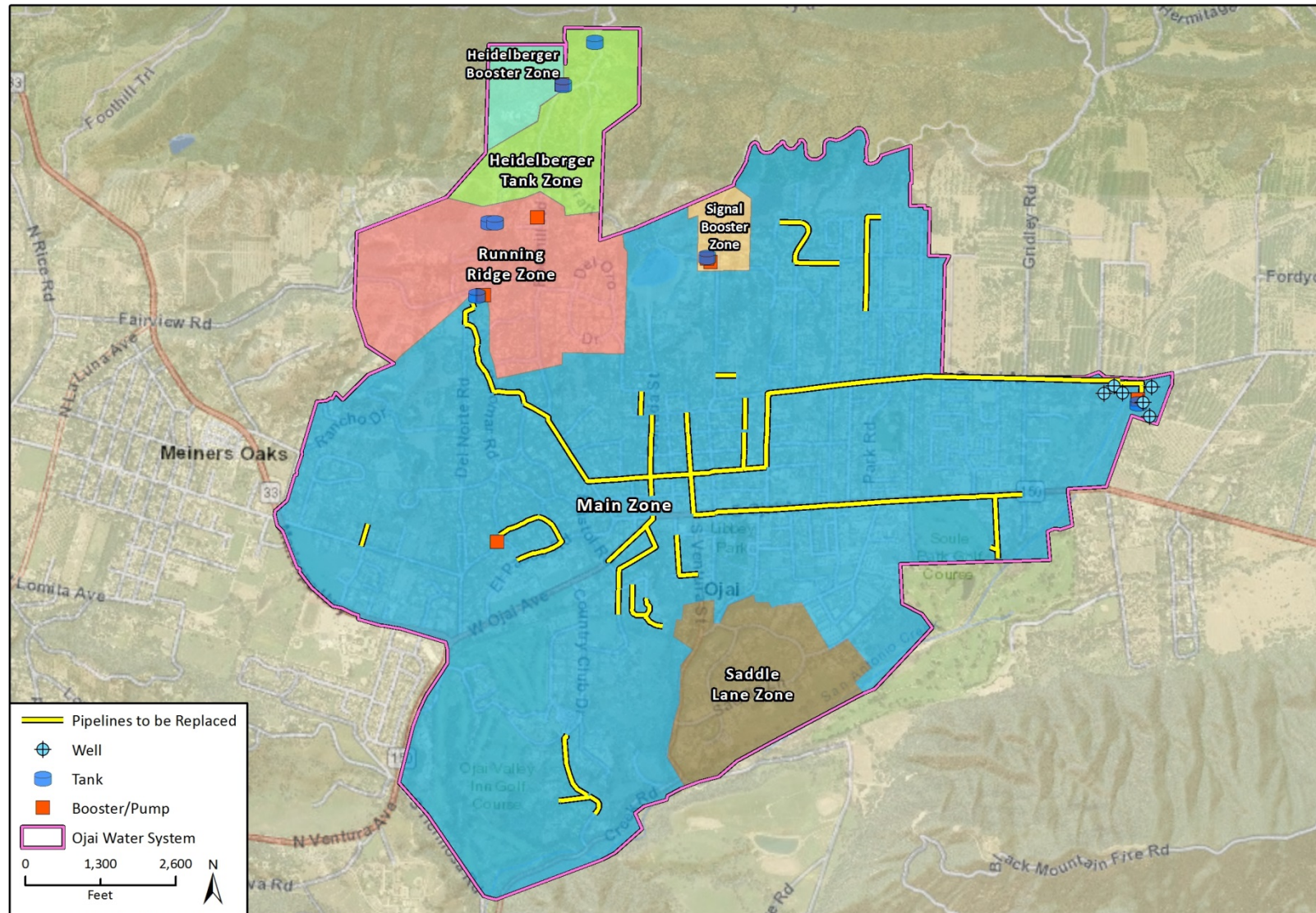


Imagery provided by Esri, Microsoft Bing and their licensors © 2018.  
CMWD, 2018.

Fig 3 Project Jurisdictions



Figure 4 Ojai System Pressure Zones



Imagery provided by Esri, Microsoft Bing and their licensors © 2018.  
Additional data provided by CMWD 2018.

Fig 5 Pressure Zones



Figure 5 Pipeline Replacement Project Types

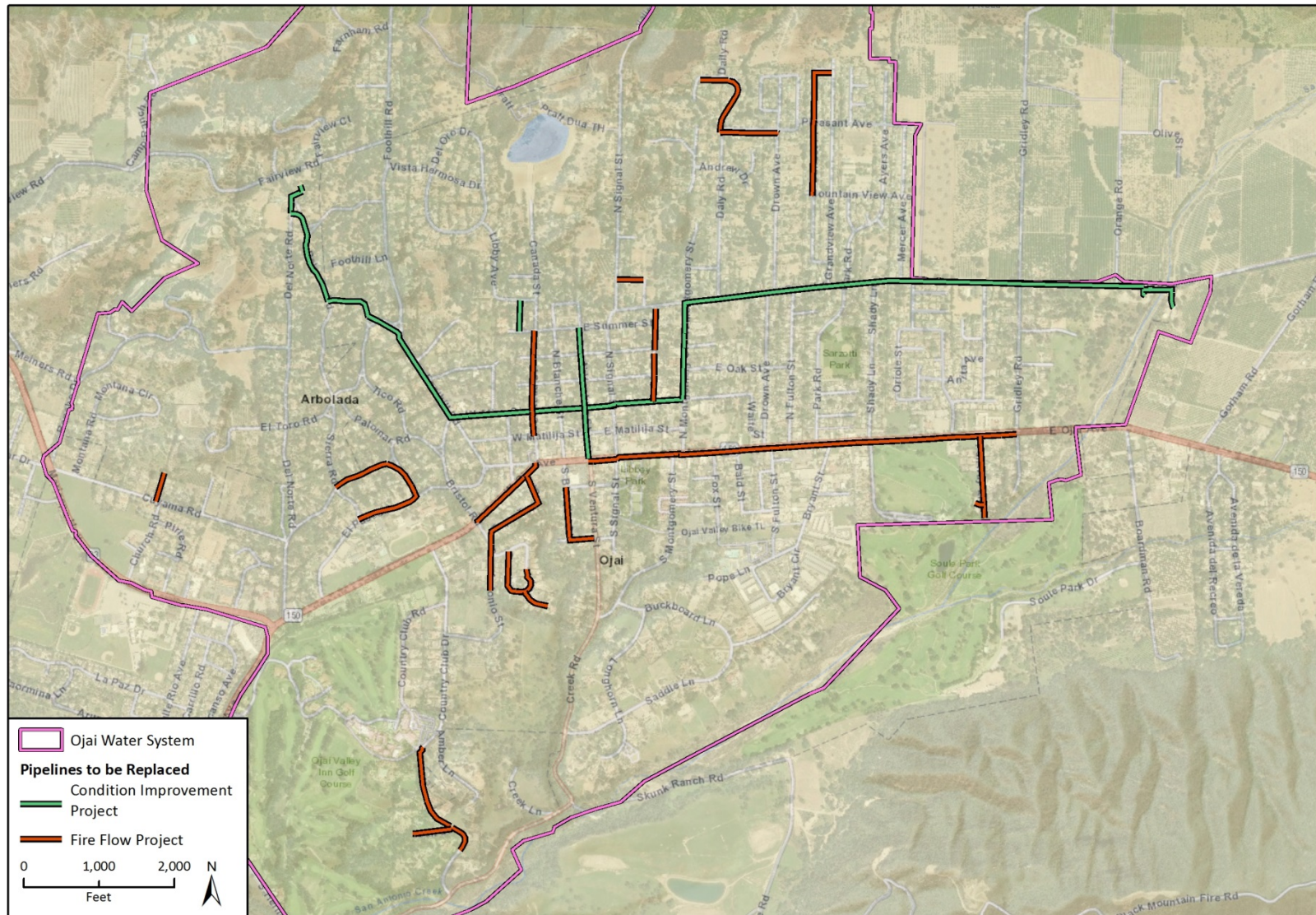


Fig 4 CondFireProj

Typically, pipeline replacement will be completed using open-cut trenching. In the event trenchless methods are required, construction may include pipe bursting, jack and bore, and horizontal directional drilling if preliminary designs show utility conflicts, significant traffic control requirements, or other issues with the potential to interfere with trenching activities. Pipelines would be typically eight to twelve inches in diameter and would require a three-foot wide trench in which to work and place the pipe. Trenches would be no more than five feet deep, unless there is a need to cross another utility. In this case, the trench depth would depend on the depth and required clearance (generally, at least one foot) between the pipeline and the other utility line.

Typical open-cut pipeline construction would be accomplished at 200 to 300 feet per-day. This includes trenching, installing the pipe, backfilling, and temporary plating. Backfill material around pipelines would be compacted sand and/or sand-cement slurry. Material would be placed at least four inches under the pipe, six inches on each side, and one foot above the pipe. The total volume of backfill required is dependent on the length of the pipeline. Generally, every linear foot of pipeline requires 0.11 cubic feet of sand (1,000 feet of pipeline requires 110 cubic feet of sand). Assuming two feet of cover over the sand backfill, earth backfill requires approximately 0.22 cubic feet of backfill per linear foot of pipeline. Paving materials would make up the remaining one foot of trench backfill.

Final paving would be performed once the entire pipeline segment is installed. Paving would progress at the rate of approximately 1,000 square feet per day. Pipeline construction using open-cut method requires the use of an excavator, wheeled loader, dump truck, and vibrating compactor. Trenchless pipeline construction uses specialized equipment depending on the method used. Paving after the pipeline is installed would require a wheeled loader, paving machine, and roller.

Materials required for pipeline construction include pipe, fittings and appurtenances, sand, cement slurry, and natural earth material for backfill, and paving materials. All materials would be delivered to the staging areas—CMWD wellfield and tank sites—for each project at the beginning of construction and materials needed for the day's work would be taken from the staging area to the work site. The number of vendor or material delivery trips would depend on the size of the specific project. It is estimated for each 1,000 feet of pipeline construction, five material deliveries per day would occur.

## 2.3 Tank Construction

In addition to pipeline improvements, the proposed project would also involve rehabilitating two water storage tanks at the Heidelberger and San Antonio Forebay facilities, demolition of two tanks in the Running Ridge Zone and one in the Signal Zone, and construction of a new tank in the Signal Zone. Figure 2 shows the locations of these water storage tanks. Several options to address the poor condition of both Running Ridge water storage tanks were evaluated and considered, including: abandonment of the existing tanks and construction of a new tank in a different location; conversion of this pressure zone to a pumped zone; or use of an existing CMWD tank close to the same elevation. The recommended project includes: connecting the Running Ridge zone to an existing CMWD reservoir; constructing a new flow meter and control valve assembly; constructing a new sodium hypochlorite feed system; and demolishing the Running Ridge Tanks. A similar evaluation was conducted to determine the best course of action to address the poor condition of the Signal Zone water storage tank. Options considered included adding storage at the same site, construction of a water storage tank at a new site, or making use of existing CMWD storage in the overall system. The recommended project includes: constructing a new tank in the Signal Zone;

constructing a new flow meter and control valve assembly; constructing a new sodium hypochlorite feed system; constructing a new booster pump station at a lower elevation; and demolishing the existing Signal Tank and booster pump station. Sites for the new booster pump station and new tank have not yet been identified; CMWD will acquire these sites once this has taken place. This analysis assumes that the sites for the new tank and new booster pump station would be similar to the sites for other existing tanks and pump stations and would not contain sensitive biological or cultural resources. Depending on the characteristics of the chosen sites, additional CEQA documentation may be required. See Section 2.5, *Booster Pump Construction*, for additional details about the proposed booster pump improvements.

Tank construction would require over-excavation to create a suitable pad for the tank and depends on the underlying soil conditions. No more than five feet of over-excavation is anticipated, but this would be confirmed with geotechnical investigation during the project design phase. The diameter of the excavation depends on the size of the tank. Tank piping would be installed underground, with trench depth expected to be less than five feet. Tank construction would require an excavator, wheeled loader, dump truck, crane, water truck, and vibrating compactor. Pipe, fittings and appurtenances, sand for tank bedding, steel tank plates, electrical equipment, concrete for the tank foundation and drainage improvements, and asphalt paving materials would be required for tank construction. Materials would be delivered in phases as needed for construction. An estimated ten material deliveries would occur per day during construction.

The duration of construction would depend on the size of the tank and the site conditions. Assuming an undeveloped parcel, site mobilization and clearing would take approximately four weeks. Excavation and grading would last approximately eight weeks. Underground pipeline construction would take approximately eight weeks. Tank erection, including coating, would require approximately eight weeks. Electrical and instrumentation would last approximately four weeks. Site improvements, such as paving and drainage, would take approximately four weeks, and final testing and acceptance would take an additional approximately four weeks. The total time required for tank construction and testing would be approximately 40 weeks.

Tank rehabilitation may include interior and exterior recoating of the tank, replacing ladders and fall protection equipment, installing cathodic protection, and installing seismic anchors. The tank will have to be empty to facilitate the work. Providing water to customers affected by the temporary loss of tank storage during rehabilitation includes installation of temporary storage tanks and piping. Construction equipment would typically include work trucks, sand blasting equipment if the existing coating is to be removed, spray equipment for coating application, and pile driving equipment for seismic anchors. Depending on the size of the tank, rehabilitation may take two to three months per tank. Tank rehabilitation usually occurs during the winter when water demands are low.

Demolition of bolted steel tanks includes removal of the roof, then the bolts holding each wall panel in place, followed by removal of the panels from the top down. Scaffolding would be used to support workers and a crane would be used to remove each panel. The panels may be cut into smaller sections to facilitate removal from the site. Aboveground piping would be removed. The concrete foundation, if removed, would be broken up using a jackhammer. Below-grade piping would be severed and be abandoned in place. Depending on the size of the tank, demolition would occur over approximately one to two months.

## 2.4 Well Construction

The proposed project would also rehabilitate or replace six existing wells in the Ojai system. These wells are the San Antonio #3 Well, San Antonio #4 Well, Gorham Well, Mutual Well #4, Mutual Well #5, and Mutual Well #6. Figure 2 shows the location of these wells. CMWD is also considering constructing a new well at the Grand Avenue pump plant site to improve production capacity. Improvements to the existing wells would occur in the form of chemical and/or mechanical rehabilitation or well replacement. CMWD identified these wells for rehabilitation or replacement based on design capacity versus 2017 observed capacity at each well. The intent of the proposed project is to restore the design capacity of the wells either through rehabilitation or replacement of the existing wells or installation of a new well. Aging, inefficient wells threaten supply reliability throughout the Ojai system. Well rehabilitation and installation would improve supply reliability as opposed to increasing groundwater supplies through withdrawals from the Ojai Valley Basin. Table 2 shows design capacity and 2017 observed capacity (in gallons per minute [gpm]) of each of the wells proposed for rehabilitation.

**Table 2 Well Production Capacity**

Well	Design Capacity (gpm)	2017 Observed Capacity (gpm)
Mutual Well #4	275	76
Mutual Well #5	670	140
Mutual Well #6	471	280
San Antonio #3	551	152
San Antonio #4	500	240
Gorham	1,000	239
<b>Total</b>	<b>3,467</b>	<b>1,061</b>

gpm: gallons per minute

Source: CMWD 2018

Well drilling would be performed using the mud rotary method with a conventional truck-mounted drill rig. Support equipment for construction would include a flatbed truck, water truck, skip loader, crew truck, generator, and lights. Materials required for well drilling would include drill mud, steel casing and screen, sand for the annular space, and a grout seal. All materials would be delivered and stored at the well site at the beginning of construction. An estimated five material deliveries would occur per day.

Well construction scheduling and duration would depend on the depth of the well. Assuming a new well at the San Antonio site, Mutual site, or an undeveloped parcel, site mobilization and clearing would take approximately four weeks. Well drilling work would be conducted in continuous shifts (24 hours per day, seven days per week) until the desired depth is reached. Well drilling would take approximately three weeks. Other work includes electrical service and pump installation, which would be completed in approximately two weeks. Well construction would last approximately nine weeks.



## 2.5 Booster Pump Construction

Several booster pump stations throughout the system have been identified for improvements, rehabilitation, and upgrades. The CBA and WMP recommends the addition of a fire pump at the Heidelberger Booster Pump Station and the evaluation of the Signal and Running Ridge zones for improvements at the Signal and/or Arbolada (formerly Fairview) and Heidelberger Booster pump stations. The proposed project would replace booster pumps at the Heidelberger pump station and add a fire pump to provide a fire protection zone. Rehabilitation efforts have also been identified for the San Antonio pump station. Based on a recent engineering evaluation, the proposed project would also involve demolition of the existing Signal Booster Pump Station and construction of a new booster pump station at a lower elevation as described in Section 2.3, *Tank Construction*.

Demolition and reconstruction of the Arbolada pump station would also occur, with the existing pump station replaced by a new pump station with pumps serving the Running Ridge and Heidelberger Zones. The existing Valley View pump station would be abandoned.

CMWD identified stations for upgrades and rehabilitation based on their design capacity versus the 2017 observed capacity. The proposed project would restore the design capacity of the pump stations through rehabilitation of the existing pumps to reliably meet existing system demand. Table 3 shows the design capacity and 2017 observed capacity (in gpm) of each of the booster pumps proposed for improvement.

Demolition of a pump station includes removal of pumps, motors, and electrical and other above-grade equipment. Above-grade piping would be removed to approximately three feet below grade and remaining below-grade piping would be abandoned in place. The site would then be graded to a uniform grade. Typical construction equipment would include: a crane to remove pumps, motors, and large electrical equipment, such as a backhoe to excavate pipe, a grader to restore the site, and typical work trucks for construction workers. Pump station demolition would take one to two months.

Construction of a new pump station includes site grading, underground and aboveground piping, concrete pads for pumps, piping, and electrical equipment, electrical service from Southern California Edison, installation of pumps, motors and electrical equipment, minor site improvements such as fencing and awnings over equipment, and start-up and testing. Typical construction equipment includes an excavator, grader, crane, and standard work trucks. Depending on the size, pump station construction may take two to three months per station.

Typical pump station rehabilitation includes replacement of pumps nearing the end of their useful life or which have lost efficiency, replacing electrical equipment, upgrading lighting fixtures, recoating aboveground piping, seismic anchoring, and minor site improvements such as fencing. Construction equipment includes work trucks and a crane to install pumps and/or electrical cabinets. Overall pump station rehabilitation would take approximately one to two months per site.

**Table 3 Pump Plant Capacity**

Booster Pump Station	Pump	Design Capacity (gpm)	2017 Observed Capacity (gpm)
San Antonio	Booster A	1,500	1,529
	Booster B	1,500	1,469
Signal A	Signal A	600	181
Signal B	Signal B	100	56
Arbolada (formerly Fairview)	Arbolada A	250	283
	Arbolada B	250	263
Valley View	Valley View A	250	198
	Valley View B	250	288
Heidelberger	Heidelberger A	75	6
	Heidelberger B	75	38
<b>Total</b>		<b>4,850</b>	<b>4,311</b>

gpm: gallons per minute

Source: CMWD 2018

## 2.6 Construction Activities, Staging, and Timing

A majority of project construction activities would occur during normal CMWD working hours, from 8:00 a.m. to 4:30 p.m. Well drilling would occur 24 hours per day until the proper well depth is reached. Pipeline construction in Ojai Avenue would be subject to an encroachment permit from the California Department of Transportation (Caltrans), which would limit construction activities to either 9:00 a.m. to 3:00 p.m. or night hours. Other special circumstances, such as emergency repairs, may also require an alternative construction schedule for certain project components.

CMWD would use the wellfield sites and tank sites for material and equipment storage throughout the duration of the construction period. For pipeline construction, contractor employees would likely park on public streets where it is allowed. For construction at tanks and wells, the contractor and employees would park on site. Approximately 10 roundtrips would occur per day for pipeline, tank, and well construction.

Pipeline construction would progress at the rate of approximately 200 to 300 feet of pipeline per day. Full street closures during this work would not be necessary, as the trench should be on one side of the street, in the public right-of-way. Traffic control would be set up to allow one travel lane with flagmen to the greatest extent possible during construction.

## Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact determined to be “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Aesthetics                         | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality                                   |
| <input checked="" type="checkbox"/> Biological Resources    | <input checked="" type="checkbox"/> Cultural Resources      | <input type="checkbox"/> Energy  |
| <input checked="" type="checkbox"/> Geology/Soils           | <input type="checkbox"/> Greenhouse Gas Emissions           | <input checked="" type="checkbox"/> Hazards & Hazardous Materials      |
| <input checked="" type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning                  | <input type="checkbox"/> Mineral Resources                             |
| <input type="checkbox"/> Noise                              | <input type="checkbox"/> Population/Housing                 | <input type="checkbox"/> Public Services                               |
| <input type="checkbox"/> Recreation                         | <input checked="" type="checkbox"/> Transportation          | <input type="checkbox"/> Tribal Cultural Resources                     |
| <input type="checkbox"/> Utilities/Service Systems          | <input checked="" type="checkbox"/> Wildfire                | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

## Determination

Based on this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

- ☐ I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Title

## Chapter 3: Environmental Checklist

### 3.1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*a. Would the project have a substantial adverse effect on a scenic vista?*

The project site is located in the Ojai Valley, mostly in the city of Ojai. Some project components extend into unincorporated Ventura County, including approximately 0.5 mile of planned pipeline replacement, the Running Ridge and Heidelberger storage tanks, the Valley View and Heidelberger booster stations, and Gorham Well #1. Figure 2, *Project Site Vicinity*, and Figure 3, *Jurisdictional Boundaries*, in Chapter 2, *Project Description*, show the project alignment, the surrounding area, and the jurisdictions crossed by the project alignment.

The County of Ventura General Plan Resources Element identifies scenic viewsheds of lakes warranting special protection, including Lake Casitas and Matilija Lake near Ojai (County of Ventura 2011). The project area is approximately 3.2 miles southeast of Matilija Lake and 4.3 miles northeast of Lake Casitas. No portion of the project area is located within the designated scenic viewshed for either of these lakes, as delineated in Figure 1.7.2 of the County's General Plan Resources Element

(County of Ventura 2011). The City of Ojai General Plan does not specifically designate scenic vistas but the City's General Plan Open Space Element does state scenic open space includes those areas with views of the city and featuring the aesthetic quality of the Ojai Valley's ridgelines (City of Ojai 1987b). Although surrounded by mountainous areas, the relatively flat nature of the Ojai Valley floor means scenic vistas of mountains and ridgelines are commonly obscured by intervening structures and vegetation in the project area. Nevertheless, public rights-of-way in the project area offer occasional views of the undeveloped Topa Topa Mountains in Los Padres National Forest to the north and of Sulphur Mountain to the south.

Construction activities may include grading, excavation, trenching, and erection of temporary safety barriers and temporary exclusion fencing. These activities may temporarily obstruct or degrade scenic vistas for residents and motorists in the project site vicinity, but this change would end once project construction is complete and the project site is restored to pre-construction conditions. Following construction, the pipeline replacements would not be visible and would not result in permanent changes affecting scenic vistas. The proposed project alignments, as well as upgraded, rehabilitated, or replaced well, pump station, and tank sites would be returned to a similar pre-construction setting following project completion. Tank demolition may occur under the project at the Running Ridge and Signal tank sites. The project may involve construction of a new tank, either at the Arbolada facility or a vacant parcel to be acquired by CMWD. While this would involve construction of new infrastructure on a currently undeveloped site, the infrastructure would be similar in size to surrounding structures and existing CMWD tanks, which do not obstruct scenic vistas in the project area. Therefore, impacts to scenic vistas from construction and operation of the proposed project would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

- b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings in a state scenic highway?*

No state scenic highways are visible from the proposed pipeline alignment or well, tank, or pump station improvement sites. SR 33 is the closest designated state scenic highway, from 6.4 miles north of SR 150 to the Santa Barbara County line (Caltrans 2018). This stretch of highway is approximately 3.5 miles north of the nearest proposed project improvements at the Heidelberger tank and pumping station, and obstructed from view by the Topa Topa Mountains. All of SR 150, including Ojai Avenue through the project site, is eligible for listing as a state scenic highway, but the roadway is not designated officially. The proposed project consists of belowground pipeline replacements and improvements to wells, pump stations, and tanks. Pipelines would be constructed underground primarily within previously disturbed public rights-of-way. Tanks, pump stations, and wells would appear substantially similar to existing conditions following rehabilitation, upgrades, or replacement. No trees, rock outcroppings, or historic buildings within a state scenic highway would be affected. Therefore, the project would not result in a substantial adverse effect on scenic resources visible from a state scenic highway and no impact would occur.

#### **NO IMPACT**

- c. *Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

The project area is surrounded by undeveloped mountain areas to the north and south. While elevations range from under 700 feet above mean sea level (amsl) in the southern portion of the project area to approximately 1,400 feet amsl near the Heidelberger tank and pumping station in the north, the majority of the project area is relatively flat through the city of Ojai. The small town visual character of the project site is characterized by urban and suburban commercial and residential development surrounded by recreational open space, agricultural uses, and undeveloped mountain ridges. Figure 6 shows images representing the visual character of the project area.

The project area spans the city of Ojai and small portions of unincorporated Ventura County. Title 10, Chapter 2, Article 20 of the Ojai Municipal Code contains the City's design review policies. Pursuant to California Government Code 53091, the project would not be subject to the design review policies contained in the City's zoning regulations. Local zoning ordinances do not apply to the location or construction of facilities for the production, generation, storage, treatment, or transmission of water.

Construction of the proposed project would be visible from surrounding land uses and would temporarily alter the existing visual character and quality of the project area and vicinity. A temporary change in visual character would result from the presence of construction equipment and material, stockpiles of soil, and construction vehicles during pipeline replacement and well, tank, and pump station rehabilitations and upgrades. Pipeline replacement would progress at the rate of approximately 200 to 300 LF per day. Therefore, the visual impacts of construction activity at any given location would be limited to a few days. Well, tank, and pump station improvements would primarily occur at the sites of existing infrastructure and, therefore, would not substantially alter the scenic quality or visual character of these sites. A new tank, if constructed, would be similar in size, massing, and appearance to existing tanks and potable water infrastructure in the project area and would not substantially alter the scenic quality or visual character. Construction equipment and materials would be removed from all sites upon completion of construction activities. Due to the temporary nature of construction activities and the removal of most visible project components following completion of construction, construction and operation of the proposed project would not substantially degrade the existing visual character or quality of the project site and its surroundings and would not conflict with any regulations governing scenic quality in the project area as no regulations related to scenic quality apply to the proposed project. This impact would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

**Figure 6 Project Area Photos**



**Photo 1:** North Montgomery Street at East Aliso Street, looking south toward Sulphur Mountain.



**Photo 2:** El Camino Road, looking west.



**Photo 3:** Canada Street at West Oak Street, looking north toward Los Padres National Forest.



**Photo 4:** Mutual well site along Grand Avenue, looking south.



*d. Would the project create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?*

The proposed pipeline replacements would not create a new source of light or glare once construction is complete, as the pipelines would be located underground. The project would involve rehabilitation of two tanks, one booster pump station, upgrades to an additional booster pump station, and demolition and reconstruction of two pump stations. Rehabilitation, upgrades, or reconstruction of these facilities may involve upgrading lighting fixtures. However, such improvements would be similar to existing infrastructure during operation, and additional lighting beyond what is currently provided for existing tanks, pump stations, and wells is not proposed. Operational impacts with respect to light and glare would be less than significant.

Proposed project components may create light and glare during construction due to the presence of construction vehicles and equipment. Construction would occur primarily during the daytime hours, though late afternoon activities during the winter could require the use of lighting. Additionally, nighttime construction may be required in some cases, including during work along SR 150 pursuant to the Caltrans encroachment permit. This light may be visible from surrounding roadways and residential and other land uses, but the lighting would not face toward adjacent uses and would be directed towards pipeline installation activities. Along the project alignment, SR 150 is a commercial corridor with few residential receptors sensitive to light trespass or glare. Any construction lighting used would be shielded to minimize impacts to any nearby receptors. As such, light and glare from occasional nighttime construction activities would not disturb sensitive receptors substantially. Pipeline construction would progress at the rate of approximately 200 to 300 LF per day.

Therefore, construction activities would be temporary, lasting no more than a few days at any given location, and potential impacts during construction associated with light or glare would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*This page intentionally left blank.*

## 3.2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project convert Prime Farmland, Unique Farmland, Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*
- b. *Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?*
- c. *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*
- d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

- e. Would the project involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use?*

The project area is not currently in agricultural production and does not contain Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or land with a Williamson Act contract (California Department of Conservation [DOC] 2016). No part of the proposed project is located on forest land or timber land (City of Ojai 1997).

The proposed project also would not cause the loss of forest land or conversion of forest land to non-forest use. Due to the absence of agricultural land at the project site or in the surrounding area, the proposed project would not involve changes to the existing environment which could result in conversion of Farmland to a non-agricultural use. The project would not expand potable water service capacity and, therefore, would not result in or support new residential development leading to the conversion of Farmland to non-agricultural use. No impact to agricultural or forest resources would occur.

**NO IMPACT**

### 3.3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The project area is in the South Central Coast Air Basin (Basin) which covers San Luis Obispo, Santa Barbara, and Ventura Counties. The Ventura County Air Pollution Control District (VCAPCD) monitors and regulates the local air quality in Ventura County and administers the Air Quality Management Plan (AQMP). The analysis presented in this section is based on information found in the Ventura County Air Quality Assessment Guidelines (Guidelines), adopted by the VCAPCD in 2003.

Air quality is affected by stationary sources (e.g., industrial uses and oil and gas operations) and mobile sources (e.g., motor vehicles). Air quality at a given location is a function of several factors, including the quantity and type of pollutants emitted locally and regionally, and the dispersion rates of pollutants in the region. Primary factors affecting pollutant dispersion are wind speed and direction, atmospheric stability, temperature, the presence or absence of inversions, and topography. The project site is located in the southeastern portion of the Basin, which has moderate variability in temperatures, tempered by coastal processes. The air quality within the Basin is influenced by a wide range of emission sources, such as dense population centers, heavy vehicular traffic, industry, and weather.

#### Air Quality Standards and Attainment

The VCAPCD is required to monitor air pollutant levels to ensure National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) are met. If the standards are met, the Basin is classified as being in "attainment." If the standards are not met, the Basin is classified as being in "nonattainment" and the VCAPCD is required to develop strategies to meet the standards. According to the California Air Resources Board (CARB) Area Designation Maps, the project site is located in a region identified as being in nonattainment for the ozone NAAQS and CAAQS and nonattainment for the particulate matter less than 10 microns in diameter (PM<sub>10</sub>)

CAAQS (CARB 2015). In February 2017, the VCAPCD adopted the 2016 Ventura County AQMP, which provides a strategy for the attainment of federal ozone standards (VCAPCD 2017).

San Joaquin Valley Fever (formally known as Coccidioidomycosis, hereafter referred to as Valley Fever) is an infectious disease caused by the fungus *Coccidioides immitis*. Valley Fever is a disease of concern in the Basin. Infection is caused by inhalation of *Coccidioides immitis* airborne spores, formed when dry, dusty soil or dirt is disturbed by natural processes, such as wind or earthquakes, or by human-induced ground-disturbing activities, such as construction, farming, or other activities (VCAPCD 2003). From 2011 to 2015, the number of cases of Valley Fever reported in California averaged 3,611 per year, with an average of 50 cases per year reported in Ventura County (California Department of Public Health 2016).

### **Air Emission Thresholds**

The VCAPCD's Guidelines recommend specific air emission thresholds for determining whether a project may have a significant adverse impact on air quality within the Basin. These air emission thresholds differ between the Ojai Planning Area, which is defined as the Ojai Valley and includes the project area, and the remainder of Ventura County. Because the proposed project is in the Ojai Planning Area, it would have a significant impact if its mobile source emissions exceed five pounds per day of Reactive Organic Compounds (ROC; also referred to as Reactive Organic Gases) or five pounds per day of Nitrogen Oxides (NO<sub>x</sub>). The five pounds per day threshold for ROC and NO<sub>x</sub> is not intended to be applied to construction emissions since such emissions are temporary. Nevertheless, VCAPCD's Guidelines state construction-related emissions should be mitigated if estimates of ROC or NO<sub>x</sub> emissions from heavy-duty construction equipment exceed this threshold.

The VCAPCD has not established quantitative thresholds for particulate matter for either operation or construction. The VCAPCD indicates a project generating fugitive dust emissions in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons, or which may endanger the comfort, repose, health, or safety of any such person, or which may cause or have a natural tendency to cause injury or damage to business or property, would have a significant air quality impact. This threshold is applicable to the generation of fugitive dust during grading and excavation activities. The VCAPCD Guidelines recommend fugitive dust mitigation measures to be applied to all dust-generating activities. Such measures include minimizing the project disturbance area, watering the site prior to commencement of ground-disturbing activities, covering all truck loads, and limiting on-site vehicle speeds to 15 miles per hour or less.

### **Applicable VCAPCD Rules and Regulations**

The VCAPCD implements rules and regulations for emissions generated by various uses and activities. The rules and regulations detail pollution-reduction measures to be implemented during construction and operation of projects. Relevant rules and regulations to the project include those listed below.

#### *Rule 50 (Opacity)*

This rule sets opacity standards on the discharge from sources of air contaminants. This rule would apply during construction of the proposed project.

*Rule 51 (Nuisance)*

This rule prohibits any person from discharging air contaminants or any other material from a source which would cause injury, detriment, nuisance, or annoyance to any considerable number of persons or the public or which endangers the comfort, health, safety, or repose to any considerable number of persons or the public. The rule would apply during construction and operational activities.

*Rule 55 (Fugitive Dust)*

This rule requires fugitive dust generators, including construction and demolition projects, to implement control measures limiting the amount of dust from vehicle track-out, earth moving, bulk material handling, and truck hauling activities. The rule would apply during construction and operational activities.

*Rule 55.1 (Paved Roads and Public Unpaved Roads)*

This rule requires fugitive dust generators to begin the removal of visible roadway accumulation within 72 hours of any written notification from the VCAPCD. The use of blowers is expressly prohibited under any circumstances. This rule also requires controls to limit the amount of dust from any construction activity or any earthmoving activity on a public unpaved road. This rule would apply throughout all construction activities.

*Rule 55.2 (Street Sweeping Equipment)*

This rule requires the use of PM<sub>10</sub> efficient street sweepers for routine street sweeping and for removing vehicle track-out pursuant to Rule 55. This rule would apply during all construction activities.

*Rule 74.4 (Cutback Asphalt)*

This rule sets limits on the type of application and volatile organic compound (VOC) content of cutback and emulsified asphalt. The proposed project is required to comply with the type of application and VOC content standards set forth in this rule.

*a. Would the project conflict with or obstruct implementation of the applicable air quality plan?*

According to the VCAPCD's Guidelines, a project may be inconsistent with the applicable air quality plan if it would cause the existing population to exceed forecasts contained in the most recently adopted AQMP. The VCAPCD adopted the 2016 Ventura County AQMP to demonstrate a strategy for and reasonable progress toward attainment of the federal 8-hour ozone standard. The 2016 Ventura County AQMP relies on the Southern California Association of Governments' 2016 Regional Transportation Plan/Sustainable Communities Strategy forecasts of regional population growth in its projections for managing Ventura County's air quality.

The proposed project would involve replacement of approximately eight miles of pipeline, and various rehabilitation efforts and updates to system tanks, booster pumps, and wells to ensure reliable water system function throughout the service area. The replacement pipeline would not increase the water system network or service distribution capacity; it would only repair, replace, and rehabilitate existing infrastructure to ensure effective use. The proposed project would not expand system capacity, nor would it generate new housing or businesses. Consequently, it would

not contribute directly or indirectly to population growth and would not cause exceedances of the growth forecasts employed in the 2016 Ventura County AQMP. No impact would occur.

#### **NO IMPACT**

- b. *Would the project 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?*

The proposed project would generate short-term emissions associated with project construction and long-term emissions associated with operation of the pump stations. Because this project would include several construction components (i.e., pipeline installation, tank construction, and well drilling), emissions for each component were modeled individually using the California Emissions Estimator Model (CalEEMod) version 2016.3.2.<sup>1</sup> Additionally, a combined model was generated to estimate a “reasonable worst-case-scenario”, accounting for construction of two different 300 LF segments of pipeline and one stationary component (i.e., construction or replacement of a tank or well) simultaneously on one single day. This was used because VCACPD thresholds are based on maximum daily emissions for construction. The stationary component found to generate the greatest emissions was the construction of a new water storage tank, based on CMWD’s specific construction details; therefore, this was the stationary component used in the “reasonable worst-case-scenario” evaluated below.

For the purposes of modeling and to account for conservative “worst-case-scenario” emissions, the analysis relied upon the following assumptions:

- Pipeline would be constructed via open trench measuring three feet in width.
- Installation of the pipeline would occur over approximately eight miles of existing segments within the Ojai system, with approximately 300 LF of pipeline constructed per day.
- Tank construction was assumed to include the complete construction of a new tank with demolition of existing tanks using the Running Ridge Tank for reference measurements.<sup>2</sup>
- Based on CMWD provided information, approximately 70 cubic yards (cy) of material would be exported and approximately 33 cy of material would be imported for each 300 LF of pipeline construction. Approximately 71 cy of material would be imported and exported for tank construction.
- Materials and equipment storage throughout the duration of the construction period would occur on the wellfield and tank sites. Approximately ten roundtrips would occur per day for pipeline, tank, and well construction.
- Phase 1 construction projects, as described above in *Project Description*, would take place from years one to three of the project, with additional projects from Phase 2 to occur from years four to ten. Generally, crews would work five days per week for all projects, except during well drilling which would occur 24 hours a day, seven days a week until appropriate well depth is reached. Since the pipelines would be constructed in segments along their alignments, individual construction phases would occur repeatedly throughout the construction period. Construction phases were modeled consecutively and over the course of one year in CalEEMod,

---

<sup>1</sup> CalEEMod was developed by the South Coast Air Quality Management District (SCAQMD) and is used by jurisdictions throughout the State to quantify criteria pollutant emissions.

<sup>2</sup> Although most tank construction would only include rehabilitation and demolition efforts, analysis for total construction is included in the event a new tank is constructed.



though, to provide more conservative emissions information. For open trench construction, construction phase lengths were based on days of equipment usage.

- Construction activities would comply with VCAPCD Rules 55 and 74.2, existing regulations controlling fugitive dust and architectural coating emissions (discussed in more detail under “Construction Impacts”).
- No heavy-duty equipment would be required for pump station upgrades.

## Construction Emissions

Project construction would generate temporary air pollutant emissions. These impacts are associated with fugitive dust and exhaust emissions from heavy-duty construction vehicles. The excavation phase of the project would involve the largest use of heavy equipment and generation of fugitive dust. Table 4 summarizes maximum daily pollutant emissions during a potential construction scenario where two segments of 300 LF of pipeline and tank construction are occurring simultaneously on one day for a conservative estimate of maximum daily emissions over the course of the project.

Table 4 Construction Emissions

	Estimated Maximum Daily Emissions (pounds/day)					
	ROC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Open Trench Pipeline Construction</b>						
Daily Maximum	3.8	33.9	26.8	<0.1	2.2	1.7
Multiplied by two	7.6	67.8	53.6	0.1	4.4	3.4
<b>Stationary Source Construction (Water Tank)</b>						
Daily Maximum	2.4	13.1	10.4	<0.1	1.0	0.8
<b>Total for “Worst-case” Emissions</b>						
Daily Maximum	10.0	80.9	64	0.1	5.4	4.2

ROC: reactive organic compounds; NO<sub>x</sub>: nitrogen oxides; CO: carbon monoxide; SO<sub>x</sub>: sulfur oxides; PM<sub>10</sub>: particulate matter less than 10 microns in diameter; PM<sub>2.5</sub>: particulate matter less than 2.5 microns in diameter

See Appendix A for modeling details and CalEEMod results.

Notes: Emissions presented are the highest of the winter and summer modeled emissions. Emissions data is sourced from “mitigated” results, which incorporate emissions reductions from measures to be implemented during project construction, such as watering of soils during construction required under VCAPCD Rule 55.

The VCAPCD’s Ojai Planning area threshold of five pounds per day for ROC and NO<sub>x</sub> do not apply to construction emissions since such emissions are temporary. Section 7.4.3 of the VCAPCD Guidelines includes recommended ROC and NO<sub>x</sub> mitigation measures. These measures, as described above, include reducing equipment idling times, maintaining equipment engines per manufacturer specifications, and using alternatively fueled equipment, when feasible. CMWD, and its contractor(s), would adhere to these measures to ensure reduced construction emissions as recommended by the VCAPCD Guidelines. Incorporation of these measures would further reduce the ROC and NO<sub>x</sub> emissions presented in Table 4.

With respect to fugitive dust emissions, the VCAPCD states significant construction-related air quality impacts result if fugitive dust emissions are generated in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which may endanger the comfort, repose, health, or safety of any such person or the public. For construction impacts, the VCAPCD recommends minimizing fugitive dust through dust control measures.<sup>3</sup>

Fugitive dust control measures are required by VCAPCD Rule 55. Such measures include securing tarps over truck loads, removing vehicle track-out using PM<sub>10</sub> efficient sweepers, and watering bulk material to minimize fugitive dust. As a result, compliance with Rule 55 would ensure construction emissions would not be generated in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or endanger the comfort, repose, health, or safety of any such person or the public.

The population of Ventura County has been and will continue to be exposed to Valley Fever from agricultural and construction activities occurring throughout the region. The fungal spores responsible for Valley Fever generally grow in virgin, undisturbed soil. Soils along the project alignment are already disturbed from construction of roadways, commercial structures, and residences, as well as activities associated with agricultural production. Due to the previous amount of disturbance along the alignment, disturbance of soils during construction activities is unlikely to pose a substantial risk of infection. Substantial increases in the number of reported cases of Valley Fever tend to occur only after major ground-disturbing events such as the 1994 Northridge earthquake (VPAPCD 2003). Construction of the proposed project would not result in a comparable amount of ground disturbance. Furthermore, the standard construction measures, listed above, would reduce fugitive dust generation, which would further minimize the risk of infection. Therefore, construction of the proposed project would not significantly increase the risk to public health above existing background levels. Because the project area does not pose a substantial risk for Valley Fever, Valley Fever-specific mitigation measures detailed in the VCAPCD Guidelines would not be required.

Given the temporary nature of construction emissions, incorporation of fugitive dust reduction measures through compliance with existing VCAPCD regulations and mitigation measures, and the negligible operational emissions, this impact would be less than significant.

## Operational Emissions

The new pipelines would not require regular maintenance beyond what is already required for existing infrastructure and therefore, would not generate any new, ongoing maintenance trips or activities. The upgraded pump station would not generate substantial operational emissions because it would be connected to the regional electricity grid which is increasingly powered by renewable energy, would restore lost efficiency in the water distribution system, would not be used to increase the retail water supply or serve additional customers, and would primarily serve to improve fire flow. Rehabilitation or replacement of wells would increase the efficiency of these wells and would not increase operation emissions beyond what was produced by existing well operations. Therefore, emissions associated with long-term project operation and maintenance

---

<sup>3</sup> Measures pertaining to fugitive dust control—including watering exposed areas, reducing vehicle speeds to 15 miles per hour on unpaved roads, and cleaning/sweeping paved roads—were incorporated into the modeling of construction emissions as “mitigation”. Other measures, such as those reducing emissions of ozone precursors, were not incorporated into the modeling of construction emissions, but would further reduce construction emissions beyond those presented in this analysis.

would remain unchanged from current conditions and would have a less than significant impact on regional air quality.

#### **LESS THAN SIGNIFICANT IMPACT**

*c. Would the project expose sensitive receptors to substantial pollutant concentrations?*

The VCAPCD defines sensitive receptors as facilities or land uses which include members of the population particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of sensitive receptors listed in the VCAPCD Guidelines include schools, hospitals, and daycare centers (VCAPCD 2003). The pipeline alignment follows several main roads such as Grand Avenue, West and East Ojai Avenue, and Montgomery Street through a largely urbanized portion of the city, with some of the proposed alignment extending to the more rural fringes of the city and into unincorporated west Ventura County. Potential sensitive receptors within 0.25 mile of the project alignment include numerous residences, ten schools, four nursing/convalescent homes, and one hospital/medical office.

As discussed under items (b) and (c), project construction would result in emissions of criteria pollutants, including fugitive dust, ROC, and NO<sub>x</sub>. Such emissions would be temporary in nature and reduced through compliance with existing regulations, such as VCAPCD Rule 55. Furthermore, emissions at a given sensitive receptor would occur for only a limited portion of the overall construction period. Construction activities would install approximately 200-300 LF of pipeline per day before moving to the next segment of pipeline. Sensitive receptors would therefore be in the vicinity of active construction along the project alignment (i.e., within approximately 900 feet) for approximately three days. Additionally, construction activities for wells would occur on the fringe of the city of Ojai and are not located near any sensitive receptors. Although the existing tanks and pumps to be rehabilitated are located near residences, construction activities at these locations would be similar to other construction activities occurring near residences in the city (such as residential and commercial construction) and would not expose sensitive receptors to substantial pollutant concentrations.

Traffic-congested roadways and intersections have the potential to generate elevated localized carbon monoxide (CO) levels (i.e., CO hotspots). In general, CO hotspots occur in areas with poor circulation or areas with heavy traffic. Existing CO levels in Ventura County have been historically low enough that VCAPCD monitoring stations throughout the county ceased monitoring ambient CO concentrations in March and July 2004 (VCAPCD 2010). The proposed project would not require regular maintenance trips, with approximately one trip per year anticipated to ensure valves are working properly. Construction activities would cause a temporary increase in vehicle traffic. Because construction is a short-term activity and impacts would move as work progresses along the pipeline corridor, construction-related traffic impacts with potential to cause temporary CO hotspots would not be substantial.

Therefore, the project would not result in CO hotspots on adjacent roadways. The project would not expose sensitive receptors to substantial pollutant concentrations and impacts would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

*d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

The proposed pipelines would be installed below ground and would not create objectionable odors during project operation. Project construction could generate odors associated with heavy-duty equipment operation and earth-moving activities. Such odors would be temporary in nature and limited to the duration of construction in the vicinity of a given site along the project's alignment. This would amount to approximately three days at any point along the project's alignment, given anticipated construction of a maximum of 300 LF of pipeline per day. Additionally, construction activities for wells would occur on the fringe of the city of Ojai and would not create objectionable odors affecting a substantial number of people. Although the existing tanks and pumps to be rehabilitated are located near residences, construction activities at these locations would be similar to other construction activities occurring near residences in the city (such as residential and commercial construction) and would not create other emissions, such as those leading to objectionable odors, affecting a substantial number of people. Therefore, this impact would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

## 3.4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

In November of 2018, Rincon Consultants, Inc. conducted a Biological Resources Assessment, including a literature review and field reconnaissance survey to document existing site conditions and the potential presence of special-status biological resources, including plant and wildlife species, plant communities, jurisdictional waters and wetlands, and habitat for nesting birds. The following summarizes the findings of the assessment. The complete Biological Resources Assessment is contained in Appendix B of this document.

The Biological Study Area (BSA) includes the pipeline segments, wells, pump stations, and tanks associated with the project and a 50-foot buffer on both sides of the project footprint (Figures 5 through 8 in Appendix B). Prior to the establishment of Ojai, the land was dominated by oak woodland habitat. Presently, land uses in and around the BSA are predominantly residential with some commercial, mixed-use, and public facilities zoning. The project footprint occurs primarily in roadways and public rights-of-way.

The BSA occurs between 600 to 1,500 feet amsl (United States Geological Survey Topographic Quadrangle Maps, Google Earth 2018). The United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Web Soil Survey delineates thirteen soil map units within the BSA. Three of these soil map units, including Anacapa gravelly sandy loam, Cortina stony sandy loam, and Riverwash, are designated as hydric soils in the Ventura Area (USDA NRCS 2018).

The BSA is dominated by residential development situated around remnant oak trees. The project footprint is primarily located within paved, developed or disturbed areas devoid of vegetation (i.e., public rights-of-way). Numerous ornamental species are present throughout the BSA, reflecting Ojai's current and historic use for residential, commercial, mixed-use, and public facilities land uses. Examples of ornamental species observed include pepper tree (*Schinus mole*), Russian olive (*Elaeagnus angustifolia*), agave (*Agave* sp.), Japanese maple (*Acer palmatum*), oleander (*Nerium oleander*), and French lavender (*Lavandula stoechas*). Emergent coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), California sycamore (*Platanus racemosa*), and California black walnut (*Juglans californica*) were observed throughout the BSA. The emergent species were observed to be overhanging the project footprint. The majority of the understory is mowed annually for fuel clearance.

Within a small location of the BSA adjacent to San Antonio Creek, coast live oak trees are codominant in the tree layer with California sycamore, willow (*Salix* sp.), and eucalyptus (*Eucalyptus* sp.) present. The shrub layer is dominated by laurel sumac (*Malosma laurina*). The herbaceous layer adjacent to the creek is dominated by non-native, invasive species such as smilo grass (*Stipa miliacea*), red brome (*Bromus madritensis*), and wild oats (*Avena fatua*). Within this unit, no vegetation was observed within the project footprint. Riverine vegetation was observed in San Antonio Creek, including willow and non-natives such as castor bean (*Ricinus communis*) and tree tobacco (*Nicotiana glauca*).

An approximate 0.25-mile stretch in the north portion of the BSA contains disturbed oak woodland. As with the developed oak woodland, developed parcels surround the project footprint in this area. The project footprint in this location does not occur along developed road shoulder but is located within private properties containing vegetation including coast live oak and valley oaks. Proposed project activities in the disturbed oak woodland habitat would only replace previously developed infrastructure in kind.

The majority of the project footprint occurs within previously developed areas or disturbed bare ground. Remnant coast live oak, valley oak, and California sycamore trees are outside of the project

footprint, but the canopy driplines of these species may overhang the project footprint in some locations.

The California Native Diversity Database (CNDDDB) lists three special-status plant communities in the nine quadrangles surrounding the BSA. One of these communities, southern California steelhead stream, is present in the BSA (i.e., San Antonio Creek). The other two communities, southern coast live oak riparian forest and southern sycamore alder riparian woodland, were not observed within the BSA.

The BSA provides suitable habitat for wildlife species commonly occurring in semi-rural, residential areas. The wildlife species detected on site are common, widely distributed, and adapted to living in proximity to human development. Common avian species detected on or adjacent to the site include Anna's hummingbird (*Calypte anna*), California scrub-jay (*Aphelocoma californica*), American crow (*Corvus brachyrhynchos*), acorn woodpecker (*Melanerpes formicivorus*), California quail (*Callipepla californica*), and house finch (*Haemorhous mexicanus*). Other wildlife species observed include western fence lizard (*Sceloporus occidentalis*), western brush rabbit (*Sylvilagus bachmani*), and California ground squirrel (*Otospermophilus beecheyi*).

The BSA is located in the Ventura River watershed near San Antonio Creek, Stewart Canyon Creek, and Fox Canyon Barranca. These drainages are subject to the jurisdiction of the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) because each feature has a hydrologic surface connection to the Ventura River, which is a relatively permanent water. The drainages also function as small-scale habitat corridors facilitating wildlife movement. Fully developed properties are present adjacent to the BSA for Fox Canyon Barranca and Stewart Canyon Creek and common wildlife adapted to urban and suburban areas (e.g., raccoon [*Procyon lotor*] and striped skunk [*Mephitis mephitis*]) could use the concrete-lined ephemeral drainages for local movement. Wildlife species could also use the riverine habitat of San Antonio Creek for local movement.

The project site does not occur within any Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan areas.

## Tree Protection Ordinances

Both the Ojai Municipal Code and Ventura County Code contain tree protection regulations which would apply to the proposed project. Title 4, Chapter 11 of the Ojai Municipal Code contains the City's tree ordinance, which protects oak, sycamore, heritage, or other mature trees as historical, aesthetic, and ecological resources. Specifically, the Ojai Municipal Code states a permit is required when encroachment in a protected tree dripline is unavoidable. Applications for a permit to impact protected trees must be accompanied by a certified arborist report. The report should list each of the protected trees located within the work area, show the protected tree's location on a development plan, and recommend a program for protecting the trees prior to, during, and after construction. Ventura County Code Section 8107-25 contains the County's tree protection regulations. Removal, alteration, or encroachment into a tree protection zone (dripline) of a tree regulated by the County of Ventura requires a permit to be obtained from the County. Minor pruning does not require a permit and includes pruning dead limbs or roots, pruning living limbs or roots 20 percent less than the trunk's girth, and pruning living limbs or roots less than 20 percent of the tree's overall canopy or root system. The removal, encroachment, or alteration of five protected trees (only three of which can be oaks or sycamores; none of which can be heritage or historical trees) may occur through a ministerial permit process.

- a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the United States Fish and Wildlife Service?*

Special-status species are those plants and animals 1) listed, proposed for listing, or candidates for listing as Threatened or Endangered by the United States Fish and Wildlife Service and National Marine Fisheries Service under the federal Endangered Species Act; 2) listed or proposed for listing as Rare, Threatened, or Endangered by the CDFW under the California Endangered Species Act; 3) recognized as Species of Special Concern by the CDFW; 4) afforded protection under the Migratory Bird Treaty Act (MBTA) and/or California Fish and Game Code (CFGF); and 5) occurring on Lists 1 and 2 of the CDFW California Rare Plant Rank system per the following definitions:

- List 1A = Plants presumed extinct in California
- List 1B.1 = Rare or endangered in California and elsewhere; seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
- List 1B.2 = Rare or endangered in California and elsewhere; fairly endangered in California (20 to 80 percent occurrences threatened)
- List 1B.3 = Rare or endangered in California and elsewhere, not very endangered in California (<20 percent of occurrences threatened or no current threats known)
- List 2 = Rare, threatened or endangered in California, but more common elsewhere

In addition, special-status species are ranked globally (G) and subnationally (S) 1 through 5 based on NatureServe's (2010) methodologies:

- G1 or S1 – Critically Imperiled Globally or Subnationally (state)
- G2 or S2 – Imperiled Globally or Subnationally (state)
- G3 or S3 – Vulnerable to extirpation or extinction Globally or Subnationally (state)
- G4 or S4 – Apparently secure Globally or Subnationally (state)
- G5 or S5 – Secure Globally or Subnationally (state)
- ? – Inexact Numeric Rank
- T – Intraspecific Taxon (subspecies, varieties, and other designations below the level of species)
- Q – Questionable taxonomy that may reduce conservation priority

Rincon biologists determined the majority of the study area does not contain suitable habitat for any special-status plant species based on a pedestrian survey of the alignment and various records searches (refer to Appendix B). The BSA and project alignment generally lack appropriate plant community types, soils and other components to support special-status plant species.

Rincon determined four wildlife species have potential to occur within the project site (Appendix B). These species were determined to have a low potential to occur in the BSA based on known ranges, habitat preferences for the species, species occurrence records from the CNDDDB, and species occurrence records from other sites in the vicinity of the survey area. Southern California steelhead has a potential to occur in the BSA. Suitable habitat for the species is located within San Antonio Creek; the proposed project has been designed to avoid direct impacts to the creek. The species is confined to aquatic habitat, proposed construction would not occur below top of bank and no equipment is proposed within the creek. Further, mitigation measure BIO-1 is suggested to avoid construction adjacent to San Antonio Creek during the rainy season (December through April). This



measure would avoid construction work adjacent to San Antonio Creek when water has the potential to rise to the top of bank. Therefore, the project would not directly impact southern California steelhead. Indirect impacts to steelhead could result from construction equipment mobilization and operation of heavy equipment near the river area in the form of water quality degradation (i.e., sediment transport, leaking equipment operated above the creek, track-off on roadways from heavy equipment use mobilizing into creeks and drainages during rain events), if the species is present. Implementation of mitigation measures BIO-1 and BIO-8 through BIO-16 will ensure the water quality of San Antonio Creek is not affected, thereby reducing indirect effects to steelhead to less than significant.

The San Bernardino ringneck snake and coast patch-nosed snake have low potential to occur in the BSA. Elements of suitable habitat are present for the species adjacent to San Antonio Creek and adjacent to the daylighted portions of Fox Canyon Barranca and Stewart Canyon Creek. Although habitat for these species occurs throughout the BSA, the project footprint occurs primarily within previously developed infrastructure. This infrastructure includes a paved road system, concrete and gravel substrates (i.e., the foundation below the booster pumps, tanks, and wells), and highly disturbed herbaceous layer (i.e., mowed grasses). Little cover for these species of snakes was observed in the project footprint. Both species are not likely to frequent sites without cover in the form of vegetation or burrows. Little vegetation or burrows were observed within the project footprint. Potential impacts to San Bernardino ringneck snake and coast patch-nosed snake, if present, could occur during construction equipment transport and operation of heavy equipment near potential habitat. Effects of these activities on these species would be minimized by surveying for and relocating individuals out of harm's way prior to and during activities. Mitigation measures BIO-2 and BIO-3 require pre-construction surveys in suitable habitats for the species and environmental education to aid workers in recognizing special-status biological resources with potential to occur in the project area. The effects to San Bernardino ringneck snake and coast patch-nosed snake would be less than significant with mitigation incorporated.

The hoary bat has a low potential to occur in the BSA. Suitable roosting and foraging habitat for the species occurs within the BSA adjacent to San Antonio Creek, within the developed and disturbed woodland in the BSA, and adjacent to the BSA near Fox Canyon Barranca and Stewart Canyon Creek. Impacts could occur if construction occurs adjacent to maternity roosts during the breeding season, because unlike adult bats, juvenile bats are unable to escape impacts. As a winter migrant the hoary bat does not commonly form maternity roosts in California. The proposed project does not include removal or trimming of trees or vegetation, therefore, the project has been designed to avoid impacts to the species' roosting habitat. In addition, the hoary bat requires a permanent water source. San Antonio Creek, Fox Canyon Barranca, and Stewart Canyon Creek are ephemeral water sources and would not support the species. It is unlikely construction would impact foraging bats because construction hours would most likely occur outside of this species' nocturnal feeding period. Foraging bats are expected to evade the construction areas with the onset of disturbance. Therefore, direct and indirect impacts to special-status bats would be less than significant.

The BSA contains habitat with potential to support nesting birds, including raptors protected under the CFGC and the MBTA. The adjacent native trees, ornamental vegetation and orchards along the project footprint provide suitable nesting habitat for avian species. Specifically, the tall eucalyptus trees adjacent to the existing infrastructure in Unit A contain suitable habitat for raptor species. Also, Grand Avenue Bridge and culverts below East Ojai Avenue and Aliso Street which channel flows from Fox Canyon Barranca and Stewart Canyon Creek, respectively, may provide habitat for mud and cavity-nesting birds such as tree swallows (*Tachycineta bicolor*) and black phoebe (*Sayornis*

*nigricans*). The project could adversely affect raptors and other nesting birds if construction occurs while they are present within or adjacent to the project footprint, through direct mortality or abandonment of nests. The loss of a nest due to construction activities would be a violation of the MBTA and CFGC Section 3503. BIO-6 and BIO-7 are recommended for compliance with the MBTA and CFGC 3503.

## Mitigation Measures

The following mitigation measures would reduce the impact to a less than significant level.

### *BIO-1 Avoid Work above San Antonio Creek during the Rainy Season*

Project activities associated with pipe replacement on the bridge above San Antonio Creek shall not occur during the rainy season (December 1 to April 1), to avoid work when higher flows and steelhead could be present. If activities at this location must occur during the rainy season, a pre-activity survey shall be conducted by a qualified fisheries biologist to determine if flow conditions are suitable for steelhead passage. If flow conditions are not suitable, pipeline replacement can proceed and the activity should be monitored by a qualified biologist, as needed, to confirm flow conditions do not change during the project activity. If flow conditions are suitable for steelhead passage, pipeline replacement shall be postponed until a qualified biologist determines the conditions are no longer suitable and the species is not likely to be present.

### *BIO-2 Worker Environmental Awareness Program*

Prior to initiation of all construction activities (including staging and mobilization), all personnel associated with project construction shall attend a Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist, to aid workers in recognizing special status biological resources potentially occurring in the project area. This training will include information about southern California steelhead, San Bernardino ringneck snake, coast patch-nosed snake, and hoary bat, as well as other special-status species with potential to occur in the project area.

The specifics of this program shall include identification of special-status species and habitats, a description of the regulatory status and general ecological characteristics of special-status resources, and review of the limits of construction and measures required to avoid and minimize impacts to biological resources within the work area. A fact sheet conveying this information shall also be prepared for distribution to all contractors, their employees, and other personnel involved with construction of the project. All employees shall sign a form provided by the trainer documenting they have attended the WEAP and understand the information presented to them. The crew foreman shall be responsible for ensuring crew members adhere to the guidelines and restrictions designed to avoid impacts to special-status species.

### *BIO-3 Pre-Construction Wildlife Surveys*

Within one week prior to the commencement of project activities, a qualified wildlife biologist shall conduct pre-construction surveys in portions of the access and construction area, particularly those containing natural vegetation. The surveys will be conducted within the project footprint locations specified below. A 50-foot buffer around the project footprint will be surveyed with inaccessible areas (i.e., private lands) surveyed with binoculars, as practicable.

A qualified biologist will conduct a survey within the following locations of the project footprint: Heidelberg Tank, 100 feet east and west San Antonio Creek at Grand Avenue, adjacent to the

daylighted portions of Fox Canyon Barranca and Stewart Canyon Creek, and within the disturbed oak woodland habitat in Unit B (if trenching is to occur in this area). The biologist will document existing conditions and search for special-status species (i.e., San Bernardino ringneck snake and coast patch-nosed snake). If San Bernardino ringneck snake and coast patch-nosed snake are found, individual animals shall be relocated to similar habitat away from construction activities, at least 200 feet from any area of project construction.

*BIO-4 Night Construction Avoidance*

Night-time construction shall be avoided adjacent to San Antonio Creek, daylighted portions of Fox Canyon Barranca, and daylighted portions of Stewart Canyon Creek as practicable, to avoid impacts to special-status wildlife in and near these drainages.

*BIO-5 Night Lighting*

If construction must occur at night (between dusk and dawn), all lighting will be shielded and directed downward to minimize the potential for glare or spillover onto adjacent properties and to reduce impacts on local wildlife.

*BIO-6 Nesting Bird Season Avoidance.*

To avoid disturbance of nesting and special-status birds, including raptor species protected by the MBTA and CFGC 3503, activities related to the project including, but not limited to, vegetation removal, ground disturbance, and construction and demolition shall occur outside of the bird breeding season for migratory birds (February 1 through August 31), if practicable.

*BIO-7 Nesting Birds*

If construction must begin during the breeding season, then a pre-construction nesting bird survey shall be conducted no more than seven days prior to initiation of ground disturbance and vegetation removal activities. The nesting bird pre-construction survey shall be conducted on foot inside the project footprint, including a 100-foot buffer (300-foot for raptors), and in inaccessible areas (e.g., private lands) from afar using binoculars to the extent practicable. The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California coastal communities. If nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be determined and demarcated by the qualified biologist with bright orange construction fencing, flagging, construction lathe, or other means to mark the boundary. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground-disturbing activities shall occur inside this buffer until the avian biologist has confirmed breeding/nesting is completed, and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

- b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

Plant communities are considered sensitive natural communities if they have limited distributions, have high wildlife value, include special-status species, or are particularly susceptible to disturbance. The CDFW ranks sensitive natural communities as "threatened" or "very threatened" and keeps

records of their occurrences in CNDDDB. Similar to special-status plant and wildlife species, vegetation alliances are ranked 1 through 5 based on NatureServe's (2010) methodology, with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive.

A southern California steelhead stream, San Antonio Creek, is present within the BSA, but not within the project footprint. As stated above, the proposed construction was designed to avoid direct impacts to San Antonio Creek and proposed work will replace existing infrastructure in-kind. Implementation of mitigation measures BIO-8 through BIO-16 will ensure construction materials do not indirectly impact the creek. Therefore, the project would have a less than significant impact to this southern California steelhead stream with implementation of these measures.

## Mitigation Measures

The following mitigation measures shall be implemented within 50 feet of San Antonio Creek, Fox Canyon Barranca, and Stewart Canyon Creek and would reduce the impact to a less than significant level.

### *BIO-8 Disturbance Area*

Areas of temporary disturbance shall be minimized to the extent practicable.

### *BIO-9 Staging Equipment*

Staging and laydown areas shall be unvegetated areas and previously disturbed sites only.

### *BIO-10 Pollutant Management*

All vehicles and equipment shall be in good working condition and free of leaks. The contractor shall prevent oil, petroleum products, or any other pollutant from contaminating the soil or entering a watercourse (dry or otherwise). When vehicles or equipment are stationary, mats or drip pans shall be placed below vehicles to contain fluid leaks.

### *BIO-11 Material Storage*

Materials shall be stored on impervious surfaces or plastic ground covers to prevent any spills or leakage. Material storage shall be at least 100 feet from San Antonio Creek, and daylighted portions of Fox Canyon Barranca, and Stewart Canyon Creek. Any material/spoils from project activities shall be located and stored 100 feet from potential jurisdictional areas (San Antonio Creek, Fox Canyon Barranca, and Stewart Canyon Creek). Construction materials and spoils shall be protected from stormwater run-off using temporary perimeter sediment barriers such as berms, silt fences, fiber rolls, covers, sand/gravel bags, and straw bale barriers, as appropriate.

### *BIO-12 Tracking Loose Material*

Implement Best Management Practices (BMPs) to prevent the off-site tracking of loose construction and landscape materials such as street sweeping, vacuuming, and rumble plates, as appropriate.

### *BIO-13 Pollution Prevention*

Prevent the discharge of silt or pollutants off of the site when working adjacent to potentially jurisdictional waters. Install BMPs (i.e., silt barriers, sand bags, straw bales) as appropriate.

*BIO-14 Site Materials and Refuse Management*

All food related trash shall be disposed of in closed containers and removed from the project area each day during the construction period. Construction personnel shall not feed or otherwise attract wildlife to the construction area. At project completion, all project-generated debris, vehicles, building materials, and rubbish shall be removed from the project footprint.

*BIO-15 Re-fueling and Maintenance*

All re-fueling, cleaning, and maintenance of equipment will occur at least 100 feet from San Antonio Creek and other potentially jurisdictional waters (Fox Canyon Barranca, Stewart Canyon Creek).

*BIO-16 Responding to Spilled Materials*

Any spillage of material will be stopped if it can be done safely. The contaminated area will be cleaned, and any contaminated materials properly disposed. For all spills, the project foreman or other designated liaison will notify CMWD immediately.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

- c. *Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

The proposed project would not 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. As stated above, several features observed within the BSA are subject to the jurisdiction of the USACE, RWQCB, and CDFW. San Antonio Creek, Fox Canyon Barranca, and Stewart Canyon Creek are located outside of the project footprint, but within the BSA. The proposed project is designed to avoid direct impacts to these water features.

Indirect impacts from construction materials (e.g., stockpiled materials, construction equipment, and trash) potentially stored on site could adversely affect water quality (e.g., increased turbidity, altered pH, decreased dissolved oxygen levels, etc.) within the water features if runoff were to occur during storm events. Therefore, mitigation measures BIO-1 and BIO-8 through BIO-16 listed above are required to avoid potential indirect impacts to water quality within the potentially jurisdictional waters. The implementation of these mitigation measures would reduce potential impacts to potential jurisdictional waters to a less than significant level.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

- d. *Would the project 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?*

The northern extent of the BSA is located within a known wildlife corridor providing connectivity for wildlife north of the city of Ojai. San Antonio Creek, Fox Canyon Barranca, and Stewart Canyon Creek could also act as movement corridors for wildlife species. As stated above, fully developed properties are present adjacent to the BSA for Fox Canyon Barranca and Stewart Canyon Creek and common wildlife adapted to urban and suburban areas (e.g., raccoon and striped skunk) could use the concrete-lined ephemeral drainages for local movement. Wildlife species could also use the riverine habitat of San Antonio Creek for local movement. The proposed project would not modify

any of these features, nor substantially increase the level of disturbance beyond ambient conditions.

Overall, the proposed project is not expected to hinder wildlife movement in the region, considering none of the project components are designed in such a way as to create a barrier to wildlife movement. The project footprint is located within previously developed infrastructure and no new infrastructure footprint is proposed. Therefore, the project would have a less than significant impact to wildlife movement.

#### **LESS THAN SIGNIFICANT IMPACT**

*e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

In the City and County jurisdictions, a number of protected trees were observed within the BSA including California sycamore, coast live oak, valley oak, and potential historical or heritage trees. Impacts to protected trees may include construction equipment compacting soil around the trees and disturbance of the canopy and the root zone. Trenching may occur in the root zone of potentially protected trees throughout the BSA, but the proposed project is replacing infrastructure currently in place. The majority of the project alignment is located within developed public right-of-way.

The Ojai Municipal Code states a permit is required when encroachment to a protected tree dripline is unavoidable. Applications for a permit to impact protected trees must be accompanied by a certified arborist report. The report should list each of the protected trees located within the work area, show the protected tree's location on a development plan, and recommend a program for protecting the trees prior to, during, and after construction.

Removal, alteration, or encroachment into a tree protection zone (dripline) of a tree regulated by the County of Ventura requires a ministerial permit to be obtained from the County. Minor pruning does not require a permit and includes pruning dead limbs or roots, pruning living limbs or roots 20 percent less than the trunk's girth, and pruning living limbs or roots less than 20 percent of the tree's overall canopy or root system. The removal, encroachment, or alteration of five protected trees (only three of which can be oaks or sycamores; none of which can be heritage or historical trees) may occur through a ministerial permit process. A ministerial permit requires the following:

- Ministerial tree permit application;
- Site sketch (no construction involved) or Site Plan (if involves new/expanding development);
- \$100 (non-refundable) application fee for one tree, \$315 for more than one tree;
- Color photos of tree(s); and
- Arborist Verification of Tree Protection Measures (Tree Form M5), if applicable.

Removal, encroachment, or alteration of more than the ministerial permit process may trigger a discretionary tree permit which requires the following:

- \$750 application deposit (if not part of another discretionary permit request), and
- An Arborist Report (Tree Doc D-AR).

The Ventura County General Plan (Biological Resources Policy 1.5.2-3 and 1.5.2-4) and Ojai Municipal Code (10-2.1004) also contain policies to protect potentially jurisdictional waters from development. No new development is proposed. Within the City and County jurisdiction,

infrastructure would be replaced outside the top of bank of jurisdictional water features observed within the BSA including San Antonio Creek, Fox Canyon Barranca, and Stewart Canyon Creek. No work within the channel is proposed and all infrastructure to be constructed is replacing infrastructure currently in place. Further, implementation of BIO-1 and BIO-8 through BIO-16 would avoid and minimize potential indirect impacts to these water features. BIO-8 through BIO-16 would be implemented within 50 feet of San Antonio Creek, Fox Canyon Barranca, and Stewart Canyon Creek, to avoid potential indirect impacts to water quality within these jurisdictional waters. Therefore, the proposed project would not conflict with local policies or ordinances protecting potentially jurisdictional waters and impacts would be less than significant.

The Ventura County General Plan contains a policy to protect wildlife migration corridors. Within the County jurisdiction, three tanks observed in the BSA (Heidelberger Tank and Running Ridge Tanks) are located within an Essential Connectivity Area (ECA). These tanks (within the project footprint) are located at the boundary of the ECA and developed portions of Ojai. The ECA surrounds the northern portion of Ojai and is approximately ten miles wide. Each tank is approximately 50 feet in diameter or less and the tanks do not represent a barrier to wildlife movement because the ECA is sufficiently wide to allow for wildlife movement around and past the tanks. Further, implementation of BIO-14 would minimize the attraction of wildlife to the project footprint. Therefore, the proposed project would not conflict with local policies or ordinances protecting habitat connectivity and impacts would be less than significant.

The Ventura County General Plan Biological Resources Policy 1.5.2-5 requires consultation with the appropriate resource agency when discretionary development may affect significant biological resources, which include locally important species. Rincon reviewed the list of locally important species and no species were observed within the BSA. The proposed project would replace existing infrastructure. Therefore, the proposed project would not conflict with local policies or ordinances protecting locally important species and impacts would be less than significant.

Generally, the project would be consistent with local policies or ordinances protecting biological resources. Nevertheless, due to potential impacts to protected trees in the City and County jurisdictions, this impact would be potentially significant unless mitigation is incorporated.

## Mitigation Measures

The following mitigation measure would reduce the impact to a less than significant level.

### *BIO-17 Arborist Study*

Prior to obtaining a permit from either jurisdiction, an Arborist Study shall be conducted within portions of the project footprint occurring within 20 feet of the canopy drip line of protected trees. The study shall plot the location of protected trees in this zone, identify each protected tree, and determine the jurisdiction of any trees to be impacted. An Arborist Report shall be prepared by a Certified Arborist in compliance with both the City of Ojai and County of Ventura ordinance guidelines. Specifically, the Arborist Report shall include, at minimum, the following:

- An inventory of all trees containing a canopy drip line within 20 feet of the project footprint, as feasible without trespassing on private lands. Inventory data should record, at minimum: diameter at breast height (DBH), height, canopy cover information/mapping, health and vigor rating
- Representative photographs of each regulated tree proposed to be encroached upon within the disturbed oak woodland footprint

- Description of proposed site development activities including, but not limited to, excavation for trenching, any tree trimming for access, and construction access routes
- A project-specific Tree Protection Plan (TPP) shall be prepared which would at minimum include site plans, protective tree fencing, the designated tree protection zone (identifying an area sufficiently large enough to protect the tree and its roots from disturbance), activities prohibited/permitted within the tree protection zone, encroachment boundaries, and potential transplanting or replacement tree plantings

The Arborist Report shall be submitted to the appropriate department of the City of Ojai or County of Ventura for approval prior to the start of any tree-disturbing construction activities, as necessary.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

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

The project site does not occur within any Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan areas. The proposed project would not conflict with the provisions of any such plans. Therefore, no impact would occur.

**NO IMPACT**



## 3.5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Information in this section regarding cultural (i.e., archaeological and historical) resources includes data from the cultural resources technical report (Appendix C) prepared by Rincon Consultants, Inc. The significance of cultural resources and impacts to those resources is determined by whether or not those resources can increase our collective knowledge of the past. The primary determining factors are site content and degree of preservation.

For the purpose of this analysis, a significant impact would occur if physical changes to these resources would result in the following conditions, listed in Appendix G of the State CEQA Guidelines:

- 1) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines §15064.5
- 2) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5
- 3) Disturb any human remains, including those interred outside of formal cemeteries

A “substantial adverse change” in the significance of a historical resource is defined as “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.” State CEQA Guidelines Section 15064.5(b) states the significance of an historical resource is “materially impaired” when a project does any of the following:

- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource conveying its historical significance and justifying its inclusion in, or eligibility for inclusion in the California Register of Historical Resources (CRHR)
- Demolishes or materially alters in an adverse manner those physical characteristics accounting for its inclusion in a local register of historical resources or its identification in an historical resources survey, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence the resource is not historically or culturally significant

- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource conveying its historical significance and justifying its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA

State CEQA Guidelines Section 15064.5 also states the term “historical resources” shall include the following:

- 1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in, the CRHR (Public Resources Code [PRC] Section 5024.1, Title 14 California Code of Regulations [CCR], Section 4850 et. seq.).
- 2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the PRC or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the PRC, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates it is not historically or culturally significant.
- 3) 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, may be considered to be an historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing in the CRHR (PRC Section 5024.1, Title 14 CCR, Section 4852) as follows:
  - Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage
  - Is associated with the lives of persons important in our past
  - Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values
  - Has yielded, or may be likely to yield, information important in prehistory or history (State CEQA Guidelines Section 15064.5)

Properties listed on the National Register of Historic Properties (NRHP) are automatically listed on the CRHR, along with State Landmarks and Points of Interest. The CRHR can also include properties designated under local ordinances or identified through local historical resource surveys.

To address historical resources and archaeological resources, a cultural resources study was prepared for the project including a cultural resources records search at the South Central Coastal Information Center (SCCIC) and pedestrian survey. The study was documented in the Cultural Resources Technical Report (Appendix C), with confidential information removed and on file with the CMWD.

## Built Environment Setting

One historic built environment resource, the Ojai Water Distribution System, was identified within the project area. Consisting of a series of pipelines, tanks, booster pump stations, and wells, the water distribution system services the city of Ojai and the immediately surrounding area. The distribution system contains approximately 45 miles of distribution and transmission mains, six

storage reservoirs, five booster pump stations, six wells, and three interconnections. The system is divided into six distribution zones and contains seven pressure zones.

The Ojai Water Distribution System is not eligible for listing in the CRHR under any applicable designation criteria. It was constructed to provide adequate water supply to the growing town of Ojai and surrounding area. This system did not contribute to the establishment of the community, nor does it appear to have encouraged growth of the community. The Ojai Water Distribution System is just one of many such water distribution systems which operated throughout Southern California in the early twentieth century; it is not associated with any events which made a significant contribution to the broad patterns of California's history and cultural heritage (CRHR Criterion 1). The system was constructed by the Golden State Water Company, a subsidiary of the American States Water Company, and is not associated with the lives of any specific individuals who were important to our past (CRHR Criterion 2). The system is a ubiquitous property type which is also not significant for its design or construction (CRHR Criterion 3). As confirmed by the cultural resources study, there is no evidence to suggest the system has potential to yield important information in history or prehistory (CRHR Criterion 4). Thus, the system is not considered a historical resource. The Cultural Resources Technical Report (Appendix C) contains a full description of the Ojai Water Distribution System and evaluation as a historical resource.

## Archaeological Resources Setting

Two previously recorded archaeological sites (P-56-000061 and P-56-001109) were identified within the project site as a result of the cultural resource study. P-56-000061, also known as the Soule Park Site, is a prehistoric archaeological site potentially representing the location of the prehistoric/ethnohistoric Chumash village of "awha'y", from which Ojai got its name. The site contains numerous burials, thermal features, rock concentrations, and midden deposits, the latter of which exceed one meter in depth. P-56-001109 consists of a raised berm representing the remains of the Ventura River and Ojai Valley Railroad. Built in 1898, the approximately 16-mile-long railroad spur ran between Nordhoff (Ojai) and Ventura. The railroad was abandoned in the 1950s with the tracks and rails removed in 1969. The portion of P-56-001109 which runs through Ojai is now used as a recreational path. Neither resource has been previously evaluated for listing in the CRHR or NRHP. For the purposes of this project, both P-56-000061 and P-56-001109 are assumed to be historical resources under CEQA.

Three additional archaeological sites (P-56-000137, P-56-001779, and P-56-001151) are located in close proximity to the current project area. P-56-000137 and P-56-001151 date to the prehistoric period with P-56-001779 consisting of historic-period remains. None of the archaeological sites have been previously evaluated for listing in the CRHR or NRHP and are therefore assumed to be historical resources under CEQA. No evidence of the three archaeological resources was identified within the project site during the field survey; the subsurface extent of each of these sites is not currently known.

- a. *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*
- b. *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

The Ojai Water Distribution System was the only built historical resource identified in the project area. As discussed above, the Ojai Water Distribution System is not eligible for listing in the CRHR under any applicable designation criteria.

Construction activities associated with the project would have the potential to substantially adversely affect identified and unidentified archaeological resources in the project area. A field survey of P-56-000061, the Soule Park Site, failed to identify any prehistoric archaeological remains within the mapped boundary of the site. There is the possibility cultural deposits associated with the site remain beneath the surface. Proposed construction in this area will be confined to the replacement of existing pipeline in previously disturbed sediments. While, it is unlikely the project will impact any intact buried cultural deposits at P-56-000061, archaeological and Native American monitoring during ground-disturbing activities within a 100-foot radius of the mapped boundary of P-56-000061 is required to reduce potential impacts to a less than significant level (see CUL-1 and CUL-2 below).

Resource P-56-001109 consists of a historic railroad alignment. The findings of the field survey indicate the two segments of P-56-001109 which intersect the project site have been destroyed by road construction and maintenance activities, and by the installation of a recreational path. Because this resource was originally above grade and exhibits little potential to contain subsurface deposits, the replacement of the pipeline in these areas will not result in any further impacts to P-56-001109 and will not cause a substantial adverse change in the significance of the resource.

Sites P-56-000137, P-56-001779, and P-56-001151 are located in close proximity to the project area. The subsurface extent of these sites is currently unknown and thus they may be impacted by ground disturbance conducted as part of the project. Mitigation is required to reduce potential impacts to a less than significant level. Archaeological and Native American monitoring are required for all ground-disturbing work occurring within a 100-foot radius of the mapped site boundaries of prehistoric sites P-56-000137 and P-56-001779, and archaeological monitoring is required within a 100-foot radius of the mapped boundary of historic site P-56-001779 (see CUL-1 and CUL -2 below).

In addition to the known archaeological sites on the project site, there remains the potential to encounter previously unknown archaeological resources during project construction. Mitigation Measure CUL-3 below would reduce potential impacts to unknown resources to a less than significant level.

## Mitigation Measures

The following mitigation measures are required to reduce potential impacts to historical and archaeological resources to a less than significant level.

### *CUL-1 Archaeological Monitoring*

Ground-disturbing activities shall be monitored by a qualified archaeologist within the mapped boundary of P-56-000061, as well as within a 100-foot radius of the site. Additionally, archaeological monitoring shall be conducted for ground disturbance occurring within 100-feet of the mapped boundaries of P-56-000137, P-56-001779 and P-56-001151. The archaeological monitor shall work

under the direction of an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology (National Park Service 1983). If cultural resources are encountered during ground-disturbing activities, work in the immediate area shall halt and the find shall be evaluated for significance under CEQA.

#### *CUL-2 Native American Monitoring*

Ground-disturbing activities shall be observed by a Native American monitor within the mapped boundary of P-56-000061 as well as within a 100-foot radius of the site. Further, Native American monitoring shall be conducted within 100-feet of the mapped boundaries of P-56-000137 and P-56-001779. If cultural resources are encountered during ground-disturbing activities, work in the immediate area shall halt and the find shall be evaluated by an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology (National Park Service 1983) for significance under CEQA.

#### *CUL -3 Unanticipated Discovery of Cultural Resources*

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt, and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology (National Park Service 1983) shall be contacted immediately to evaluate the find. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation, Native American consultation, and archaeological monitoring may be warranted to mitigate any significant impacts.

### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

#### *c. Would the project disturb any human remains, including those interred outside of formal cemeteries?*

Previous archaeological investigations at P-56-000061 encountered a number of prehistoric burial features containing human remains. Although there is a potential for the recovery of human remains during ground-disturbing activities in the vicinity of the site, construction activities within the mapped boundaries of P-56-000061 will be limited to the replacement of existing pipelines in previously disturbed sediments. As such, it is unlikely the project will impact any intact human remains during ground-disturbing activities. Archaeological and Native American monitoring during ground-disturbing activities within a 100-foot radius of the mapped boundary of P-56-000061 is required to reduce potential impacts to a less than significant level (see CUL-1 and CUL-2 above).

If human remains are found, existing regulations outlined in the State of California Health and Safety Code Section 7050.5 state no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of being granted access and provide recommendations as to the treatment of the remains to the landowner.

### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*This page intentionally left blank.*

## 3.6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

California is one of the lowest per capita energy users in the United States, ranked 48<sup>th</sup> in the nation, due to its energy efficiency programs and mild climate (United States Energy Information Administration [EIA] 2018a). California consumed 292,039 gigawatt-hours of electricity and 2,110,829 million cubic feet of natural gas in 2017 (California Energy Commission [CEC] 2019, EIA 2018b). In addition, Californians consume approximately 18.7 billion gallons of motor vehicle fuels per year (Federal Transit Administration 2017). The single largest end-use sector for energy consumption in California is transportation (39.8 percent), followed by industry (23.7 percent), commercial (18.9 percent), and residential (17.7 percent) (EIA 2018a).

Most of California's electricity is generated in-state with approximately 30 percent imported from the Northwest and Southwest in 2017 (CEC 2018). In addition, approximately 30 percent of California's electricity supply comes from renewable energy sources, such as wind, solar photovoltaic, geothermal, and biomass (CEC 2018). Adopted on September 10, 2018, Senate Bill (SB) 100 accelerates the state's Renewable Portfolio Standards Program, codified in the Public Utilities Act, by requiring electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

To reduce statewide vehicle emissions, California requires all motorists use California Reformulated Gasoline, which is sourced almost exclusively from in-state refineries. Gasoline is the most used transportation fuel in California with 15.1 billion gallons sold in 2015 and is used by light-duty cars, pickup trucks, and sport utility vehicles (CEC 2016a). Diesel is the second most used fuel in California with 4.2 billion gallons sold in 2015 and is used primarily by heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles (CEC 2016b). Both gasoline and diesel are primarily petroleum-based, and their consumption releases greenhouse gas (GHG) emissions, including CO<sub>2</sub> and NO<sub>x</sub>. The transportation sector is the single largest source of GHG emissions in California, accounting for 41 percent of all inventoried emissions in 2016 (CARB 2018).

- a. *Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

Energy use during project construction would be primarily in the form of fuel consumption to operate heavy equipment, light-duty vehicles, machinery, and generators. Temporary grid power may also be provided to construction trailers or electric construction equipment. Energy use during construction would be temporary in nature, and construction equipment used would be typical of construction projects in the region. Therefore, project construction would not result in a potential impact due to wasteful, inefficient, or unnecessary consumption of energy resources. No impact would occur during construction.

The proposed project would not expand the existing water supply pipeline network and would only increase service distribution capacity to improve fire flow and replace aging infrastructure. The project would not increase energy demands associated with existing tanks, wells, and booster pump stations because the rehabilitation of existing tank, well, and pump station infrastructure would not involve an expansion of design capacity. Additionally, any rehabilitation to well sites would increase the efficiency of these wells, which would reduce energy use. Pump station improvements would incrementally increase daily electricity use, but this energy demand would be supplied by the regional electricity grid which is increasingly powered by renewable energy, would restore lost efficiency in the water distribution system, would not be used to increase the retail water supply or serve additional customers, and would primarily serve to improve fire flow. Operational trips associated with maintenance of the infrastructure would be the same as under existing conditions. As such, project operation would not result in a potential impact due to wasteful, inefficient, or unnecessary consumption of energy resources. No impact would occur during operation.

**NO IMPACT**

- b. *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

As mentioned above, SB 100 mandates 100 percent clean electricity for California by 2045. Because the proposed project would be powered by the existing electricity grid, the project would eventually be powered by renewable energy mandated by SB 100 and would not conflict with this statewide plan. Casitas MWD, the City of Ojai and the County of Ventura do not have any specific renewable energy or energy efficiency plans with which the project could comply. Nonetheless, the project would not conflict with or obstruct the state plan for renewable energy; therefore, no impact would occur.

**NO IMPACT**



## 3.7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential adverse effects, including the risk of loss, injury, or death involving:				
1. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is made unstable as a result of the project, and potentially result in on or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Geologic Setting

The project area is located in the Ojai Valley, flanked by Sulphur Mountain to the south and the Topa Topa Mountains to the north. The project site is located in the Transverse Ranges Geomorphic Province, characterized by anomalous east-west trending mountain ranges. The province is bounded on the north by the Coastal Ranges (Sierra Madre Mountains), on the south by the Peninsular Ranges, on the east by the Mojave Desert, and on the west by the Pacific Ocean.

The Transverse Ranges province is seismically active, bounded by three major fault zones, including the San Andreas Fault and Big Pine Fault to the north and the Malibu Coast Fault to the south. Seismic events can result in groundshaking, liquefaction, landslides, subsidence, tsunami and seiche. In addition to the three major faults described above, numerous smaller faults are located in and around the Ojai Valley, including the Santa Ana Fault/Mission Ridge Fault Zone and the San Cayetano Fault. The Mission Ridge Fault Zone is closest to the project site, approximately 0.6 mile southwest of the nearest project component (pipeline replacement along Verano Drive).

## Paleontological Resources Setting

### *Geologic Units in the Project Area*

The project area is mapped at a scale of 1:24,000 by Tan and Irvine (2005), Tan and Jones (2006), and Dibblee and Ehrenspeck (1987a, b). Several sedimentary units are mapped at the surface of the project area, including: the Eocene Coldwater Sandstone (Tcw), Eocene to Miocene (predominately Oligocene) Sespe Formation (Ts), Quaternary older alluvium (Qpa) of Pleistocene age and Quaternary younger alluvium of Holocene age (Qha, Qhf, Qw).

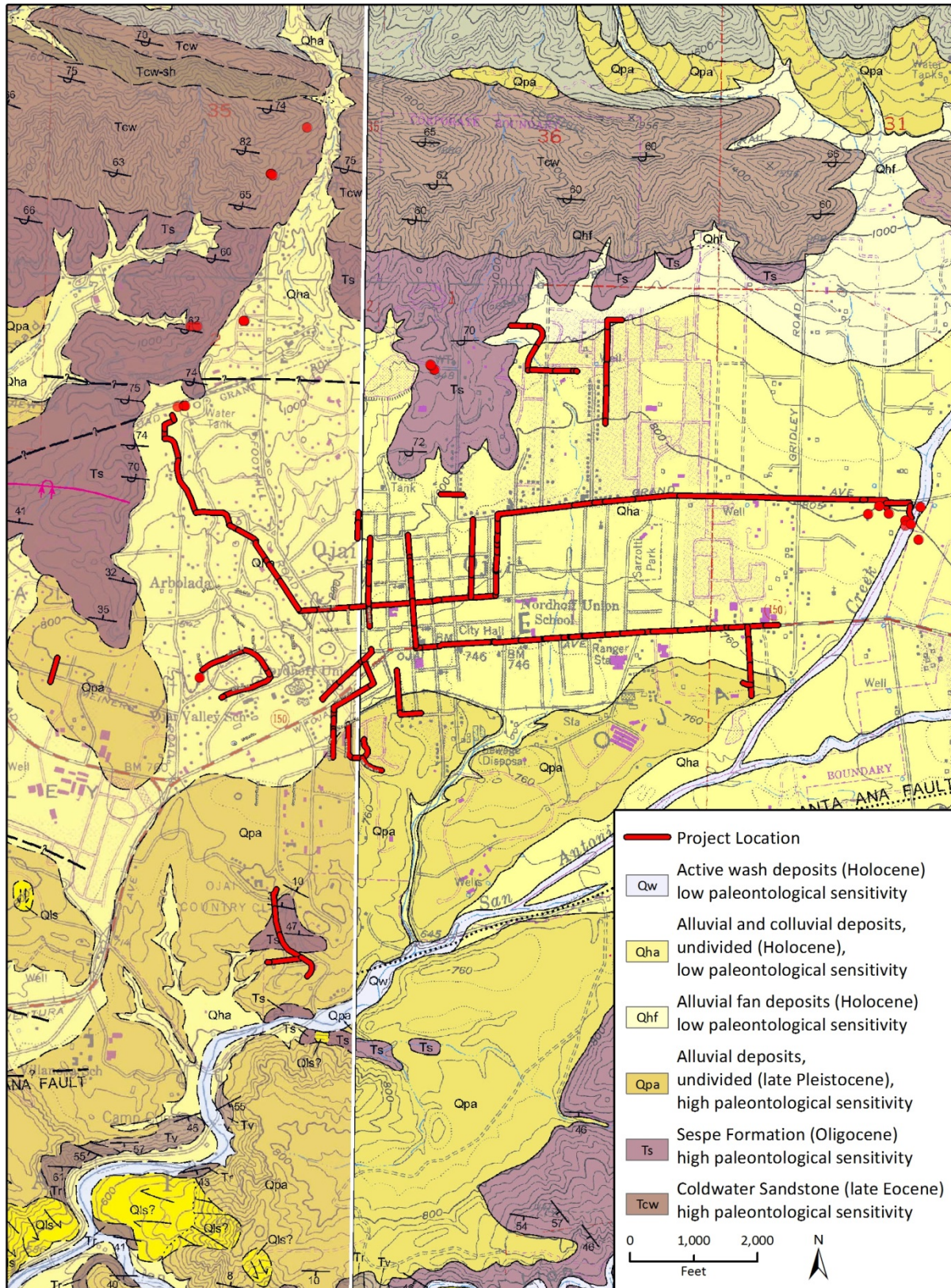
The non-marine Sespe Formation is composed of red-brown to yellow-brown, well-indurated, commonly crossbedded sandstone with imbricated pebble conglomerate and dark brown claystone. The Sespe Formation has yielded hundreds of fossil specimens of at least 35 mammalian, rodent, reptile, and bird species, including 15 type specimens (Kelly 1990, 1992, 2009, 2010; Kelly and Whistler 1994; Lander 1983; UCMP 2018). The marine Coldwater Sandstone is composed of sandstone, greenish-gray shale and siltstone, pebble conglomerate, and oyster reef debris (Dibblee 1966). The Coldwater Formation has produced numerous invertebrate and microfossil localities and at least two vertebrate localities yielding unidentified mammal specimens (UCMP 2018). The Quaternary alluvial units are composed of unconsolidated to moderately consolidated, silt, sand, and gravel deposits. Pleistocene alluvial deposits have proven to yield significant vertebrate fossil localities throughout southern California from the coastal areas to the inland valleys. These localities have produced fossil specimens of terrestrial mammals such as mammoth, horse, camel, bison, rodent, bird, and reptile (Jefferson 1991; UCMP 2018).

Figure 7 shows geologic units underlying the project area and their respective paleontological sensitivity.

### *Locality Record Search*

A search of paleontological locality records at the Natural History Museum of Los Angeles County (LACM) resulted in no previously recorded fossil localities within the project area. According to LACM collection records, the closest vertebrate locality from Pleistocene alluvium was identified south of the project area in Sexton Canyon on Sulphur Mountain. The vertebrate locality LACM [CIT] 211 produced a fossil specimen of extinct goose (*Chendytes lawi*), with depth of recovery unreported. A supplemental review of University of California Museum of Paleontology (UCMP)

Figure 7 Geologic Units and Paleontological Sensitivity





vertebrate fossil collection records resulted in no vertebrate fossil localities in the project area. The closest Pleistocene vertebrate localities identified on the UCMP online database include V5697, V5809, and V65287, recovered southwest of Ojai near the city of Ventura. The localities yielded fossil specimens of mammoth, horse, bison, and seal. The UCMP has at least two previously-recorded vertebrate localities (V82372 and V81116) for the Eocene Coldwater Sandstone in the immediate vicinity of Ojai, which yielded rodent specimens. In addition, the UCMP has at least 28 previously-recorded vertebrate localities for the Eocene-Miocene Sespe Formation in Ventura County, which yielded over 300 vertebrate specimens including taxa of perissodactyl, artiodactyl, rodent, reptile, and bird. Depth of recovery was unreported.

### *Paleontological Sensitivity*

Based on a literature review and museum locality search, and in accordance with Society of Vertebrate Paleontology (2010) guidelines, the Quaternary alluvial units underlying the project area were determined to have low to high paleontological sensitivity. The Sespe Formation (Ts), Coldwater Sandstone (Tcw), and Quaternary older alluvium (Qpa) have been assigned a high sensitivity because similar deposits have previously yielded vertebrate fossils in Ventura County and near the project area (McLeod 2018; UCMP 2018). The Holocene alluvium (Qha, Qhf, Qw) has been assigned a low paleontological sensitivity because Holocene age sedimentary deposits, particularly those younger than 5,000 years, are too young to preserve fossils.

- a1. *Would the project directly or indirectly cause potential adverse effects, including the risk of loss, injury, or death involving 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?*
- a2. *Would the project directly or indirectly cause potential adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*
- a3. *Would the project directly or indirectly cause potential adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*
- a4. *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?*

Pursuant to state law, the California Geological Survey has designated Alquist-Priolo Earthquake Fault Zones for the Ojai and Matilija Quadrangles in which the project site is located. No portion of the project site is located in an Alquist-Priolo earthquake fault zone. The nearest Alquist-Priolo earthquake fault zones to the project site are the Mission Ridge Fault Zone, approximately 0.6 mile southwest of the project site in the unincorporated community of Meiners Oaks, and the San Cayetano Fault Zone, approximately 3.6 miles east of the project site in unincorporated Ventura County (California Department of Conservation 2018).

Although the proposed project is located in a seismically active area, it will not itself expose people or structures to seismically induced risk. The proposed project involves replacement of belowground pipeline and improvements to existing pump stations, wells, and storage tanks; it does not involve construction of or modification to any habitable structures. A large seismic event, such as a fault rupture, seismic shaking, or ground failure, could result in breakage of the pipelines, failure of joints, or underground leakage from the pipelines. This risk already exists with the current pipelines in place in the project area. In such an event, the pipelines would be inspected and repaired. Additionally, materials and installation standards of the American Water Works Association as

required pursuant to 22 CCR Chapter 16 would incorporate appropriate standard engineering practices and specifications in any facility design to minimize risk of structural failure in a seismic event and would reduce any potential secondary impacts.

In the event of a major earthquake, seismically induced liquefaction and landslides would be expected throughout Ventura County. Liquefaction hazard zones in the vicinity of the project site include areas along San Antonio Creek and a portion of downtown Ojai along Canada, Ventura, and Summer Streets (California Department of Conservation 2018). These zones include portions of the proposed pipeline replacement alignment as well as improvements to the San Antonio Booster Pump Station and storage tank. Additionally, improvements to the Heidelberger Booster Pump Station and tank are located in or adjacent to a seismically-induced landslide hazard zone at the base of the Topa Topa Mountains. Project development would consist of minimal aboveground structures, none of which are habitable. Aboveground facility upgrades proposed by the project would serve as improvements to existing aboveground facilities and, therefore, would not exacerbate risks from geologic hazards beyond those associated with existing structures on the project site.

The proposed project would not involve development of habitable structures, is not located within an Alquist-Priolo earthquake fault zone, and does not cross an active fault. Therefore, the project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, seismic-related ground failure, or landslides. This impact would be less than significant.

Construction workers in pipeline trenches or near heavy equipment and materials would be exposed to heightened health and safety risks should seismically-induced ground shaking occur during construction activities. Construction activities would limit risk to construction workers by complying with Occupational Safety and Health Administration (OSHA) rules for safety during excavation activities. With adherence to existing regulations, potential impacts would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

*b. Would the project result in substantial soil erosion or the loss of topsoil?*

The project area is previously disturbed, and the majority of the proposed pipeline alignment is paved. Nevertheless, construction activities involving soil disturbance, such as excavation, stockpiling, and grading could result in increased erosion and sediment transport by stormwater to surface waters.

The proposed project would minimize soil erosion via implementation of BMPs, in accordance with the Waste Discharge Requirement for Stormwater (Wet Weather) and Non-Stormwater (Dry Weather) Discharges from the Municipal Separate Storm Sewer Systems within the Ventura County Watershed Protection District, County of Ventura and the Incorporated Cities Therein (Order R4-2010-0108, NPDES Permit No. CAS004002; MS4 Permit) and the Construction General Permit (Order Nos. 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ). Compliance with the MS4 Permit requires implementation of an effective combination of erosion and sediment control BMPs, such as hydraulic mulch and hydroseeding, silt fencing and sand bag barriers, spill prevention and control, soil binders, and street sweeping, to prevent erosion and sediment loss. Furthermore, the Construction General Permit requires the development of a Stormwater Pollution Prevention Plan (SWPPP) to reduce erosion and topsoil loss from stormwater runoff. Compliance with these two permits would ensure the proposed project implements BMPs during construction and prevents

substantial soil erosion or the loss of topsoil. The SWPPP would include additional erosion control BMPs, such as covering of stockpiles, use of desilting basins, limitations on work during high-wind events, and post-construction revegetation and drainage requirements. Implementation of the required SWPPP and BMPs would ensure this impact would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

- c. *Would the project be located on a geologic unit or soil that is unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*

In the event of a major earthquake, seismically induced landslides would be expected throughout Ventura County, particularly in areas with high slope angles. The project area does not contain any mapped landslides, but components of the project—including improvements at the Heidelberger Booster Pump Station and storage tank—are located on or adjacent to a seismically-induced landslide hazard zone (County of Ventura 2013; California Department of Conservation 2018). Liquefaction hazard zones in the vicinity of the project site include areas along San Antonio Creek and a portion of downtown Ojai along Canada, Ventura, and Summer Streets (California Department of Conservation 2018). These zones include portions of the proposed pipeline replacement alignment as well as improvements to the San Antonio Booster Pump Station and storage tank. The project site and vicinity is not located in a probable subsidence zone, as delineated in the County of Ventura General Plan Hazards Appendix (County of Ventura 2013).

The proposed project involves replacement of underground pipeline through existing developed urban land primarily within public rights-of-way. Rehabilitation, upgrades, and replacement of existing wells, tanks, and pump stations would generally occur on sites where this infrastructure currently exists. As discussed previously, although the proposed project would be located in a seismically active area, the project is not anticipated to adversely affect soil stability or increase the potential for local or regional landslides, subsidence, liquefaction, or collapse. Trenching activities would implement BMPs such as shoring during open trenching. Additionally, the project involves rehabilitations and upgrades to existing facilities and, therefore, would not increase risks associated with soil instability beyond current conditions. This impact would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

- d. *Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code, creating substantial direct or indirect risks to life or property?*

Expansive soils expand when wet and contract when dry, creating cracks in foundations and causing considerable damage to structures (County of Ventura 2013). Expansive soils have been documented throughout Ventura County, including portions of the Ojai Valley (County of Ventura 2013). Based on the USDA Soil Survey for the Los Padres National Forest Area and Ventura Area Map Units, the project site contains mostly sandy loams, including Ojai very fine sandy loam and stony fine sandy loam, Anacapa gravelly sandy loam, and Garretson loam and gravelly loam (USDA NRCS 2018). The plasticity index of soils underlying the project site generally ranges from 2.5 to 15 percent, and liquid limits generally range from 25 to 50 percent, indicating low expansion potential. Nevertheless, given the localized nature of expansive soils, such soils may be present in small, isolated portions of the project site.

Expansive soils pose the greatest risk to structures. The project would involve rehabilitations and upgrades to existing facilities and would not involve construction of any habitable structures. Furthermore, compliance with the American Water Works Association's materials and installation

requirements pertaining to expansive soils, including foundation construction techniques, grading techniques, and proper site surface drainage for any proposed structures, would minimize risk associated with expansive soils, if present. Therefore, the project would not create a substantial risk to life or property associated with expansive soils. This impact would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

- e. *Would the project 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?*

The proposed project would not include the use of septic-tanks or alternative wastewater disposal systems. No impact would occur.

#### **NO IMPACT**

- f. *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geological feature?*

While paleontological locality records searches resulted in no previously recorded fossil localities in the project area, portions of the project area are underlain by the Sespe Formation, Coldwater Sandstone, and Quaternary older alluvium; these geologic units have high paleontological sensitivity. As a result, grading, excavation, and other ground disturbing activities in previously undisturbed portions of the project area underlain by geologic units with a high paleontological sensitivity may result in significant impacts to paleontological resources by crushing or otherwise damaging such resources. Impacts would be significant if construction activities result in the destruction, damage, or loss of scientifically important paleontological resources and associated stratigraphic and paleontological data. Mitigation is necessary to reduce potential impacts to a less than significant level.

### **Mitigation Measures**

The following mitigation measure would reduce potentially significant impacts relating to the discovery of paleontological resources during project implementation and ground-disturbing activities to a less than significant level.

#### *GEO-1 Paleontological Resources*

Prior to the commencement of ground disturbing activities within previously undisturbed portions of the project area, a qualified professional paleontologist shall be retained to conduct paleontological monitoring during project ground disturbing activities. The Qualified Paleontologist (Principal Paleontologist) shall meet Ventura County's (2010) Minimum Qualifications for Paleontological Consultants, including possession of at least Bachelor's Degree or equivalent work experience in paleontology, knowledge of the local paleontology, and experience with paleontological procedures and techniques.

Ground disturbing construction activities (including grading, trenching, drilling with an auger greater than three feet in diameter, and other excavation) within project areas with high paleontological sensitivity (i.e., Sespe Formation, Ts; Coldwater Sandstone, Tcw; and, Pleistocene alluvium, Qpa) shall be monitored on a full-time basis. Spot-check monitoring is recommended for project areas underlain by geologic units with low paleontological sensitivity (i.e., Holocene alluvium; Qha, Qhf, Qw) to determine if underlying sensitive units are being impacted. Monitoring shall be supervised by

the Qualified Paleontologist and shall be conducted by a qualified paleontological monitor, who is defined as an individual who meets the minimum qualifications per standards set forth by the Society of Vertebrate Paleontology (2010), which includes a B.S. or B.A. degree in geology or paleontology with one year of monitoring experience and knowledge of collection and salvage of paleontological resources.

The duration and timing of the monitoring shall be determined by the Qualified Paleontologist. If the Qualified Paleontologist determines full-time monitoring is no longer warranted, he or she may recommend to reduce monitoring to periodic spot-checking or cease monitoring entirely. Monitoring would be reinstated if any new ground disturbances are required and reduction or suspension would need to be reconsidered by the Qualified Paleontologist.

If a paleontological resource is discovered, the monitor shall have the authority to temporarily divert the construction equipment around the find until it is assessed for scientific significance and collected. If a paleontological resource is discovered during construction, construction activities must halt in the area of the discovery, the Qualified Paleontologist shall be notified, and a site evaluation shall be conducted as necessary to assess the site and determine further mitigation measures, as appropriate. Once salvaged, significant fossils shall be prepared to a curation-ready condition and curated in a scientific institution with a permanent paleontological collection (such as the LACM). Curation fees are the responsibility of the project owner.

A final report shall be prepared describing the results of the paleontological monitoring efforts associated with the project. The report shall include a summary of the field and laboratory methods, an overview of the project geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and recommendations. The report shall be submitted to CMWD. If the monitoring efforts produced fossils, then a copy of the report shall also be submitted to the designated museum repository.

#### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**



## 3.8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with any applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Background

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of greenhouse gases (GHGs) contributing to the "greenhouse effect," a natural occurrence which takes place in Earth's atmosphere to help regulate the temperature of the planet. The majority of radiation from the sun hits Earth's surface and warms it. The surface, in turn, radiates heat back towards the atmosphere in the form of infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping into space and re-radiate it in all directions, but anthropogenic activities since the beginning of the industrial revolution (approximately 250 years ago) are adding to the natural greenhouse effect by increasing the gases in the atmosphere which trap heat. Emissions resulting from human activities thereby contribute to an average increase in Earth's temperature.

GHGs occur both naturally and as a result of human activities, such as fossil fuel burning, methane generated by landfill wastes and raising livestock, deforestation activities, and some agricultural practices. GHGs produced by human activities include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF<sub>6</sub>). Since 1750, estimated concentrations of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O in the atmosphere have increased over by 36 percent, 148 percent, and 18 percent, respectively, primarily due to human activity. Potential climate change impacts in California may include loss of snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (California Energy Commission 2009).

In response to climate change, California implemented Assembly Bill (AB) 32, the "California Global Warming Solutions Act of 2006." AB 32 requires achievement by 2020 of a statewide GHG emissions limit equivalent to 1990 emissions (essentially a 15 percent reduction below 2005 emission levels) and the adoption of rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions. On September 8, 2016, the governor signed SB 32 into law, extending AB 32 by requiring the State to further reduce GHGs to 40 percent below 1990 levels by

2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends local governments adopt policies and locally-appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) CO<sub>2</sub>e by 2030 and two MT CO<sub>2</sub>e by 2050 (CARB 2017). Additionally, on September 10, 2018, the governor signed SB 100 into law, increasing California Renewables Portfolio Standard requirements. SB 100 establishes a state goal of 100 percent clean energy for California by 2045 and accelerates SB 350 mandate of 50 percent clean renewable energy from 2030 to 2026.

## Significance Thresholds

The majority of individual projects do not generate sufficient GHG emissions to influence climate change directly. Physical changes caused by a project can contribute incrementally to significant cumulative effects, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15064[h][1]).

According to CEQA Guidelines, projects can tier from a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of the project's consistency with the GHG reduction policies included in a qualified GHG reduction plan. This approach is considered by the Association of Environmental Professionals (2016) in its white paper, *Beyond Newhall and 2020*, to be the most defensible approach presently available under CEQA to determine the significance of a project's GHG emissions. Ventura County includes a climate change chapter in its 2040 General Plan Background Report (Chapter 12)(County of Ventura 2017). The chapter includes findings and discussion of countywide emissions, as well as potential localized effects of climate change in the county. While both the City of Ojai and the County of Ventura have taken steps toward development and adoption of a Climate Action Plan (CAP), neither the City nor the County has formally adopted a CAP or other GHG reduction plan addressing community-wide emissions to date. Additionally, CMWD does not currently have a formal CAP or GHG reduction plan. Thus, this approach is not currently feasible for this analysis.

To evaluate whether a project may generate a quantity of GHG emissions with the potential to have a significant impact on the environment, state agencies developed a number of operational bright-line significance thresholds. Significance thresholds are numeric mass emissions thresholds which identify the level at which additional analysis of project GHG emissions is necessary. If projects attain the significance target, with or without mitigation, they would result in less than significant GHG emissions.

VCAPCD has not established quantitative significance thresholds for evaluating GHG emissions in CEQA analyses, but it recommends using the California Air Pollution Control Officers Association (2008) *CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act* white paper and other resources when developing GHG evaluations (VCAPCD 2006). The *CEQA and Climate Change* paper provides a common platform of information and tools to support local governments and was prepared as a resource, not as a guidance document. CEQA Guidelines section 15064.4 expressly provides a "lead agency shall have discretion to determine, in the context of a particular project," whether to "[u]se a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use." A lead agency also has

discretion under the CEQA Guidelines to “[r]ely on a qualitative analysis or [quantitative] performance based standards.”

In light of the lack of a specific GHG threshold from VCAPCD, it is appropriate to refer to guidance from other agencies when discussing GHG emissions. Thus, for the purposes of this analysis, the bright-line threshold developed by the SCAQMD (3,000 MT CO<sub>2</sub>e per year for development projects) is considered appropriate to determine the significance of GHG emissions.

Because the project involves pipeline replacement and system facilities rehabilitation, the vast majority of the project’s GHG emissions would be from construction and operational emissions would be negligible. Although construction activity is addressed in this analysis, CAPCOA does not discuss whether any threshold approaches adequately address impacts from temporary construction activity. As stated in the *CEQA and Climate Change* white paper, “more study is needed to make this assessment or to develop separate thresholds for construction activity” (CAPCOA 2008). Nevertheless, air districts such as the SCAQMD (2008) have recommended GHG emissions from construction be amortized over 30 years and added to operational GHG emissions to determine the overall impact of a proposed project.

- a. *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*

Project construction would generate GHG emissions from the operation of heavy machinery for pipeline construction and installation, motor vehicles, and worker trips to and from the site. Construction GHG emissions would be temporary and would cease upon completion of construction. Operation of the project would generate negligible vehicle trips, estimated at one maintenance trip per year to operate valves. Because the proposed project would replace aging pumps with new, more efficient pumps and would replace aging, roughened pipes with new, smoother pipes to convey water more efficiently, implementation of the proposed project would result in a reduction in indirect GHG emissions from electricity generation by the electric service provider. Therefore, project operation would not result in a substantial net increase in power consumption or GHG emissions.

Construction GHG emissions were estimated using CalEEMod version 2016.3.2 and a conservative “worst-case-scenario” assumption for construction activities. The construction emissions for one year were estimated by aggregating all pipeline construction for the entire alignment which could occur in one year, demolition of an existing tank and replacement with a new storage tank, and construction of a well in an undeveloped area with pump installation. This was used for modelling purposes as several project components are unknown and could change based on specific site conditions for each project. The “worst-case” estimate accounts for complete construction of new facilities and is not likely to occur for most project components, but it was used in these conservative estimates. Because booster pump installation would not require the use of heavy machinery and would therefore not contribute substantial GHG emissions, it was not included in the modelling. Table 5 shows the breakdown of annual GHG emissions anticipated to result from construction of the proposed project. SCAQMD recommends GHG emissions from construction be amortized over 30 years and added to operational GHG emissions to determine the overall impact of the proposed project.

**Table 5 Estimated GHG Emissions**

Year	Emissions (MT CO <sub>2</sub> e)
Total Pipeline Construction Emissions	323.4
Total Tank Construction Emissions	84.6
Total Well Construction Emissions	27.2
<b>Total Construction Emissions</b>	<b>435.2</b>
Amortized Construction Emissions (over 30 years)	14.5
<b>Total Annual Emissions</b>	<b>14.5</b>
SCAQMD Recommended Threshold	3,000
Threshold Exceeded?	No

CO<sub>2</sub>e: carbon dioxide equivalent; MT: metric tons; SCAQMD: South Coast Air Quality Management District  
See Appendix A for CalEEMod results.  
Values are approximations and have been rounded to nearest tenth.

Both the proposed project's total annual construction emissions (435.2 MT of CO<sub>2</sub>e) and amortized annual construction emissions (14.5 MT of CO<sub>2</sub>e) fall below the SCAQMD's interim recommended bright-line significance threshold of 3,000 MT of CO<sub>2</sub>e per year. The proposed project would replace and rehabilitate aging and inefficient infrastructure with water system components designed to improve operational efficiency and reduce the amount of water and energy being wasted under current conditions. Therefore, impacts related to GHG emissions would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

- b. Would the project conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

Because the proposed project would not result in a significant increase in GHG emissions, it would not be in conflict with any applicable plans, policies, or regulations for the purpose of reducing GHG emissions. The VCAPCD, City, and County have not adopted any plans, policies, or regulations for the purpose of reducing the emissions of GHGs. Therefore, this impact would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

## 3.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on a site that is included on a list of hazardous material 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- b. *Would the project 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?*

Construction of the proposed project would temporarily increase the transport and use of hazardous materials in the area through the operation of construction vehicles and equipment. Ground-disturbing activities could cause an accidental upset or accident condition. If such conditions cause a release of hazardous materials into the environment, potential impacts could occur. Limited quantities of miscellaneous hazardous substances, such as diesel fuel, oil, solvents, and other similar materials, would be brought onto the construction site, used, and stored during the construction period. These materials would be disposed off-site in accordance with all applicable laws pertaining to the handling and disposal of hazardous waste.

The transport, use, and storage of hazardous materials during construction would be conducted in accordance with all applicable State and federal laws, such as the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, the California Hazardous Material Management Act, and the California Code of Regulations, Title 22. The proposed project would be required to comply with VCACPD Rule 62.1 (Hazardous Materials), which mandates no hazardous materials shall be discharged from any source so as to result in concentrations at or beyond the property line in excess of any State, federal or local standards or emission limits established. In the absence of specific standards for a particular hazardous material, the airborne concentrations of such materials shall not exceed those levels and time intervals established by the State Division of Industrial Safety or OSHA. Compliance with Rule 62.1 would ensure hazardous materials would not be discharged from the project site; therefore, construction activities would not pose a significant hazard to the public or to the environment.

Project construction activities would comply with all relevant regulations, including the enforcement of hazardous materials treatment, handling, notification, and transportation regulations and implementation of BMPs. Nevertheless, upset or accident conditions could result in the unanticipated spill or release of hazardous materials such as vehicle and equipment fuels, potentially introducing a hazard to the public or the environment. To ensure an additional level of safety and reduce potential impacts to a less than significant level, Mitigation Measure HAZ-1 would be implemented.

## **Mitigation Measures**

With implementation of the following mitigation measure, the potential impacts related to hazardous materials would be reduced to a less than significant level.

### *HAZ-1 Hazardous Materials Management and Spill Control Plan*

Before construction begins, the construction contractor shall submit to CMWD for review and approval a Hazardous Materials Management and Spill Control Plan (HMMSCP) including a project-specific contingency plan for hazardous materials and waste operations. The HMMSCP shall establish policies and procedures consistent with applicable codes and regulations, including but not limited to the California Building and Fire Codes, as well United States Department of Labor OSHA and California OSHA regulations. The HMMSCP shall articulate hazardous materials handling practices to prevent the accidental spill or release of hazardous materials.

### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

There are several schools located within the project area which spans the entire Ojai Water Distribution System service area. The majority of the schools are located in the city of Ojai where several of the pipe replacements or repairs would occur. The wells, pumps and tanks to be repaired or improved with project construction are located toward the service area fringes and are therefore farther from most of the schools in the area. Construction staging and materials storage would occur at the wellfield and tank sites which are not located near any schools in the area.

There is the potential for an accidental spill or release of hazardous or potentially hazardous materials such as vehicle and equipment fuels to occur during project construction. Project activities would not occur on a school property, and impacts associated with a potential release of hazardous materials on or near a school site as a result of the project would not occur. Additionally, implementation of mitigation measure MM HAZ-1, *Hazardous Materials Management and Spill Control Plan*, would ensure potentially significant impacts associated with project activities would be reduced to a less-than-significant level. As described in Section 3.17, *Transportation*, Mitigation Measure TRA-3 *Notification of Construction to Service Providers and Educational Institutions* requires the written notification to local schools and police and fire departments so detour routes for emergency responses can be planned for the construction period.

Therefore, potential impacts associated with a potential emission or release of hazardous materials or wastes in proximity to a school would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

- d. *Would the project be located on a site included on a list of hazardous material 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?*

Government Code section 65962.5 requires the California Environmental Protection Agency to develop an updated Cortese List. The Department of Toxic Substance Control (DTSC) is responsible for a portion of the information contained in the Cortese List. Other state and local government agencies are required to provide additional hazardous material release information for the Cortese List (DTSC 2018). The analysis for this section included a review of the following resources on October 30, 2018 to provide hazardous material release information:

- SWRCB GeoTracker database
- DTSC EnviroStor database

There are no known active hazardous materials sites located within the project area. SWRCB's GeoTracker database lists a number of closed case cleanup sites in the vicinity of the project area. In 2011, California Environmental Protection Agency identified and requested an Application for Waste Discharge Requirements (WDRs) for discharge of groundwater from a well into pond water and for discharge of filter backwash water from the San Antonio Treatment Plant at 2235 Grand Avenue. The site is currently under draft as a WDR site (SWRCB 2011). The San Antonio facility would be repaired as one of the proposed project's tank rehabilitation efforts which would see to the wastewater discharge issue.

Figure 8 shows the hazardous waste cleanup sites near the project area. The County of Ventura Resource Management Agency, Environmental Health Division served as the cleanup oversight

agency for all of the identified hazardous waste cleanup sites. The Los Angeles RWQCB served as the cleanup oversight agency for the historical and draft WDR sites. Potential future remediation activities in the project area would be overseen by the County of Ventura Resource Management Agency, Environmental Health Division or the Los Angeles RWQCB.

All identified hazardous waste cleanups have been completed and closed. According to the environmental database review, the project alignment overlaps numerous closed cleanup sites for hazardous materials compiled pursuant to Government Code Section 65962.5. Therefore, impacts would be less than significant with implementation of the mitigation measure listed below.

## Mitigation Measures

With implementation of the following mitigation measure, the potential impacts related to hazardous materials cleanup sites would be reduced to a less than significant level.

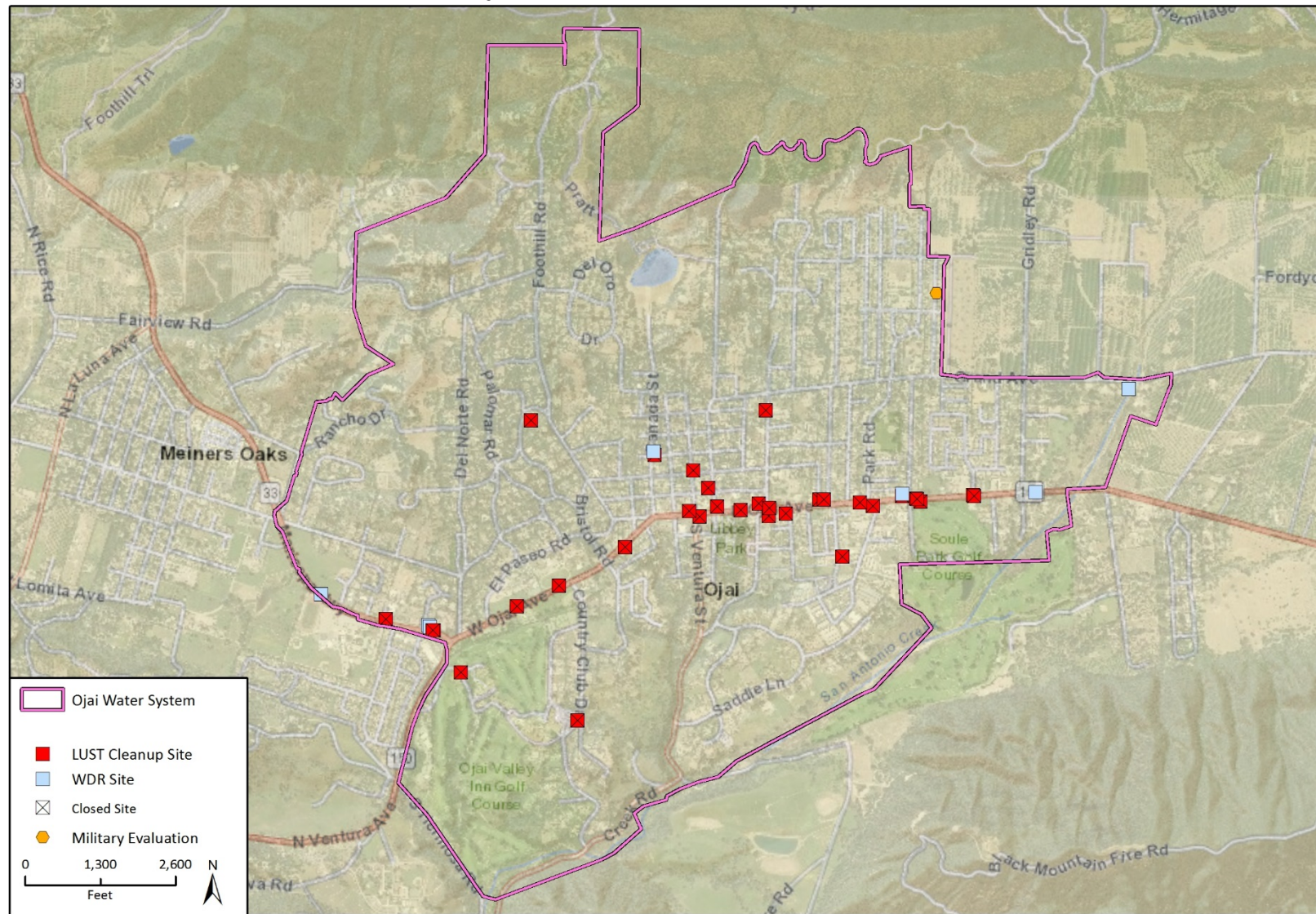
### *HAZ-2 Unanticipated Discovery of Contaminated Soil or Groundwater*

In the event unanticipated, existing soil or groundwater contamination is discovered during construction of the proposed project, the construction contractor shall implement appropriate procedures for the treatment, handling, and notification of unanticipated hazardous materials. The construction contractor shall promptly notify CMWD in writing regarding any material the construction contractor believes may be a hazardous waste. The construction contractor also shall promptly notify CMWD in writing regarding unknown physical conditions at the project site of any unusual nature, different materially from those ordinarily encountered. Upon such notification, CMWD shall promptly investigate the conditions at the project site. If the construction contractor encounters a hazardous environmental condition, the construction contractor shall immediately secure or otherwise isolate such condition, stop all work in connection with such condition and in any area affected thereby, and notify CMWD of the hazardous environmental condition. The construction contractor shall not be required to resume work in connection with such condition or in any affected area until after CMWD has obtained any required permits related thereto and delivered written notice to the construction contractor specifying such condition and any affected area is or has been rendered safe for the resumption of work and specifying any special conditions under which such work may be resumed safely. The construction contractor is required to comply with all applicable laws related to the work performed, including laws governing hazardous materials treatment, handling, notification, transportation, and disposal of contaminated soil and import of clean fill.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**



Figure 8 Hazardous Sites Located within the Project Area



Imagery provided by Esri, Microsoft Bing and their licensors © 2018.  
Additional data provided by GeoTracker, 2018; EnviroStor, 2018.

Fig Hazards

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

The closest public airport to the project is the Santa Paula Airport, a privately-owned public-use airport located approximately 12 miles southeast of the project area. The proposed project would not extend into an airport land use plan and is not located within two miles of a public or public-use airport. Additionally, the proposed project is not located near a private airstrip. Therefore, the project would have no impact related to safety hazards for people residing or working in the project area due to proximity to a public or private airport.

**NO IMPACT**

- f. *Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Construction activities associated with the proposed project may require temporary lane or road closures which could impede emergency response. The Traffic Control Plan required in Mitigation Measure TRA-1 (see Section 3.17, *Transportation*) would implement safe and effective traffic control measures at all construction sites and would address any potential interference with emergency response and/or evacuation plans. With the Traffic Control Plan in place, the impact would be less than significant with mitigation incorporated.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

- g. *Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

Construction and operation of the project would not introduce potentially flammable activities in fire-prone areas. The city of Ojai is susceptible to the hazard of wildland fires from the native vegetation surrounding the developed portion of Ojai (City of Ojai 1991a). Wildland fires are also a major concern due to large tracts of sparsely populated land in the surrounding area which must be protected from wildfires in hot dry summers. A portion of the project area is located in a Very High Fire Hazard Severity Zone, as determined by the California Department of Forestry and Fire Protection (CalFire 2010). Section 9-1.301(b) of the Ojai Municipal Code designates the entire city of Ojai as a High Fire Hazard. The proposed project would comply with design standards in the Uniform Building Code (UBC) to prevent loss during a wildland fire (as modified in Section 9-1.301 of the Municipal Code) and the design requirements of the Ventura County Fire Protection District. Additionally, the proposed project is intended to improve fire flow during the event of a wildfire and would therefore reduce the risk of wildfire hazards. Compliance with the required provisions of the Ventura County Fire Code and the UBC would reduce potential impacts to a less than significant level.

**LESS THAN SIGNIFICANT IMPACT**

## 3.10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) Result in substantial erosion or situation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The federal Clean Water Act establishes the framework for regulating discharges to Waters of the U.S. in order to protect their beneficial uses. The Porter-Cologne Water Quality Act regulates water quality within California and establishes the authority of the SWRCB and the nine RWQCBs. The SWRCB requires construction projects to provide careful management and close monitoring of runoff during construction, including on site erosion protection, sediment management, and prevention of non-stormwater discharges. The SWRCB and RWQCBs issue NPDES permits to regulate specific discharges. The NPDES Construction General Permit regulates stormwater discharges from construction sites disturbing more than one acre of land.

The project area predominately overlies the Ojai Valley Groundwater Basin (Basin Number 4-002), though an approximately 400-foot segment of proposed pipeline replacement along Verano Drive overlies the Ventura River Valley Basin, Upper Ventura River Sub-basin (Basin Number 4-003). The Ojai Valley Groundwater Basin underlies most of the Ojai Valley floor, and is bound by Tertiary Period rocks on the east and west, the Santa Ana Fault and Sulphur Mountain to the south, and the Topa Topa Mountains to the north (California Department of Water Resources [DWR] 2004). Groundwater in the basin is generally unconfined, found in alluvial sediments and fractures in the underlying sedimentary rock. Groundwater levels in the basin are seasonally variable and highly susceptible to inter-annual variation in precipitation, such as multi-year drought or wet cycles. Despite this shorter term variability, long-term groundwater storage has remained relatively stable (Ojai Basin Groundwater Management Agency, 2018). San Antonio Creek drains a portion of the basin, flowing south to the Ventura River. In 2014, the Ojai Basin Groundwater Management Agency became the Groundwater Sustainability Agency for the Ojai Valley basin for the purposes of implementing the Sustainable Groundwater Management Act.

- a. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?*
- e. *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

## Surface Water

Excavation, grading, and other activities associated with construction of the proposed project would result in soil disturbance which could cause water quality violations through potential erosion and subsequent sedimentation of receiving water bodies. Construction activities could also cause water quality violations in the event of an accidental fuel or hazardous materials leak or spill. If precautions are not taken to contain contaminants, construction activities could result in contaminated stormwater runoff entering nearby waterbodies, such as San Antonio Creek and the Ventura River. Construction activities resulting in ground disturbance of one acre or more are subject to the permitting requirements of the NPDES General Permit for Stormwater Discharges associated with Construction and Land Disturbance Activities (Construction General Permit Order No. 2009-0009-DWQ). While most, if not all, individual pipeline replacements or well, tank, and booster pump improvements would disturb less than one acre of land, the Construction General Permit still covers construction activities disturbing less than one acre if such activities are part of a larger common plan of development. Because project components collectively would exceed one acre of land disturbance, the project would be subject to the requirements of the Construction General Permit.

The Construction General Permit requires the preparation and implementation of a SWPPP, which must be prepared before construction begins. The SWPPP includes specifications for BMPs

implemented during project construction to minimize or prevent sediment or pollutants in stormwater runoff. Additionally, the project would comply with erosion control requirements of the County's MS4 Permit, as discussed under Section 3.7, *Geology and Soils*.

Project construction would comply with the requirements of the NPDES Construction General Permit and the applicable MS4 Permit. The NPDES Construction General Permit would require preparation of a SWPPP for any project disturbing more than one acre, which would include the largest proposed pipeline replacements and infrastructure upgrades. Projects which would not exceed one acre of disturbance area would still implement BMPs pursuant to requirements in the Ventura County MS4 Permit, including erosion and sediment controls such as silt fences and sand bag barriers. These measures are required at construction sites less than one acre under the MS4 Permit. Additionally, mitigation measures BIO-8 through BIO-16 would further reduce pollutant discharges to waterways by requiring materials storage and management, spill response, and other pollution prevention measures. Finally, the project would involve replacement of and upgrades to existing infrastructure for the purposes of extracting, storing, and distributing potable water. The project would not involve discharge or conveyance of wastewater or raw non-potable water with potential to degrade water quality. Therefore, the proposed project would not violate any water quality standards or waste discharge requirements.

The project area is under the jurisdiction of RWQCB Region 4 (Los Angeles Region). The RWQCB provides permits for projects potentially affecting surface waters and groundwater locally, and is responsible for preparing the Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan). The Basin Plan designates beneficial uses of water in the region and establishes narrative and numerical water quality objectives. The State has developed total maximum daily loads (also called TMDLs), which are a calculation of the maximum amount of a pollutant a water body can have and still meet water quality objectives established by the region. In the project area, San Antonio Creek does not meet water quality objectives for its designated beneficial uses and is listed as impaired for indicator bacteria, nitrogen, and total dissolved solids (State Water Resources Control Board, 2018). With adherence to the requirements of the NPDES Construction General Permit, the Ventura County NPDES MS4 Permit, and implementation of mitigation measures BIO-8 through BIO-16, construction and operation of the proposed project would not exacerbate these impairments or contribute to other water body impairments in the vicinity of the project site.

## Groundwater

The project area predominantly overlies the Ojai Valley Groundwater Basin. Groundwater impairments in the basin include high levels of total dissolved solids, averaging near 700 milligrams per liter, as well as elevated nitrate and sulfate concentrations (DWR 2004). Operation of construction equipment would have the potential to result in pollution of the underlying groundwater due to leaks of oil, gasoline, lubricants, or other chemicals. Implementation of mitigation measures BIO-10, BIO-11, BIO-14, and BIO-16 would reduce potential groundwater quality impacts to a less than significant level by requiring pollutant management, material storage, and refuse management BMPs.

In January 2019, DWR published revised ranked prioritizations of the state's groundwater basins, to help identify, evaluate, and determine the need for additional groundwater level monitoring. DWR ranked the Ojai Valley Groundwater Basin as a "High" priority basin (DWR 2019) and, therefore, the basin is required to develop and implement a Groundwater Sustainability Plan under the Sustainable Groundwater Management Act. The project would involve replacement, rehabilitation

of, and upgrades to existing infrastructure used to extract, distribute, and store potable water sourced from the Ojai Valley Groundwater Basin and Lake Casitas. Well rehabilitation, replacement, or construction of a new well would restore groundwater production capacity lost due to aging infrastructure over time. The project would not increase groundwater extraction rights nor result in groundwater extraction beyond the historical baseline and, therefore, would not obstruct implementation of the Groundwater Sustainability Plan.

Overall, project construction activities would have the potential to result in discharge of pollutants to surface water and leaching of pollutants to underlying groundwater. With adherence to existing regulatory requirements, as well as implementation of construction-related water quality BMPs incorporated as mitigation measures BIO-8 through BIO-16, impacts would be less than significant with mitigation incorporated.

#### **LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

- b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

The project would involve replacement, rehabilitation of, and upgrades to existing infrastructure used to extract, distribute, and store potable water sourced from the Ojai Valley Groundwater Basin and Lake Casitas. The project would not substantially increase impervious surface cover which could inhibit groundwater recharge, as most of the project would be constructed in existing roadways or on existing CMWD facilities. Well rehabilitation, replacement, or construction of a new well would restore groundwater production capacity lost due to aging infrastructure over time. Of the Ojai Water System's six extraction wells, four were constructed prior to 2000, with the San Antonio Well #3, Mutual Well #4, and Mutual Well #5 constructed prior to 1960. Average water levels in the Ojai Valley Groundwater Basin have remained fairly stable over time, with hydrographs indicating no long-term decline in the basin between 1973 and 2000 when the majority of wells operated closer to their design capacity (Ojai Basin Groundwater Management Agency 2018; DWR 2004). Moreover, the project does not propose expansion of the potable water distribution system capacity except where necessary to meet fire flow requirements. A new well, if constructed, would be designed to optimize production within the Ojai system and would not be designed to increase production capacity in the Ojai Valley Groundwater Basin beyond restoring past groundwater production capacity. Therefore, the project would not substantially deplete groundwater supplies or interfere with groundwater recharge such that the project would impede sustainable groundwater management of the Ojai Valley Groundwater Basin. This impact would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

- c1. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or situation on- or off-site?*
- c2. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*
- c3. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious*



*surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

- c4. *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?*

The proposed project would primarily consist of construction of underground pipelines generally located within existing paved public rights-of-way. Although construction activities would disturb paved roadways in the project area due to trenching and other pipeline installation methods, this disturbance would be temporary. Tank, pump station, and well improvements would generally occur on sites with existing infrastructure and would not substantially change the drainage characteristics of these sites. After construction, the project area would be restored to its original condition and any drainage pattern would be the same as it was prior to project construction activities. Therefore, the proposed project would not substantially alter the existing drainage pattern or the course of a stream or river and would not result in substantial erosion or siltation on or off site.

Further, because the pipelines would be constructed underground within developed areas, they would not increase the rate or amount of surface runoff so as to exceed the capacity of existing or planned drainage systems or provide additional sources of polluted runoff. Although individual project components would not exceed one acre of disturbance area, the overall project construction would disturb more than one acre of land; consequently, the project would comply with the State's Construction General Permit (Order No. 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ). Preparation of the SWPPP in accordance with the Construction General Permit would require erosion-control BMPs in the construction areas. Additionally, project construction would be required to implement erosion and sediment control BMPs under the MS4 Permit.

Finally, according to the Federal Emergency Management Agency (2010) Flood Insurance Rate Maps, the portions of the project area within the 100-year flood hazard zone are limited to areas along San Antonio Creek and Stewart Canyon Creek on the southern and eastern portions of the city of Ojai. The proposed pipeline replacements, well rehabilitation or replacement, and new well construction would be located underground and would not impede or redirect flows. Proposed new booster pumps would be located at the Signal and Arbolada sites, both of which are located outside of the 100-year flood hazard zone. A new tank may be constructed to provide additional storage following demolition of the Running Ridge and Signal tanks. This tank may be constructed at the Arbolada site, which is not located in the 100-year flood hazard zone, or a vacant parcel to be acquired by CMWD. A new tank would be sited similarly to existing tank facilities, which are generally located in higher elevations in the northern portion of the project area, outside of the 100-year floodplain. Therefore, the project would not impede or redirect flood flows. Potential impacts would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

- d. *Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?*

Portions of the project area along San Antonio Creek and Stewart Canyon Creek on the southern and eastern portions of the city of Ojai are located in the 100-year flood hazard zone. Additionally, a

portion of central Ojai is within the inundation area for the Stewart Canyon Creek Debris Basin, including areas along Canada Street in downtown Ojai (County of Ventura 2015). There are no large bodies of water in the immediate project area. The project area is approximately 4.5 miles northeast of Lake Casitas and 10.5 miles northeast of the Pacific Ocean. Due to distance from the ocean and lack of large water bodies within the immediate project area, the project area is not subject to tsunamis or seiche. Furthermore, the project area is not located in a tsunami inundation hazard area, as delineated in the Ventura County General Plan Hazards Appendix (County of Ventura 2013). The project would involve replacement, rehabilitation, or construction of new potable water infrastructure. The project would not involve construction or installation of any structures or facilities using, processing, or storing pollutants which could be released in the event of inundation. Therefore, no impact would occur.

**NO IMPACT**



## 3.11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project area includes the potable water distribution system service area for the City of Ojai and surrounding areas in western Ventura County. The majority of the pipeline replacement would be in Ojai, with approximately 0.5 mile of pipeline repairs and replacement extending into unincorporated Ventura County.

*a. Would the project physically divide an established community?*

Once constructed, project facilities would consist of approximately eight miles of pipeline segments, and rehabilitated, replaced, or upgraded tanks, booster pump stations, and active wells throughout the Ojai system which would not have the potential to physically divide an established community. The proposed project includes the rehabilitation of potable water pipeline in a developed, primarily residential urban area. Staging would occur on the wellfield and tank sites where rehabilitation activities are planned throughout the Ojai system service area. The presence of construction-related equipment and workers would temporarily change the existing character of the vicinity to a construction zone. Construction staging would maintain local access for businesses and residences along the proposed alignment to the extent practicable throughout short-term construction of the proposed project. Therefore, the project would not displace or divide an established community and no impact would occur.

**NO IMPACT**

*b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

The goal of CMWD's CBA and WMP is to ensure planned CIP expenditures and improvement projects reliably meet current and future water demands in a cost-effective and sustainable manner. The proposed project is therefore consistent with the objectives of the CBA and WMP for water conservation and development of water system improvements for the future.

The proposed project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project. The City of Ojai General Plan identifies goals and objectives to preserve the quantity and enhance the quality of water resources affecting the Ojai

Valley (City of Ojai 1987). The proposed project would be consistent with the following City of Ojai policies and programs:

**Policy:** The City shall ensure that adequate supplies of water be available to all City residents and uses requiring water.

**Program:** Coordination between the City and all water agencies and companies shall be maintained, and the City shall work together with any involved entities to enhance the quality and quantity of water in the Ojai Valley.

**Policy:** The City shall identify the sources and availability of water, flood potential, and sources of potential damage to the City's water supply and quality in order to maintain the optimum quality of water in the City and its watershed.

The County of Ventura's General Plan also identifies goals and policies to maintain adequate water supplies and quality in the county. The proposed project would be consistent with the following goals and policies:

**Water Resources Goal 4:** Ensure that demand for water does not exceed available water resources.

**Water Resources Program 5:** The Planning Division and Public Works Agency will continue to coordinate with water districts and other appropriate agencies to establish a data base on actual available supply, projected use factors for types of land use and development, and threshold limits for development within available water resources.

**Water Resources Program 8:** The Environmental Health Division will continue to monitor, inspect and regulate underground storage tanks.

There would be no conflicts with land use plans, policies, or regulations of the City of Ojai or County of Ventura. Therefore, the project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. No impact would occur.

**NO IMPACT**

## 3.12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b. *Would the project 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?*

Mineral resources in the region include sand, gravel, and crushed rock (collectively, “aggregate”), as well as petroleum resources. Mineral Lands Classification maps indicate the project area is located predominantly in Mineral Resource Zones 1 (MRZ-1) and 4 (MRZ-4), with a small area outside the city of Ojai in the western portion of the project site designated as MRZ-3 (California Department of Conservation 1981). In MRZ-1 areas, adequate information indicates no significant mineral deposits are present, while an MRZ-4 designation indicates available information is inadequate for assignment to any other classification (County of Ventura 2011). MRZ-3 areas are those which contain mineral deposits, the significance of which cannot be evaluated from available data. The project site contains no areas identified as MRZ-2, which are areas designated as having mineral resources of regional or statewide significance. Consequently, the project would not result in a loss of availability of a known mineral resource of value to the region and residents of the state.

The Ventura County General Plan Resources Appendix adopts the same MRZ designations identified by the California Department of Conservation described above (County of Ventura 2011). The City of Ojai General Plan Conservation Element references mineral resources identified in the City’s Master Environmental Assessment document, which designates areas with a MRZ-3 classification immediately outside the city of Ojai as “Significant Minerals” (City of Ojai 1988, 1987). Additionally, the Master Environmental Assessment identifies an existing petroleum field south of Ojai Avenue encompassing the proposed pipeline replacement alignment along Fairway Lane. Recent aerial imagery indicates the site has since been developed with single family homes, roadways, and a golf course. The Ventura County General Plan Resources Appendix does not identify any existing petroleum fields in the project site vicinity (County of Ventura 2011). The project would involve

Casitas Municipal Water District  
**Ojai Water System Improvements Project**

rehabilitation or upgrades to existing facilities and would not affect any ongoing mineral resource recovery operations in the project site vicinity. Therefore, no impact would occur.

**NO IMPACT**

## 3.13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Noise Background

Noise is unwanted sound resulting in a disturbance of human activity. Environmental noise levels typically fluctuate over time, and different types of noise descriptors are used to account for this variability. Noise level measurements include intensity, frequency, and duration, as well as time of occurrence. Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). Because of the way the human ear interprets sound level, a sound must be approximately 10 dBA greater than the reference sound to be judged as twice as loud. In general, a 3 dBA change in community noise levels is noticeable, while 1 to 2 dBA changes are typically not perceived. Quiet suburban areas generally have noise levels in the range of 40 to 50 dBA, while arterial streets are in the 50 to 60+ dBA range. Normal conversational levels are in the 60 to 65 dBA range, and ambient noise levels greater than 65 dBA can interrupt conversations.

Noise levels typically attenuate (or drop off) at a rate of approximately 6 dBA per doubling of distance from point sources (such as construction equipment). Noise from lightly traveled roads typically attenuates at a rate of approximately 4.5 dBA per doubling of distance, while noise from heavily traveled roads typically attenuates at approximately 3 dBA per doubling of distance. Noise levels may also be reduced by intervening structures. For example, a single row of buildings between the receptor and the noise source reduces the noise level by approximately 5 dBA, while a solid wall or berm breaking the line-of-sight reduces noise levels by 5 to 10 dBA (Federal Transit Administration [FTA] 2018). The construction style for dwelling units in California generally provides

a reduction of exterior-to-interior noise levels of approximately 25 dBA with closed windows (FTA 2006).

In addition to the instantaneous measurement of sound levels, the duration of sound is important since sounds occurring over a long period of time are more likely to be an annoyance or cause direct physical damage or environmental stress. The equivalent noise level (Leq) is one of the most frequently used noise metrics and considers both duration and sound power level. The Leq is defined as the single steady A-weighted level equal to the same amount of energy contained in the actual fluctuating levels over a period of time (essentially, the average noise level). Typically, Leq is summed over a one-hour period. The highest root mean squared (RMS) sound pressure level within the measuring period is the Lmax. The lowest RMS sound pressure level within the measuring period is the Lmin.

## Vibration Background

Vibration is a unique form of noise because its energy is carried through buildings, structures, and the ground, whereas noise is simply carried through the air. Thus, vibration is generally felt rather than heard. Some vibration effects can be caused by noise (e.g., the rattling of windows from passing trucks). This phenomenon is caused by the coupling of the acoustic energy at frequencies close to the resonant frequency of the material being vibrated. Typically, groundborne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. The ground motion caused by vibration is measured as particle velocity in inches per second and is referenced as vibration decibels (VdB) in the United States.

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources inside buildings such as the operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads.

## Project Site Setting

The project is located in a developed, predominantly commercial and residential area of the city of Ojai and unincorporated Ventura County. The proposed pipeline replacements are located throughout the city of Ojai, with segments along Verano Drive, Country Club Drive, Palomar Road, and Del Norte Road extending into unincorporated Ventura County. All of the proposed alignments pass near single family or multi-family residences. Well, pump stations, and tank locations are generally concentrated along the northern side of the project area, adjacent to residential and open space land uses. The Mutual well and San Antonio tank and pump station are located along Grand Avenue at San Antonio Creek, adjacent to agricultural, open space, and residential land uses. Although the project area is largely urbanized, agricultural land borders the north side of the proposed Grand Avenue alignment east of Mercer Avenue, as well as the San Antonio wells, storage tank, and pump station to the east. Figure 2 and Figure 3 in Chapter 2, *Project Description*, show the location of proposed project improvements and the jurisdictions in which such improvements would occur. The project area contains no divided highways; SR 150 (Ojai Avenue) runs through the project area and SR 33 runs approximately 0.25 mile west of the project area.

Noise levels at the project site are typical of residential and commercial areas. Primary sources of noise can be attributed to roadway traffic along Ojai Avenue, Grand Avenue, and other city streets.

Traffic in these areas ranges from infrequent in the residential neighborhoods to moderate frequencies in the commercial areas of central Ojai.

The Ojai Valley contains no airports. The nearest airport to the project area is Santa Paula Airport, located approximately 12 miles to the east. Due to the distance from this airport, airport noise does not contribute to noise levels in the project area.

Rincon Consultants collected eight 15-minute noise measurements at points in the project area on Thursday, November 15, 2018 during the morning and evening peak hours. Noise measurements were sited in order to characterize ambient noise levels near clusters of noise sensitive receptors in the project area. While noise measurement locations are generally located along proposed pipeline replacements, Noise Measurement (NM) 7 and NM 8 also characterize noise levels near proposed improvements at the San Antonio tank and pump station and Fairview tank and pump station, respectively. All noise measurement locations were selected to avoid walls or structures which could interfere with collection of noise measurements. Table 6 shows the recorded noise measurements and Figure 9 shows the locations of the measurements.

**Table 6 Noise Measurements**

Measurement Number	Measurement Location	Sample Times <sup>1</sup>	Leq (dBA) <sup>2</sup>	Lmin (dBA) <sup>3</sup>	Lmax (dBA) <sup>4</sup>
NM 1	El Paseo Road at Ojai Valley School/Matilija Junior High School	7:17 a.m. – 7:32 a.m.	60.5	47.0	75.6
NM 2	West Eucalyptus Street near North Ventura Street	4:23 p.m. – 4:38 p.m.	46.0	33.3	65.4
NM 3	East Ojai Avenue (Libbey Park)	7:44 a.m. – 7:59 a.m.	59.3	48.8	75.2
NM 4	North Montgomery Street near Grand Avenue	4:47 p.m. – 5:02 p.m.	58.0	45.3	74.7
NM 5	East Ojai Avenue and Shady Lane	8:08 a.m. – 8:23 a.m.	70.0	46.8	84.3
NM 6	Sunset Place near Mountain View Avenue	5:09 p.m. – 5:24 p.m.	46.9	33.4	71.1
NM 7	Grand Avenue near Orange Road	8:32 a.m. – 8:47 a.m.	61.4	29.9	77.9
NM 8	Del Norte Road near Rancho Drive <sup>5</sup>	3:55 p.m. – 4:10 p.m.	39.9	65.2	32.9

<sup>1</sup> All measurements collected on Thursday, November 15, 2018 during the morning (7-9 a.m.) or evening (4-6 p.m.) or PM peak hour.

<sup>2</sup> A-weighted decibel (dBA) is defined as a decibel (dB) adjusted to be consistent with human response. The equivalent noise level (Leq) is defined as the single steady A-weighted level equivalent to the same amount of energy contained in the actual fluctuating levels over a period of time (essentially, the average noise level).

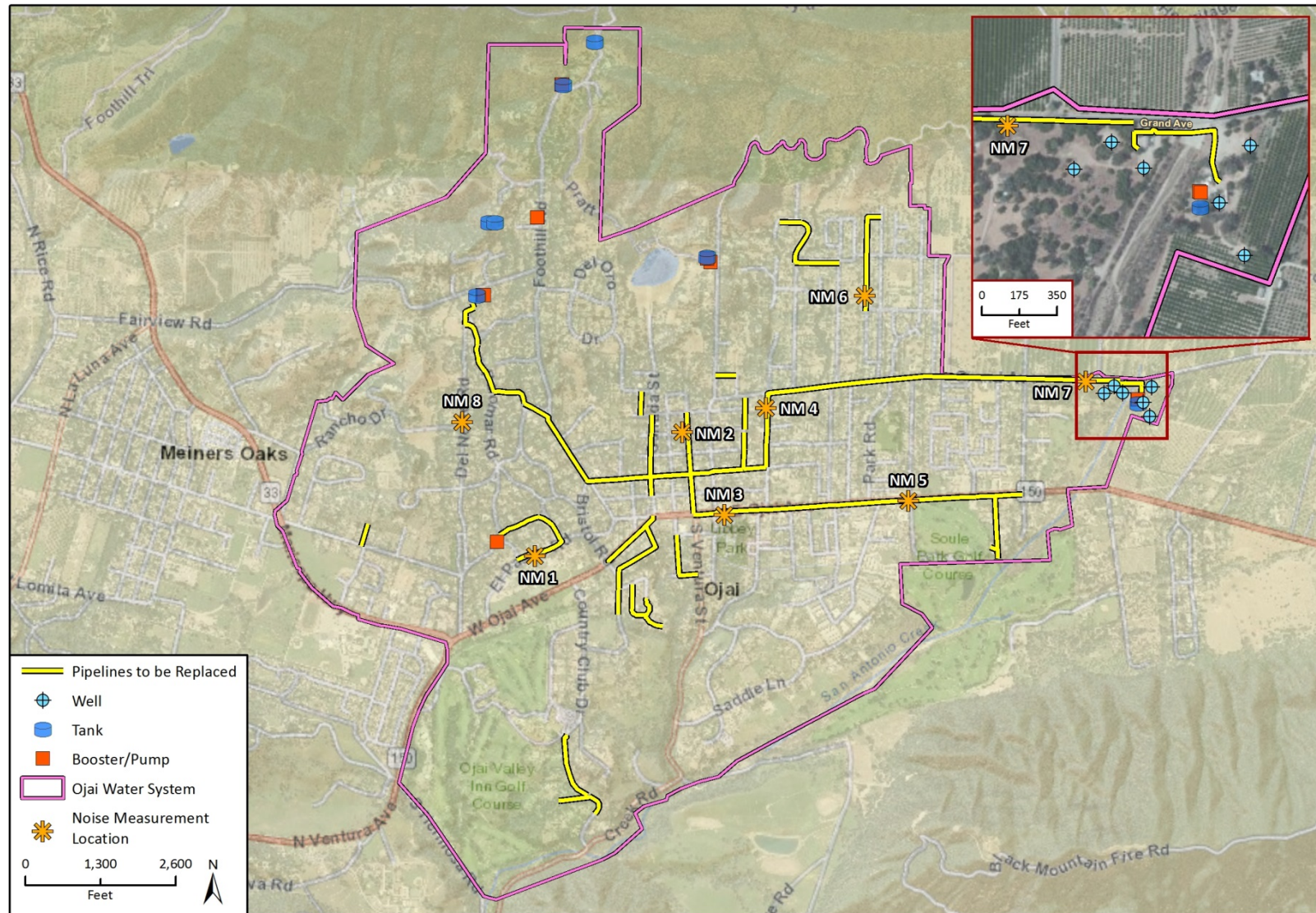
<sup>3</sup> Lmin is the minimum sound level experienced within the recorded measurement with A-weighted frequency response.

<sup>4</sup> Lmax is the maximum sound level experienced within the recorded measurement with A-weighted frequency response.

<sup>5</sup> Due to insufficient public right-of-way in which to record a noise measurement adjacent to the proposed pipeline realignment on Del Norte Road, NM 8 was collected south of proposed improvements. Though this measurement is not located adjacent to proposed project improvements, it is representative of ambient noise levels in the residential neighborhood where such improvements would occur.

Source: Rincon Consultants, field visit on November 15, 2018 using ANSI Type 2 Integrating sound level meter. See Appendix D for noise monitoring data

Figure 9 Noise Measurement Locations



Imagery provided by Esri, Microsoft Bing and their licensors © 2018.  
Additional data provided by CMWD 2018.

Fig X Noise Measurement Locations



## Sensitive Receptors

Noise exposure goals for different types of land uses reflect the varying noise sensitivities associated with those uses. The City of Ojai General Plan Noise Element identifies particular land uses as sensitive to noise, including housing, schools, hospitals, museums, convalescent homes, libraries, and parks (City of Ojai 1991b). Additionally, the Noise Element identifies specific noise sensitive receptors in the city. Noise measurement locations were sited to characterize ambient noise levels at these receptors. Table 7 presents noise sensitive receptors identified by the Noise Element which are likely to be affected by project construction, as well as the nearest noise measurement location and nearest proposed project component.

**Table 7 Noise Sensitive Receptors in Project Area**

Sensitive Receptor	Noise Source	Nearest Noise Measurement Location <sup>1</sup>	Nearest Project Construction
Matilija Junior High School and Ojai Valley School	Traffic along SR 150, El Paseo Road	NM 1 (60.5 dBA Leq)	Pipeline replacement along El Paseo Road (approximately 50 feet north)
Whispering Oaks Senior Housing	Traffic along SR 150 (Ojai Avenue)	NM 5 (70.0 dBA Leq)	Pipeline replacement along Ojai Avenue (approximately 175 feet north)
Acacias Convalescent Housing	Traffic along Montgomery Street and Grand Avenue	NM 4 (58.0 dBA Leq)	Pipeline replacement along Montgomery Street and Grand Avenue (approximately 30 feet east)
Libbey Park	Traffic along Ojai Avenue	NM 3 (59.3 dBA Leq)	Pipeline replacement along Ojai Avenue (approximately 30 feet north)
Ojai Library	Traffic along Ojai Avenue and Ventura Street	NM 3 (59.3 dBA Leq)	Pipeline replacement along Ojai Avenue and Ventura Street (approximately 30 feet north)
Ojai Art Center	Traffic along Montgomery Street and Ojai Avenue	NM 3 (59.3 dBA Leq)	Pipeline replacement along Ojai Avenue (approximately 240 feet north)
Mim's Manor/Manor of Ojai Convalescent Hospital	Traffic along Ventura Street and Eucalyptus Street	NM 2 (46.0 dBA Leq)	Pipeline replacement along Ventura Street (approximately 170 feet east)
Grey Gables/Gables of Ojai residential care facility	Traffic along Grand Avenue and Montgomery Street	NM 4 (58.0 dBA Leq)	Pipeline replacement along Montgomery Street and Grand Avenue (approximately 70 feet south)

SR: State Route

<sup>1</sup> A-weighted decibel (dBA) is defined as a decibel (dB) adjusted to be consistent with human response. The equivalent noise level (Leq) is defined as the single steady A-weighted level equivalent to the same amount of energy contained in the actual fluctuating levels over a period of time (essentially, the average noise level).

Source: City of Ojai 1991b

In addition to the noise sensitive receptors identified above, proposed pipeline replacement alignments pass within approximately 30 feet of single-family and multi-family residential receptors throughout the City of Ojai.

## Regulatory Setting

### *City of Ojai*

#### OJAI MUNICIPAL CODE

Title 5, Chapter 11 of the Ojai Municipal Code, contains the City's Noise Ordinance (this is not a Building or Zoning ordinance, which are provided in Title 9 and Title 10, respectively). The ordinance prohibits any person from making or permitting to be made any noise which unreasonably disturbs the peace and contains exterior and interior noise standards for residential, commercial, and industrial zones within the city. Table 8 summarizes the exterior noise standards outlined in Section 5-11.04 of the Ojai Municipal Code.

**Table 8 Exterior Noise Standards**

Land Use	Time Period	Noise Level (dBA Leq)
Residential Zone <sup>1</sup>	7:00 a.m. – 10:00 p.m.	55 dBA
	10:00 p.m. – 7:00 a.m.	45 dBA
Commercial/Industrial Zone	7:00 a.m. – 10:00 p.m.	65 dBA
	10:00 p.m. – 7:00 a.m.	55 dBA

<sup>1</sup> Includes Village Mixed Use.

Source: Ojai Municipal Code, Section 5-11.04

Additionally, Section 5-11.05, Special Noise Sources, provides specific provisions for construction noise. The ordinance sets hours of permitted construction activity between 7:00 a.m. and 5:00 p.m. on weekdays, with no construction activity permitted on weekends or City holidays. Construction activities authorized by a valid City permit or otherwise allowed may exceed the noise level limits established in the noise ordinance on a temporary and short-term basis during authorized construction hours. Additionally, all construction equipment is required to be operated with the standard factory silencer and/or muffler equipment attached and maintained in good working order.

Pursuant to Section 5-11.07, Exemptions, maintenance and repair of public facilities by City personnel and City-authorized contractors on weekends and holidays are exempt, and construction on public facilities or in the public right-of-way by City-authorized contractors and personnel is exempt from the provisions of the Noise Ordinance. Although CMWD construction contractors would not be considered City-authorized contractors under a strict interpretation of the Noise Ordinance, they generally would be afforded the same flexibility as the purpose of the proposed project is to repair and rehabilitate public facilities. Nevertheless, construction activities for the proposed project generally would occur on weekdays between 7:00 a.m. and 5:00 p.m. and therefore would not be subject to noise level restrictions. The Community Development Director or designee may issue after-hours construction permits if the public interest would be served by such a permit, such as authorizing construction near school grounds or with potential to interfere with vehicular or pedestrian traffic in heavily traveled areas. Also, emergency repairs, should they be

required during the course of project implementation, would be exempt from Noise Ordinance limits.

### **GENERAL PLAN**

The Noise Element of the City of Ojai General Plan describes the acoustical environment in the City, including typical daytime and nighttime noise levels and noise sources, and identifies specific noise sensitive receptors. Additionally, the General Plan Noise Element provides goals, policies, and programs in an effort to control noise in the City. The applicable policies and programs to the proposed project are summarized below (City of Ojai 1991b).

#### ***Policies***

**Policy 6.** The City should discourage nighttime traffic, particularly truck traffic, on streets in residential areas and schedule trash pickups between 7:00 a.m. and 5:00 p.m. in residential areas.

**Policy 7.** The City should adopt a new comprehensive community noise ordinance to ensure city residents are not exposed to excessive noise levels from existing and new stationary noise sources.

#### ***Programs***

**Program 5.** Restrict hours of operation and days of the week of construction activities.

### *County of Ventura*

### **VENTURA COUNTY GENERAL PLAN**

Section 2.16 of the County of Ventura (County) General Plan Hazards Appendix contains the County's Noise Element (County of Ventura 2013). The Noise Element identifies primary noise sources in the county, develops noise contours for existing transportation, industrial, and miscellaneous sources, and provides mitigation strategies to reduce noise impacts in the county through the year 2020.

The Noise Element defines noise sensitive receptors by land use and time of sensitivity. According to the County's Noise Element, noise sensitive receptors include residences at any time, parks and other outdoor recreation areas, primarily during the day, and the interior of schools, churches, libraries, prisons, correctional facilities, and group shelters during the day.

### **VENTURA COUNTY CODE OF ORDINANCES**

Article 11 of the County's Code of Ordinances prohibits loud or raucous noise within any residential zone which is audible to the human ear during the hours of 9:00 p.m. to 7:00 a.m. at a distance of 50 feet from the property line of the noise source or 50 feet from any such noise source if the source is in a public right-of-way. While the ordinance indicates "loud or raucous noise" can include operation of riding tractors or other mechanical or electrical devices or hand tools, which could be used during construction activities, Section 6299-2(a) exempts any government entity or public utility, such as CMWD, from the provisions of the ordinance.

## Impact Analysis

- a. *Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Operation of the replaced pipeline would not perceptibly increase noise levels in the project area above existing conditions. New or rehabilitated wells would be located underground, and newly constructed or rehabilitated tanks would store water supply without the use of noise-generating equipment. Consequently, these project components would not generate substantial operational noise. The proposed project would introduce a new long-term noise source through operation of newly constructed pumping equipment, including aboveground pump stations and well pumps. Consistent with existing pump stations in the system, the equipment would be housed in an enclosure and pumps would be electric water pumps, therefore a substantial increase in ambient noise levels above levels existing without the proposed project would not occur. No additional vehicle trips beyond those needed for maintenance of existing facilities would occur following construction of the project. Therefore, operational noise associated with the project would not result in a substantial permanent increase in ambient noise.

Construction activities associated with the project would result in temporary and intermittent noise increases at nearby sensitive receptors. The project area contains sensitive receptors (residences) within 30 feet of where construction would occur. In addition, the alignment of the proposed pipeline replacements would pass within approximately 30 feet of Ojai Library and Libbey Park and within 240 feet of other sensitive receptors identified in the City of Ojai General Plan Noise Element, as described in Table 7. Construction of the project would involve the use of heavy equipment, creating occasional noise levels exceeding applicable regulations if construction activities were to occur outside of exempt hours, as described in the Regulatory Setting. Construction noise primarily arises from the use of equipment, such as excavators, compactors, trucks, and other machinery. Noise would also be introduced in the form of trucks transporting excavated material from the construction site to staging areas and/or disposal sites. Approximately 200 to 300 LF of roadway would be disturbed per day for construction activities, including excavation, laying pipe, and backfilling as construction continues along the alignment path. Noise-generating construction activities would occur adjacent to a given sensitive receptor for only a few days, after which time the active construction area would be located more than 600 feet away and construction noise would be substantially diminished.

The potential for temporary construction noise impacts are determined by the proximity of sensitive receptors to construction activities, estimated noise levels associated with construction activities, the potential for construction noise to interfere with daytime and nighttime activities, and whether construction noise at nearby receptors would exceed local noise ordinance standards. Construction noise associated with pipeline, well, and tank construction was estimated using the Federal Highway Administration's (FHWA) Roadway Construction Noise Model (RCNM). RCNM estimates noise levels from multiple pieces of construction equipment operating concurrently based on ambient noise levels in the project vicinity, equipment use rates, standard noise attenuation for point sources, and distance to receptors (FHWA 2006). Equipment for pipeline, well, and tank construction phases was based on the equipment list generated by CalEEMod for each project component. Improvements to booster pump stations are not anticipated to require heavy construction equipment and, therefore, would result in minimal construction-related noise. RCNM worksheets are included as Appendix E.

Table 9 provides the estimated noise levels for each phase of construction associated with pipeline replacement. As described previously, the rate of attenuation (i.e., reduction) from point sources of noise is approximately 6 dBA for every doubling of distance. The nearest sensitive receptors to proposed pipeline replacements are residences along North Montgomery Street, Libbey Park and Ojai Library along East Ojai Avenue, and Matilija Junior High School/Ojai Valley School along El Paseo Road. Construction noise at other sensitive receptors in the project area would be similar to or lower than the noise levels described in Table 9.

**Table 9 Estimated Noise Levels Generated during Pipeline Replacement**

Construction Phase	Equipment	Combined Hourly Leq (dBA)
<b>Single Family Residences and Libbey Park/Ojai Library (30 feet from closest construction)</b>		
Site Preparation	Grader, Backhoe	86.2
Trenching	Excavator, Backhoe	82.9
Pipeline Installation	Crane, Forklift/Man Lift (2), Compactor, Backhoe (2), Dozer	86.9
Paving	Cement/Concrete Mixer (4), Paver, Roller, Backhoe	87.2
Architectural Coating	Air Compressor	78.1
<b>Matilija Junior High School/Ojai Valley School (50 feet from closest construction)</b>		
Site Preparation	Grader, Backhoe	81.7
Trenching	Excavator, Backhoe	78.4
Pipeline Installation	Crane, Forklift/Man Lift (2), Compactor, Backhoe (2), Dozer	82.5
Paving	Cement/Concrete Mixer (4), Paver, Roller, Backhoe	82.8
Architectural Coating	Air Compressor	73.7
Source: FHWA 2006. See Appendix E for RCNM worksheets		

The project would also involve potential well replacement or construction of a new well at either the Mutual Wellfield, San Antonio well site, or an undeveloped parcel. Both the Mutual Wellfield and San Antonio well site are located along Grand Avenue east of the city of Ojai. The nearest sensitive receptors are a residence south of Grand Avenue, approximately 490 feet west of the Mutual Wellfield, and a residence north of Grand Avenue, approximately 250 feet north of the San Antonio well sites. Table 10 shows anticipated temporary noise levels associated with new well construction at each of these receptors.

**Table 10 Estimated Noise Levels Generated during Well Construction/Replacement**

Construction Phase	Equipment	Combined Hourly Leq (dBA)
<b>Residence (north of Grand Avenue, 250 feet from San Antonio well site)</b>		
Site Preparation	Grader, Backhoe	67.8
Well Drilling	Generator, Truck-Mounted Drill Rig, Flat Bed Truck (2), Backhoe	66.8
Electrical/Pump Installation	Crane, Forklift/Man Lift (2), Backhoe (2)	64.8
<b>Residence (south of Grand Avenue, 490 feet from Mutual Wellfield)</b>		
Site Preparation	Grader, Backhoe	61.9
Well Drilling	Generator, Truck-Mounted Drill Rig, Flat Bed Truck (2), Backhoe	60.9
Electrical/Pump Installation	Crane, Forklift/Man Lift (2), Backhoe (2)	59.0

Source: FHWA 2006. See Appendix E for RCNM worksheets

Finally, the project would involve tank demolition and construction. The location of new tank construction is not known at this time, but tank demolition may occur at the Running Ridge or Signal tank sites, and tank construction may occur at the Arbolada site or at a presently undeveloped parcel to be acquired by CMWD. Existing tank facilities owned and operated by CMWD are generally located on the north side of the Ojai system service area, and all existing tank facilities are at least 100 feet from the nearest noise-sensitive receptors. While the exact location of new tank construction is not presently known, Table 11 shows anticipated noise levels generated during new tank construction at 25 feet, 100 feet, and 200 feet from the proposed construction activities.

**Table 11 Estimated Noise Levels Generated During New Tank Construction**

Construction Phase	Equipment	Combined Hourly Leq at 25 Feet (dBA)	Combined Hourly Leq at 100 Feet (dBA)	Combined Hourly Leq at 200 Feet (dBA)
Demolition	Concrete Saw, Dozer, Backhoe	90.2	78.2	72.2
Site Preparation	Grader, Backhoe	87.8	75.7	69.7
Grading	Excavator, Dozer, Backhoe, Concrete Saw	90.9	78.9	72.9
Building Construction	Compactor, Crane, Forklift/Man Lift (2), Backhoe	85.8	73.7	67.7
Paving	Cement/Concrete Mixer (4), Paver, Roller, Backhoe	88.8	76.8	70.8
Architectural Coating	Air Compressor	79.7	67.7	61.6

Source: FHWA 2006. See Appendix E for RCNM worksheets

The project would be located within 30 feet of residential properties and other sensitive receptors in the city of Ojai and unincorporated Ventura County. Pipeline replacement would create the greatest construction-related noise at sensitive receptors, temporarily increasing noise exposure to approximately 87 dBA Leq in residential areas. While well and tank construction would generate lower noise levels, all project construction activities would result in an exceedance of the 55 dBA

Leq exterior daytime noise standard for residential zones and 65 dBA Leq exterior daytime noise standard for commercial/industrial zones in the city of Ojai. Noise generated by construction activities in unincorporated Ventura County could constitute loud or raucous noise under Article 11 of the Ventura County Code. Per Section 5-11.05 of the City of Ojai Municipal Code, construction activities authorized by a valid City permit may exceed the noise level limits established in the noise ordinance on a temporary and short-term basis during authorized construction hours. Authorized construction hours are between 7:00 a.m. and 5:00 p.m. on weekdays. As discussed in Section 2.6, *Construction Activities, Staging, and Timing*, construction would generally take place during normal CMWD working hours between 8:00 a.m. and 4:30 p.m. In addition, Section 6299-2(a) of the Ventura County Code exempts any government entity or public utility from the provisions of the County's noise ordinance; therefore, the County's noise ordinance would not apply to the proposed project. Pipeline installation would progress at the rate of approximately 200 to 300 LF per day, reducing the length of exposure of any particular sensitive receptors to a few days at most.

Due to the range of equipment noise levels and the proximity to sensitive receptors, construction activities would subject sensitive receptors to a substantial temporary increase in noise during daytime hours. Construction noise would be exempt in Ventura County and construction noise on weekdays between the hours of 7:00 a.m. and 5:00 p.m. would be exempt in the city of Ojai pursuant to Section 5-11.05 of the Ojai Municipal Code. Emergency work outside of those hours would also be exempt in the city, and limited nighttime work to satisfy construction engineering constraints (such as well drilling) may be authorized by the Community Development Director. Project construction would comply with any working hour limitations specified in encroachment permits issued by the City, County, or Caltrans. Additionally, any increase in ambient noise levels from construction activities for a given sensitive receptor would be limited to a few days. Therefore, due to the temporary and generally exempt noise increases associated with construction of the proposed project, impacts would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

*b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

The FTA provides guidelines for when vibration impacts may be significant, depending on the frequency and sensitive receptor type. Construction-related vibration impacts would be less than significant for residential receptors if vibration levels are below the threshold of potential damage to buildings (100 VdB) and if vibration events over 85 VdB would be infrequent with respect to the number of events per day (FTA 2018).

Operation of the pipeline replacement, tanks, wells, or pumping stations would not perceptibly increase groundborne vibration in the project area above existing conditions. Construction of the project could potentially increase groundborne vibration in the project area, but any effects would be temporary. The project area includes sensitive receptors within 30 feet of where construction would occur. Table 12 shows typical vibration levels associated with standard construction equipment potentially used for the project.

**Table 12 Typical Vibration Levels Generated by Construction Equipment**

Equipment <sup>1</sup>	Approximate VdB 30 Feet from the Source	Approximate VdB 50 Feet from the Source
Vibratory Roller	92	85
Hoe Ram	85	78
Large Bulldozer	85	78
Loaded Trucks	83	77
Jack Hammer	76	70

VdB: vibration decibels

<sup>1</sup>List not comprehensive of all equipment potentially used for the proposed project

Source: FTA 2018

Based on the information presented in Table 12, residences at 30 feet from construction activities could be exposed to maximum vibration levels of approximately 92 VdB during construction. As noted in Section 2.3, *Tank Construction*, tank rehabilitation may require pile driving in order to secure seismic anchors. While pile driving activities would be infrequent, impact pile drivers can generate groundborne vibration levels of up to 112 VdB at a reference distance of 25 feet. Given all existing tank facilities are located at least 100 feet from the nearest noise-sensitive receptors, pile driving associated with tank rehabilitation efforts may result in groundborne vibration levels of up to 94 VdB at such receptors.

As discussed above, 100 VdB is the general threshold where minor damage can occur in buildings. Because vibration levels would not reach 100 VdB, structural damage would not be expected to occur as a result of construction activities. Vibration levels during construction would exceed the FTA Guidelines' groundborne velocity level of 85 VdB, which is considered tolerable only for an infrequent number of events. Construction activities would occur for only short durations as they move along the pipeline alignment and sensitive receptors near construction activities would experience only temporary increases in vibration levels. Activities associated with more substantial groundborne vibration impacts, such as pile driving, would occur infrequently, only while securing seismic anchors during tank rehabilitation. As described in Section 2.6, *Construction Activities, Staging, and Timing*, construction activities would generally be limited to between the hours of 8 a.m. and 4:30 p.m., which are outside of normal sleep hours. Activities with potential to occur during the overnight hours, such as night work along SR 150 and well drilling, would be located further from residences and, therefore, would not cause vibration impacts in buildings where people normally sleep. As a result, this impact would be less than significant.

#### **LESS THAN SIGNIFICANT IMPACT**

- c. *For a project located within the vicinity of a private airstrip or 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?*

The project site is located approximately 12 miles west of the Santa Paula Airport and is not located in an airport land use plan area (Ventura County Airport Land Use Commission 2000). There are no public airports, public use airports, or private airstrips in or near the project area. Construction of the proposed project would not expose people residing or working in the project area to excessive noise levels. No impact would occur.

#### **NO IMPACT**



## 3.14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

The proposed project would involve replacement of existing potable water pipelines, as well as rehabilitations and upgrades to existing wells, booster pump stations, and tanks. The project does not propose construction of new homes or businesses and would therefore not directly induce population growth in the service area.

Although the proposed project would expand the conveyance capacity of existing water infrastructure by increasing the diameter of the pipelines currently serving existing customers, the purpose of this expanded capacity is to improve fire flow. The project would also involve rehabilitation or replacement of existing production wells and may involve installation of a new well in the service area. Any well rehabilitation, replacement, or new well installation would serve to regain pumping capacity lost over time due to aging infrastructure. The project would update existing infrastructure to meet existing and projected demand, but would not result in acquisition of additional water supplies and would not expand service beyond areas presently served by the existing infrastructure. Furthermore, the pipelines, wells, pump stations, and tanks would be maintained by existing CMWD employees and would not indirectly induce population growth as a result of new employment opportunities. Therefore, the project would not indirectly support population growth. No impact related to population growth would occur.

**NO IMPACT**

- b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The proposed project would primarily be constructed within existing roadways and existing CMWD-owned properties and does not include any features with potential to displace any existing housing or people. No impact would occur.

**NO IMPACT**

## 3.15 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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, or the 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:				
1 Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2 Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3 Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4 Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5 Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

*a.1-5 Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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 fire protection, police protection, schools, parks, and/or other public facilities?*

The proposed project does not include any features or facilities requiring additional or unusual fire or police protection resources. It is expected construction workers would be local to the city of Ojai and the surrounding area, and construction would not generate new population growth. The existing CMWD workforce would operate the proposed project. In addition, the proposed project would not change existing demand for public services because population growth would not result from construction of the proposed project (see Section 3.14, *Population and Housing*). No impact would occur.

**NO IMPACT**

*This page intentionally left blank.*

## 3.16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- 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?*

As discussed in Section 3.14, *Population and Housing*, the proposed project would not directly or indirectly support population growth. Therefore, it would not increase the use of existing neighborhood and regional parks or other recreational facilities so as to cause or accelerate a substantial physical deterioration of the facility. No impact would occur.

### **NO IMPACT**

- b. *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

The proposed project does not propose recreational facilities and would not require the construction or expansion of any recreational facilities. As such, no impact would occur.

### **NO IMPACT**

*This page intentionally left blank.*

## 3.17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

The Ventura County Transportation Commission (VCTC) is the designated Congestion Management Agency responsible for the development and implementation of the Congestion Management Program (CMP) in the project area. According to the current (2009) CMP, all regional roadways within the project area are operating at acceptable levels of service (VCTC 2009).

The proposed project involves construction and operation of potable water infrastructure which would not conflict with adopted policies, plans, or programs addressing the circulation system, including public transit, bicycle, or pedestrian facilities. The proposed pipeline alignments would be placed along existing roadways and in public rights-of-way; project facilities would be located primarily underground, or on sites with existing water system infrastructure. Construction staging would occur primarily on the wellfield sites and tank sites at various locations throughout the city of Ojai and unincorporated Ventura County.

Pipeline construction activities would install approximately 200 to 300 LF of pipeline per day before moving to the next segment of pipeline. Full street closures during this work would not be necessary, as the trench should be on one side of the street, in the public right-of-way. Traffic control would be set up to allow one travel lane with flagmen to maintain vehicle, transit, bicycle, and pedestrian access to the greatest extent practicable during construction while maintaining worker and public safety. Anticipated construction-related vehicle trips include construction workers traveling to and from the project work areas, haul trucks (including for import and export of excavated materials, as needed), and other trucks associated with equipment and material deliveries. During peak construction months, construction-related vehicle trips would number approximately 10 roundtrips per day for pipeline, tank, and well construction. Any potential local

traffic impacts from this increase in vehicle traffic would be temporary, as construction activities would move along the alignment.

Because construction is a short-term activity, and impacts would move as work progresses along the pipeline corridor, construction-related traffic impacts would not be substantial. Roadways would be restored to match the surrounding road type once construction is complete. To ensure appropriate traffic controls are implemented and potential traffic impacts would be less than significant, the proposed project would be required to implement several transportation mitigation measures, as detailed below.

The following mitigation measures would reduce the impact to a less than significant level.

*TRA-1 Traffic Control Plan*

To mitigate temporary traffic disruption and ensure public safety, the construction contractor shall prepare a traffic control plan for construction areas located in or near roadways whose traffic volumes exceed Ventura County Levels of Service or City of Ojai criteria. The construction contractors will be required to submit their traffic control plans to the City of Ojai, County of Ventura, and/or Caltrans, as necessary, prior to receiving an encroachment permit.

*TRA-2 Emergency Service Providers*

The Project Manager shall notify emergency service providers (fire and police departments within a 0.5-mile radius of the alignment) with construction contact names, locations, schedules, and traffic plans, if applicable, prior to the start of construction.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3(b)?*

CEQA Guidelines Section 15064.3(b) identifies criteria for evaluating transportation impacts. Specifically, the guidelines state vehicle miles traveled (VMT) exceeding an applicable threshold of significance may indicate a significant impact. According to Section 15064.3(b)(3) of the CEQA Guidelines, a lead agency may include a qualitative analysis of operational and construction traffic.

Project operation would not generate long-term VMT because the project would not require additional maintenance trips beyond those necessary to maintain existing facilities, and the project would not directly or indirectly induce population growth. Project construction would generate worker trips to the project area, including up to 10 roundtrips per day for pipeline, tank, and well construction. Mitigation measure TRA-1 would require implementation of a construction traffic control plan to minimize potential impacts associated with this nominal and temporary increase in VMT during project construction. As a result, the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b), and this impact would be less than significant with mitigation incorporated.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**



- c. *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*

Project facilities consist of potable water facilities and infrastructure, which would have no impact on street design. The proposed project would therefore not create or substantially increase a traffic hazard due to a design feature. No impact would occur.

**NO IMPACT**

- d. *Would the project result in inadequate emergency access?*

Lane closures and other potential traffic impacts caused by construction activities would have the potential to impede emergency response to those areas, or to areas accessed via those routes. To ensure project construction will not interfere with emergency response times or other performance public service performance objectives, the proposed project will implement mitigation requiring preparation of a traffic control plan and notification of emergency service providers regarding construction plans prior to commencement of construction activities (see TRA-1 and TRA-2 above). With mitigation, impacts would remain less than significant.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*This page intentionally left blank.*

## 3.18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 2024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

As of July 1, 2015, California Assembly Bill 52 of 2014 (AB 52) was enacted and expands CEQA by defining a new resource category, "tribal cultural resources." AB 52 states, "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" (PRC Section 21084.2). It further states the lead agency shall establish measures to avoid impacts altering the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A) and (B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is:

1. Listed or eligible for listing in the CRHR or in a local register of historical resources as defined in PRC section 5020.1(k), or
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified or adopted. Under AB 52, lead agencies are required to “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes to be included in the process are those having requested notice of projects proposed in the jurisdiction of the lead agency.

On November 8, 2018, CMWD distributed AB 52 consultation letters for the proposed project, including project information, map, and contact information to three Native American tribes and the Ventura County Resource Management Agency – Planning Division. A copy of the letter can be found in Appendix F. The tribal governments provided with an AB 52 consultation letter (via certified mail) include the following list of recipients:

- Barbareño/Ventureño Band of Mission Indians
- San Gabriel Band of Mission Indians
- Torres Martinez Desert Cahuilla Indians

Under AB 52, Native American tribes have 30 days to respond and request further project information and request formal consultation. CMWD did not receive any requests for consultation.

- a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?*
- b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 2024.1?*

As part of the process of identifying cultural resources issues for this project, Rincon Consultants contacted the Native American Heritage Commission on October 18, 2018 to request a Sacred Lands File (SLF) search of the project area. The Native American Heritage Commission responded on November 9, 2018 stating the results of the search were positive and suggested contacting the Barbareño/Ventureño Band of Mission Indians for more information. The SLF search with the NAHC produced positive results for the Township and Range within which the project site lies. The results were intended to be discussed with the tribes during the AB 52 consultation effort, but no tribes responded requesting consultation with CMWD. Given the project's location primarily within existing roadways and previously disturbed areas, it is unlikely any sacred sites exist directly within the project alignment. No cultural resources of Native American origin were identified within the project site as a result of the SCCIC records search and survey (see Section 3.5, *Cultural Resources*). Based on the above, no known TCRs are present within the project site. Therefore, no impacts would occur to TCRs. See Section 3.5, *Cultural Resources*, for mitigation measures related to the unanticipated discovery of archaeological resources.

## **NO IMPACT**

## 3.19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

### Water

The proposed project involves the replacement of water pipelines and associated infrastructure or water infrastructure approaching the end of service utility, the environmental effects of which are analyzed in this IS-MND. The project would not increase pipeline capacity to serve additional customers. Over the course of project implementation, more water pipelines may be identified as

having multiple leaks or breaks, or for which replacement makes sense because they are close to other planned replacements. This work will be performed at the discretion of CMWD. The details of additional pipeline improvements are unknown; thus, pipeline or other water system improvements not described in this document will require separate environmental review under CEQA. As concluded by this IS-MND, the water facilities included in the proposed project would not cause unmitigable significant environmental effects. Consequently, no additional impact related to water facilities would occur.

## Wastewater Treatment

The Ojai Valley Sanitary District collects and processes wastewater from the city of Ojai, the unincorporated Ojai Valley, and the north Ventura Avenue area. Approximately 120 miles of trunk and main sewer lines form a network transporting the untreated wastewater downstream to the Ojai Valley Treatment Plant, which has a capacity of 3.0 million gallons per day (mgd). Wastewater treated at the Ojai Valley Treatment Plant is discharged to the Ventura River through a permit with the RWQCB.

The proposed project would not generate sanitary wastewater or otherwise contribute to an increase in wastewater treatment requirements. The amount or characteristics of wastewater treated at the Ojai Valley Treatment Plant would not change compared to existing conditions with implementation of the proposed project. Wastewater discharges from the treatment plant would continue to comply with applicable RWQCB wastewater treatment requirements. Thus, no impact related to wastewater treatment would occur.

## Stormwater Drainage

As discussed in Section 3.10, *Hydrology and Water Quality*, the proposed project would primarily be constructed underground in developed areas and would not increase the rate or amount of surface runoff so as to exceed the capacity of existing or planned drainage systems or provide additional sources of polluted runoff. The proposed project would not result in significant new impervious surfaces. Although construction activities would disturb paved roadways in the project area due to trenching and other pipeline installation methods, this disturbance would be temporary. Tank, pump station, and well improvements would generally occur on sites with existing infrastructure and would not substantially change the drainage characteristics of these sites. After construction, the project area would be restored to its original condition and any drainage pattern would be the same as it was prior to project construction activities. Therefore, no impact related to stormwater drainage would occur.

## Electric Power

As discussed in Section 3.6, *Energy*, the proposed project would not increase energy demands associated with existing tanks, wells, and booster pump stations because the rehabilitation of existing tank, well, and pump station infrastructure would not involve an expansion of design capacity. Additionally, any rehabilitation or replacement of well sites would increase the efficiency of these wells, which would reduce energy use. Pump station improvements would incrementally increase daily electricity use, but this energy demand would be supplied by the regional electricity grid that is increasingly powered by renewable energy, would restore lost efficiency in the water distribution system, would not be used to increase the retail water supply or serve additional customers, and would primarily serve to improve fire flow. Therefore, no new or relocated energy

facilities would be required as a result of the proposed project. No impact related to electric power would occur.

## Natural Gas

The project would not involve any components requiring natural gas service and is not anticipated to involve the relocation of existing natural gas facilities. Therefore, no impact related to natural gas facilities would occur.

## Telecommunications

The project would not involve any components requiring telecommunications infrastructure and is not anticipated to involve the relocation of existing telecommunications facilities. Therefore, no impact related to telecommunications facilities would occur.

### NO IMPACT

- b. *Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?*

The proposed project consists of the construction and operation of potable water facilities. Given the proposed project is designed to serve existing demands with currently available water supply and the proposed project itself includes improvements to fire flow and replacement of aging infrastructure to meet those demands, there would be adequate capacity to serve the demands of the project area. Project construction water requirements would be met via CMWD's existing supplies and facilities. Operation of the proposed project would not increase production of groundwater supplies through withdrawals from the Ojai Valley Groundwater Basin, nor would it increase pipeline capacity to serve additional customers. Moreover, the proposed project would have a beneficial effect on potable water demands by providing improved facilities for water transportation and storage throughout the Ojai system. Therefore, no impact related to sufficiency of water supplies would occur.

### NO IMPACT

- c. *Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

As discussed in Item a, the project would not generate sanitary wastewater or otherwise contribute to an increase in wastewater treatment requirements. No impact would occur.

### NO IMPACT

- d. *Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*
- e. *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

E.J. Harrison and Sons provides waste and recycling services in the city of Ojai and the surrounding unincorporated areas of Ventura County. Solid waste is directed by E.J. Harrison and Sons to the Gold Coast Recycling and Transfer Station, a privately-operated diversion and recycling station. The

remaining waste is then transferred to the Toland Road Landfill, a Class III landfill operated by the Ventura Regional Sanitation District. The Toland Road Landfill is located in Santa Paula, approximately 13 miles southeast of the project site. According to the California Department of Resources Recycling and Recovery, the Toland Road Landfill has a permitted capacity of 30 million cubic yards and a maximum disposal capacity of 1,500 tons per day. As of January 2016, the remaining capacity at the landfill was approximately 10.5 million cubic yards. The landfill solid waste permit lists an estimated closure date of 2027. Toland Road Landfill accepts a variety of materials, including construction and demolition materials, agricultural waste, industrial waste, sludge (biosolids), and mixed municipal waste. (CalRecycle 2018b)

Waste Management, Inc. operates the Simi Valley Landfill and Recycling Center, located in the city of Simi Valley, approximately 28 miles southeast of the project site. The Simi Valley Landfill and Recycling Center has a permitted capacity of 119,600,000 cubic yards and a maximum disposal capacity of 9,250 tons per day. As of February 2017, the remaining capacity was approximately 88.3 million cubic yards. The landfill solid waste permit lists an estimated closure date of 2052. The landfill accepts a variety of materials including construction and demolition materials, industrial waste, sludge (biosolids), and mixed municipal waste. (CalRecycle 2018a)

Construction activities may temporarily generate solid waste, which would be disposed of in accordance with all applicable federal, State, and local statutes and regulations. As described above, local solid waste infrastructure has the capacity to accept solid waste generated by project construction activities. Once constructed, project operation would not generate solid waste. The project would not impair the attainment of solid waste reduction goals. Potential impacts would therefore be less than significant.

**LESS THAN SIGNIFICANT IMPACT**



## 3.20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The northern portion of the project site, including the locations of the Heidelberger, Arbolada, Running Ridge, Valley View, and Signal facilities, is a designated Very High Fire Hazard Severity Zone in the State and Local Responsibility Areas (CAL FIRE 2007 and 2010). In addition, although the urbanized areas of the City of Ojai are not located in a Very High Fire Hazard Severity Zone, the City is within 1.5 miles of large open space areas with very high fire severity risks. The project area has been subject to several recent fires, including the 282-acre Chorro Fire in August 2015, the 2,304-acre Pine Fire, and the 281,893-acre Thomas Fire in 2017 (CAL FIRE 2015, 2016, and 2019). Although the recent Thomas Fire did not affect the majority of the project site, it did burn the location of the Heidelberger facility.

- a. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*

As discussed in Section 3.9, *Hazards and Hazardous Materials*, construction activities associated with the proposed project may require temporary lane or road closures which could impede

emergency response. However, the Traffic Control Plan required in Mitigation Measure TRA-1 (see Section 3.17, *Transportation*) would implement safe and effective traffic control measures at all construction sites and would address any potential interference with emergency response and/or evacuation plans. With the Traffic Control Plan in place, the impact would be less than significant with mitigation incorporated.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

- b. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*
- c. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*
- d. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

Heavy duty equipment used during project construction equipment may produce sparks with the potential to ignite vegetation. However, California Public Resources Code (PRC) Section 4442 mandates the use of spark arrestors, which prevent the emission of flammable debris from exhaust, on earth-moving and portable construction equipment with internal combustion engines operating on any forest-covered, brush-covered, or grass-covered land. Furthermore, PRC Sections 4427 and 4431 specify standards for conducting construction activities on days when a burning permit is required, and PRC Section 4428 requires construction contractors to maintain fire suppression equipment during the highest fire danger period (April 1 to December 1) when operating on or near any forest-covered, brush-covered, or grass-covered land. Therefore, with compliance with applicable PRC provisions, project construction would not exacerbate wildfire risk.

The project would replace existing pipelines as well as tank, well, and booster pump station infrastructure. The project would not include housing or new permanent structures and would not accommodate occupants. Therefore, the project would not exacerbate wildfire risk and would not expose people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes. Furthermore, none of the proposed equipment would exacerbate fire risk because the majority of project components would be replacements of existing infrastructure. The project would not require associated infrastructure such as fuel breaks or emergency water sources resulting in temporary or ongoing impacts to the environment. In addition, the project itself would improve fire flow throughout the pipeline network and enhance firefighting capacity in the area by improving pumping capacity. Therefore, there would be no impacts.

**NO IMPACT**

## 3.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Does the project:				
a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- a. *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

The majority of the project would involve infrastructure replacement and upgrades within previously developed urban area. The project consists primarily of the replacement of underground pipelines and upgrades to existing pumps, wells, and tanks. As a result, the project would not have the potential to substantially reduce the habitat of fish and wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. The project would involve construction activities in and around the Soule Park Site, which represents the location of the

prehistoric/ethnohistoric Chumash village of Awha'y, and may contain cultural resources exemplifying major periods of California history or prehistory. As discussed in Section 3.5, *Cultural Resources*, mitigation measures CUL-1 through CUL-3 would reduce such impacts to less than significant levels with mitigation incorporated.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

- b. *Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

As described in the discussion of environmental checklist Sections 3.1 through 3.20, with respect to all environmental issues, the proposed project would have no impact, a less than significant impact, or a less than significant impact with mitigation incorporated. Construction activities associated with pipeline replacement would install approximately 200 to 300 LF of pipeline per day before moving to the next segment of pipeline. The potential effects would be temporary and phased as construction progresses along the pipeline alignment. Replacement of other infrastructure, including demolition and construction of tanks, wells, and pumps, would also be temporary in nature and would not result in long-term operational impacts. If other unforeseen projects happen to occur at the same time as the proposed project within the project area, adjacent sensitive receptors may be exposed to greater levels of impact from construction activities (e.g., noise). If other construction projects are occurring at the same time in the immediate area, though, any cumulative effects would also be short-term and temporary. Therefore, the proposed project would not result in a considerable contribution to any cumulative impact significant or otherwise. This impact would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

- c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

As detailed in the preceding sections, the proposed project would not result, either directly or indirectly, in substantial adverse effects. Where potential environmental impacts would occur, mitigation measures would be implemented to reduce or avoid an impact. With adherence to the mitigation program, the proposed project would not result in substantial adverse effects on either the environment or human beings. This impact would be less than significant with mitigation incorporated.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

## Chapter 4: References

---

### 4.1 Bibliography

- Association of Environmental Professionals. 2016. *Beyond 2020 and Newhall: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California*. [online]: [https://www.califaep.org/images/climate-change/AEP-2016\\_Final\\_White\\_Paper.pdf](https://www.califaep.org/images/climate-change/AEP-2016_Final_White_Paper.pdf). Accessed October 2018.
- California Air Pollution Control Officers Association (CAPCOA). 2008. CEQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act. [online]: <http://www.capcoa.org/wp-content/uploads/downloads/2010/05/CAPCOA-White-Paper.pdf>. Accessed October 2018.
- California Air Resources Board (CARB). 2018. California Greenhouse Gas Emission Inventory - 2018 Edition. <https://www.arb.ca.gov/cc/inventory/data/data.htm> (accessed January 2019).
- California Department of Conservation. 1981. Classification of the Sand, Gravel, and Crushed Rock Resource Areas, Western Ventura County Production-Consumption Region. [online]: <https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc>. Accessed November 2018.
- \_\_\_\_\_. 2016. *California Important Farmland Finder*. Sacramento, CA. <https://maps.conservation.ca.gov/DLRP/CIFF/>. Accessed October 2018.
- \_\_\_\_\_. 2018. *EQ Zapp: California Earthquake Hazards Zone Application*. [online]: <http://www.conservation.ca.gov/cgs/geohazards/eq-zapp>. Accessed October 2018.
- California Department of Forestry and Fire Protection (CALFIRE). 2007. Fire Hazard Severity Zones in SRA [map]. 1:100,000. November 7, 2007. [online]: [http://frap.fire.ca.gov/webdata/maps/ventura/fhszs\\_map.56.pdf](http://frap.fire.ca.gov/webdata/maps/ventura/fhszs_map.56.pdf). Accessed January 2019.
- \_\_\_\_\_. 2010. Ventura County FHSZ Map - Very High Fire Hazard Severity Zones in LRA [map]. 1:100,000. October 6, 2010. [online]: [http://www.fire.ca.gov/fire\\_prevention/downloads/fhsz\\_maps/ventura\\_56\\_lra.pdf](http://www.fire.ca.gov/fire_prevention/downloads/fhsz_maps/ventura_56_lra.pdf). Accessed January 2019.
- \_\_\_\_\_. 2015. Incident Information – Chorro Fire. [online]: [http://cdfdata.fire.ca.gov/incidents/incidents\\_details\\_info?incident\\_id=1181](http://cdfdata.fire.ca.gov/incidents/incidents_details_info?incident_id=1181). Accessed January 2019.
- \_\_\_\_\_. 2016. Incident Information – Pine Fire. [online]: [http://cdfdata.fire.ca.gov/incidents/incidents\\_details\\_info?incident\\_id=1313](http://cdfdata.fire.ca.gov/incidents/incidents_details_info?incident_id=1313). Accessed January 2019.
- \_\_\_\_\_. 2019. Incident Information – Thomas Fire. [online]: [http://cdfdata.fire.ca.gov/incidents/incidents\\_details\\_info?incident\\_id=1922](http://cdfdata.fire.ca.gov/incidents/incidents_details_info?incident_id=1922). Accessed January 2019.
- California Department of Public Health. 2016. Yearly Summaries of Selected General Communicable Diseases in California, 2011-2015. [online]:

- <https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/YearlySummaryRptsofSelectedGenCommDisinCA2011-2015.pdf#page=38>. Accessed November 2018.
- California Department of Resources Recycling and Recovery (CalRecycle). 2018a. *Facility/Site Summary Details: Simi Valley Landfill & Recycling Center (56-AA-0007)*. 2018. [online]: <https://www2.calrecycle.ca.gov/swfacilities/Directory/56-AA-0007/>. Accessed November 2018.
- \_\_\_\_\_. 2018b. *Facility/Site Summary Details: Toland Road Landfill (56-AA-0005)*. 2018. [online]: <https://www2.calrecycle.ca.gov/swfacilities/Directory/56-AA-0005/>. Accessed November 2018.
- California Department of Transportation (Caltrans). 2018. *Scenic Highways*. [online]: <http://www.dot.ca.gov/design/lap/livability/scenic-highways/>. Accessed October 2018.
- California Department of Water Resources (DWR). 2004. *Ojai Valley Groundwater Basin*. [online]: [https://water.ca.gov/LegacyFiles/pubs/groundwater/bulletin\\_118/basindescriptions/4-2.pdf](https://water.ca.gov/LegacyFiles/pubs/groundwater/bulletin_118/basindescriptions/4-2.pdf). Accessed November 2018.
- \_\_\_\_\_. 2014. *California Groundwater Elevation Monitoring*. [online]: [https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Basin-Prioritization/Files/CA\\_GW-Basin-Prioritization\\_07-10-14.pdf](https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Basin-Prioritization/Files/CA_GW-Basin-Prioritization_07-10-14.pdf). Accessed November 2018.
- \_\_\_\_\_. 2019. *Sustainable Groundwater Management Act, 2018 Basin Prioritization. Process and Results*. [online]: <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Basin-Prioritization/Files/2018-Sustainable-Groundwater-Management-Act-Basin-Prioritization.pdf?la=en&hash=B9F946563AA3E6B338674951A7FFB0D80B037530>. Accessed January 2019.
- California Geological Survey (CGS). 2002. *California Geomorphic Provinces*, Note 36.
- California Energy Commission. 2009. *Environmental Health and Equity Impacts from Climate Change and Mitigation Policies in California: A Review of the Literature*. [online]: <http://www.energy.ca.gov/2009publications/CEC-500-2009-038/CEC-500-2009-038-D.PDF>. Accessed October 2018.
- \_\_\_\_\_. 2016a. *California Gasoline Data, Facts, and Statistics*. [online]: [http://www.energy.ca.gov/almanac/transportation\\_data/gasoline/](http://www.energy.ca.gov/almanac/transportation_data/gasoline/). Accessed January 2019.
- \_\_\_\_\_. 2016b. *Diesel Fuel Data, Facts, and Statistics*. [online]: [https://www.energy.ca.gov/almanac/transportation\\_data/diesel.html](https://www.energy.ca.gov/almanac/transportation_data/diesel.html). Accessed January 2019.
- \_\_\_\_\_. 2018. "Renewables Portfolio Standard (RPS)." Sacramento, CA. [online]: <http://www.energy.ca.gov/portfolio/>. Accessed January 2019.
- \_\_\_\_\_. 2019. *Total System Electric Generation*. [online]: [https://www.energy.ca.gov/almanac/electricity\\_data/total\\_system\\_power.html](https://www.energy.ca.gov/almanac/electricity_data/total_system_power.html). Accessed January 2019.
- Casitas Municipal Water District (CMWD). 2018. *2018 Condition Based Assessment and Water Master Plan*. September 2018.
- \_\_\_\_\_. 2016. *Final Urban Water Management Plan and Agricultural Water Management Plan 2016 Update*. June 2016. Available online:

- <https://water.ca.gov/LegacyFiles/wateruseefficiency/sb7/docs/2016/Casitas%20MWD-2016%20UWMP-AWMP.pdf>
- Department of Toxic Substances Control (DTSC). 2018. *EnviroStor Database*. [online]: <http://www.envirostor.dtsc.ca.gov/public>. Accessed October 2018.
- Dibblee, T.W. 1966. Geology of the Central Santa Ynez Mountains, Santa Barbara County, California. California Division of Mines and Geology Bulletin 188.
- Dibblee, T.W., and Ehrenspeck, H.E., ed. 1987. Geologic map of the Matilija quadrangle, Ventura County, California. Dibblee Geological Foundation, Dibblee Foundation Map DF-12, scale 1:24,000.
- \_\_\_\_\_. 1987. Geologic map of the Ojai quadrangle, Ventura County, California. Dibblee Geological Foundation, Dibblee Foundation Map DF-13, scale 1:24,000.
- Federal Emergency Management Agency (FEMA). 2010. *FEMA Flood Map Service Center*. 06111C0578F. [online]: <https://msc.fema.gov/portal/search?AddressQuery=Ojai%2C%20CA#searchresultsanchor>. Accessed November 2018.
- Federal Highway Administration (FHWA). 2006. *Roadway Construction Noise Model*.
- Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment Manual*. [online]: [https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123\\_0.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf). Accessed November 2018.
- \_\_\_\_\_. 2017. Policy and Governmental Affairs: Office of Highway Policy Impacts, Motor Fuel Use – 2016 (1). [online]: <https://www.fhwa.dot.gov/policyinformation/statistics/2016/mf21.cfm>. Accessed January 2019.
- \_\_\_\_\_. 2006. *Transit Noise and Vibration Impact Assessment*. [online]: [https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA\\_Noise\\_and\\_Vibration\\_Manual.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf). Accessed November 2018.
- Golden State Water Company (GSWC). 2010. *2010 Urban Water Management Plan – Ojai*. August 2011. Available online: [http://obgma.com/wp-content/uploads/2015/05/GSW\\_Ojai\\_UWMP\\_2011.pdf](http://obgma.com/wp-content/uploads/2015/05/GSW_Ojai_UWMP_2011.pdf)
- Jefferson, G.T. 1991. A catalogue of Late Quaternary vertebrates from California, Part Two, mammals. Natural History Museum of Los Angeles County Technical Reports, no. 7, 129 p.
- Kelly, Thomas S. 1990. Biostratigraphy of Uintan and Duchesnean Land Mammal Assemblages from the Middle Member of the Sespe Formation, Simi Valley, California. Natural History Museum of Los Angeles County Contributions in Science No. 419.
- \_\_\_\_\_. 1992. New Uintan and Duchesnean (Middle and Late Eocene) Rodents from the Sespe Formation, Simi Valley, California. Southern California Academy of Sciences Bulletin 91:97–120. Natural History Museum of Los Angeles County.
- \_\_\_\_\_. 2009. A New Species of *Heliscomys* (Rodentia, Heliscomyidae) from the Duchesnean (Middle Eocene) Simi Valley Landfill Local Fauna, Sespe Formation, California. *Paludicola* 7(3):67–77.

- \_\_\_\_\_. 2010. New Records of Marsupialia, Lipotyphla, and Primates from the Duchesnean (Middle Eocene) Simi Valley Landfill Local Fauna, Sespe Formation, California. *Paludicola* 7(4):158–169.
- Kelly, T.S., and Whistler, D.P. 1994. Additional Uintan and Duchesnean (Middle and Late Eocene) Mammals from the Sespe Formation, Simi Valley, California. *Natural History Museum of Los Angeles County Contributions in Science* 439.
- Lander, E.B. 1983. Continental Vertebrate Faunas from the Upper Member of the Sespe Formation, Simi Valley, California, and the Terminal Eocene Event. In *Cenozoic Geology of the Simi Valley Area, Southern California*, edited by R. R. Squires and M. V. Filewicz, pp. 142–172. Society of Exploration Paleontologists and Mineralogists, Pacific Section, Fall Field Trip Volume and Guidebook.
- National Park Service. 1983. *Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines*. Electronic document, online at [http://www.nps.gov/history/local-law/Arch\\_Standards.htm](http://www.nps.gov/history/local-law/Arch_Standards.htm), accessed December 6, 2011.
- Norris, R.M., and Webb, R.W. 1990. *Geology of California*. John Wiley & Sons, New York.
- Ojai Basin Groundwater Management Agency. 2018. *The Ojai Basin*. [online]: <https://obgma.com/the-ojai-valley-basin/>. Accessed November 2018.
- Ojai, City of. 1987. *City of Ojai General Plan: Conservation Element*. May 13, 1987 [online]: <http://ojaicity.org/ojais-general-plan/>. Accessed October 2018.
- \_\_\_\_\_. 1988. *Master Environmental Assessment*. [online]: <http://ojaicity.org/design-guidelines-area-plans/>. Accessed November 2018.
- \_\_\_\_\_. 1991a. *General Plan, Safety Element*. September 24, 1991. [online]: <http://ojaicity.org/ojais-general-plan/>. Accessed October 2018.
- \_\_\_\_\_. 1991b. *City of Ojai General Plan Noise Element*. [online]: <http://ojaicity.org/ojais-general-plan/>. Accessed October 2018.
- \_\_\_\_\_. 1997. *General Plan: Land Use Element*. May 13, 1997. [online]: <http://ojaicity.org/ojais-general-plan/>. Accessed October 2018.
- Society of Vertebrate Paleontology (SVP). 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. Society of Vertebrate Paleontology Impact Mitigation Guidelines Revision Committee.
- South Coast Air Quality Management District (SCAQMD). 2010. *Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group Meeting #15*. September 28, 2010. [online]: [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf)
- \_\_\_\_\_. 2017. *California Emissions Estimator Model User Guide, Appendix A Calculations Details for CalEEMod*. [online]: [http://www.aqmd.gov/docs/default-source/caleemod/02\\_appendix-a2016-3-2.pdf?sfvrsn=6](http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6)
- State Water Resources Control Board (SWRCB). 2011. *GeoTracker Database*. San Antonio Treatment Plant (WDR100001620). [online]: [https://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=WDR100001620](https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=WDR100001620). Accessed October 2018.



- \_\_\_\_\_. 2018. Impaired Water Bodies 2014/2016 Integrated Report Approval Documents. [online]: [https://www.waterboards.ca.gov/water\\_issues/programs/tmdl/integrated2014\\_2016.shtml](https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtml). Accessed January 2019.
- Tan, S.S., and Irvine, P.J., 2005, Geologic map of the Ojai 7.5-minute quadrangle, Ventura County, California. California Geological Survey, Preliminary Geologic Maps, scale 1:24,000.
- Tan, S.S., and Jones, T.A., 2006, Geologic map of the Matilija 7.5-minute quadrangle, Ventura County, California. California Geological Survey, Preliminary Geologic Maps, scale 1:24,000.
- United States Department of Agriculture, Natural Resources Conservation Service. 2018. *Web Soil Survey*. [online]: <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Accessed November 2018.
- United States Energy Information Administration (EIA). 2018a. "California - Profile Overview." Last modified: November 15, 2018. <https://www.eia.gov/state/?sid=CA>. Accessed January 2019.
- \_\_\_\_\_. 2018b. Natural Gas: Natural Gas Consumption by End Use. December 31, 2018b. [https://www.eia.gov/dnav/ng/ng\\_cons\\_sum\\_dcu\\_SCA\\_a.htm](https://www.eia.gov/dnav/ng/ng_cons_sum_dcu_SCA_a.htm). Accessed January 2019.
- Ventura, County of. 2010. *Ventura County General Plan, Resource Protection Map (Figure 1, South Half)*. [online]: [https://docs.vcrma.org/images/pdf/planning/tree-permits/Resource\\_Protection\\_Map\\_South.pdf](https://docs.vcrma.org/images/pdf/planning/tree-permits/Resource_Protection_Map_South.pdf). Accessed January 2019.
- \_\_\_\_\_. 2011. *Ventura County General Plan Resources Appendix*. June 28, 2011. [online]: <https://docs.vcrma.org/images/pdf/planning/plans/General-Plan-Resources-Appendix.pdf>. Accessed November 2018.
- \_\_\_\_\_. 2013. *Ventura County General Plan Hazards Appendix*. October 22, 2013. [online]: [https://docs.vcrma.org/images/pdf/planning/plans/General\\_Plan\\_Hazards\\_Appendix.pdf](https://docs.vcrma.org/images/pdf/planning/plans/General_Plan_Hazards_Appendix.pdf). Accessed October 2018.
- \_\_\_\_\_. 2015. *2015 Ventura County Multi Hazard Mitigation Plan*. Figure F-4A, Dam Failure Inundation Areas. [online]: [http://www.venturacountymhmp.com/uploads/documents/4a.%20Flood\\_DamInundation.pdf](http://www.venturacountymhmp.com/uploads/documents/4a.%20Flood_DamInundation.pdf). Accessed November 2018.
- \_\_\_\_\_. 2016. *Ventura County General Plan Goals, Policies and Programs*. December 13, 2016. [online]: <https://docs.vcrma.org/images/pdf/planning/plans/Goals-Policies-and-Programs.pdf>. Accessed January 2019.
- \_\_\_\_\_. 2017. *Ventura County 2040 General Plan. Chapter 12, Climate Change*. [online]: [http://ventura.granicus.com/MetaViewer.php?view\\_id=83&clip\\_id=4673&meta\\_id=593009](http://ventura.granicus.com/MetaViewer.php?view_id=83&clip_id=4673&meta_id=593009)
- Ventura County Air Pollution Control District (VCAPCD). 2003. *Ventura County Air Quality Assessment Guidelines*. [online]: <http://www.vcapcd.org/pubs/Planning/VCAQGuidelines.pdf>
- \_\_\_\_\_. 2006. *Air Quality Assessment for CEQA*. [online]: [http://www.vcapcd.org/environmental-review.htm#What\\_about\\_greenhouse\\_gases\\_and\\_CEQA\\_](http://www.vcapcd.org/environmental-review.htm#What_about_greenhouse_gases_and_CEQA_)
- \_\_\_\_\_. 2010. *Ventura County 2010 Air Quality Management Plan*. July 2010. [online]: <https://www3.epa.gov/ttnamti1/files/networkplans/CAVCAPCDPlan2010.pdf>

- \_\_\_\_\_. 2017. 2016 Ventura County Air Quality Management Plan. [online]: <http://www.vcapcd.org/pubs/Planning/AQMP/2016/Final/Final-2016-Ventura-County-AQMP.pdf>. September 2017.
- Ventura County Airport Land Use Commission. 2000. *Airport Comprehensive Land Use Plan for Ventura County – Final Report*. [online]: <https://www.goventura.org/wp-content/uploads/2018/03/2000-airport-land-use-for-ventura-county.pdf>. Accessed November 2018.
- Ventura County Transportation Commission (VCTC). 2009. Congestion Management Program. Adopted July 10, 2010. [online]: <https://www.goventura.org/work-with-vctc/publications/>. Accessed November 2018.

## 4.2 List of Preparers

Rincon Consultants, Inc. prepared this IS-MND on behalf of the Casitas Municipal Water District. Persons involved in data gathering analysis, project management, and quality control include the following.

### **RINCON CONSULTANTS, INC.**

Jennifer Haddow, PhD, Vice President, Principal Environmental Scientist, Principal-in-Charge  
Matthew Long, MESC, MPP, Senior Environmental Scientist, Project Manager  
Steven Hongola, Principal Ecologist  
Christopher Duran, MA, Principal Investigator, Archaeologist  
Tiffany Clark, PhD, Principal Investigator, Archaeologist  
Jessica DeBusk, MBA, Principal Investigator, Paleontologist  
Shannon Carmack, Senior Architectural Historian  
Lindsey Sarquilla, MESM, Senior Environmental Planner  
Lindsay Griffin, Senior Biologist  
John Sisser, MESM, Associate Environmental Planner, Lead Analyst  
Beth Wilson, Associate Environmental Planner  
Hannah Mize, Associate Environmental Planner  
Nikolas Kilpelainen, Associate Environmental Planner  
Danielle Yaconelli, Associate Biologist  
Meagan Szromba, MA, Associate Archaeologist  
Hannah Haas, Associate Archaeologist  
Tricia Dodds, MA, Associate Archaeologist  
Heather Clifford, MS, Associate Paleontologist  
Marcus Klatt, GIS Supervisor/Analyst  
Jonathon Schuhrke, GIS Analyst  
Allysen Valencia, GIS Analyst  
Douglas Carreiro, GIS Analyst  
Jon Montgomery, MESM, GIS Analyst  
April Durham, PhD, Senior Technical Editor