

# **Initial Study/ Mitigated Negative Declaration**

## **Reservoir 6 and Almond Street Waterline Replacement**



Cucamonga Valley Water District  
Engineering Department  
10440 Ashford Street  
Rancho Cucamonga, CA 91730-2799

November 2025

*This page intentionally left blank*

## Table of Contents

<b>SECTION 1: INTRODUCTION</b>	<b>1</b>
1.1 California Native American Consultation	3
1.2 Environmental Factors Potentially Affected	5
1.3 Determination	5
<b>SECTION 2: PROJECT DESCRIPTION</b>	<b>6</b>
2.1 Project Location	6
2.2 Background	6
2.3 Project Objective	6
2.4 Project Description	6
2.5 Project Construction	7
2.6 Environmental Setting	7
2.7 Required Permits and Approvals	7
<b>SECTION 3: DISCUSSION OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES</b>	<b>12</b>
I. Aesthetics	12
II. Agriculture and Forestry Resources	14
III. Air Quality	16
IV. Biological Resources	20
V. Cultural Resources	23
VI. Energy	25
VII. Geology and Soils	26
VIII. Greenhouse Gas Emissions	30
IX. Hazards and Hazardous Materials	33
X. Hydrology and Water Quality	36
XI. Land Use and Planning	40
XII. Mineral Resources	41
XIII. Noise	42
XIV. Population and Housing	45
XV. Public Services	46
XVI. Recreation	48

XVII. Transportation.....	49
XVIII. Tribal Cultural Resources .....	51
XIX. Utility and Service Systems .....	54
XX. Wildfire .....	56
XXI. Mandatory Findings of Significance .....	58
<b>SECTION 4: LIST OF PREPARERS .....</b>	<b>60</b>
<b>SECTION 5: REFERENCES.....</b>	<b>61</b>
5.1 Project Specific References.....	61

**TABLES**

Table 1: Project Site and Surrounding General Plan Designation and Zoning:.....	2
Table 2: AB 52 Consultation Summary .....	3
Table 3: Waterline Installation Construction Equipment Emissions .....	17
Table 4: Greenhouse Gas Construction Emissions Waterline Installation .....	31

**FIGURES**

Figure 1: Regional Vicinity.....	8
Figure 2: Vicinity Map.....	9
Figure 3: Site Plan.....	10
Figure 4: Project Alignment-Aerial.....	11

## **SECTION 1: INTRODUCTION**

The California Environmental Quality Act (CEQA) was enacted in 1970 for the purpose of providing decision-makers and the public with information regarding environmental effects of Proposed Projects; identifying means of avoiding environmental damage; and disclosing to the public the reasons behind a project's approval, even if it leads to environmental damage. The Proposed Project is subject to CEQA, and no exemptions apply. Therefore, an Initial Study (IS) has been prepared.

An Initial Study is a preliminary analysis conducted by the lead agency, in consultation with other agencies (responsible or trustee agencies, as applicable), to determine whether there is substantial evidence that a project may have a significant effect on the environment. If the IS concludes that the project, with mitigation, may have a significant effect on the environment, an Environmental Impact Report (EIR) should be prepared; otherwise, the lead agency may adopt a Negative Declaration (ND) or Mitigated Negative Declaration (MND). It has been determined that an MND is appropriate for the Proposed Project.

The IS/MND contained herein have been prepared in accordance with CEQA (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (Title 14, California Code of Regulations, Section 15000 et seq.).

The following discussion of potential environmental effects was completed in accordance with Section 15063(d)(3) of the CEQA Guidelines to determine if the project may have significant effect on the environment.

### **CEQA INITIAL STUDY FORM**

**Project Title:** Reservoir 6 and Almond St. Waterline Replacement

**Lead Agency and Project Sponsor's Name and Address:**

Cucamonga Valley Water District  
Engineering Department  
10440 Ashford Street  
Rancho Cucamonga, CA 91729

**Contact Person and Phone Number:**

Ms. Jiwon Seung, Assistant Engineer  
Engineering Department  
Cucamonga Valley Water District  
(909) 987-2591

[JiwonS@CVWDwater.com](mailto:JiwonS@CVWDwater.com)

**Project Summary**

The Cucamonga Valley Water District (CVWD, District) proposes to construct and install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated waterlines to replace approximately 300 linear feet of the existing Reservoir 6 and Almond Street 14-inch and 16-inch waterlines which are deteriorating. The waterline replacement project is within the City of Rancho Cucamonga. The waterlines are also located in a flood zone with portions currently exposed due to erosion from flood scouring. The waterlines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents.

**Project Location:**

The Project Site is located in the northern region of the City of Rancho Cucamonga, occurring northeast of Almond Street and south of Angalls Canyon (see Figure 1: *Regional Vicinity* and Figure 2: *Project Location*).

**Project Site and Surrounding Land Uses:**

The Proposed Project is located within an urbanized area in the City of Rancho Cucamonga and is adjacent to single-family residential development to the west. Natural hillside open space exists to the north, east, and south of the Project Site. The Project Site is zoned Open Space Conservation (OSC) according to the City of Rancho Cucamonga General Plan Zoning Map and categorized as General Open Space and Facilities (see Table 1).

**Table 1  
Project Site and Surrounding General Plan Designation and Zoning:**

	<b>CURRENT USE</b>	<b>ZONING</b>	<b>GENERAL PLAN LAND USE</b>
Project Site	Vacant	Open Space Conservation (OSC)	General Open Space and Facilities (OS)
North	Vacant	Hillside Residential (HR)	Rural Open Space (OS)
South	Vacant	Flood Control/Utility Corridor (FC/UC)	General Open Space and Facilities (OS)
East	Vacant	Hillside Residential (HR)	Rural Open Space (OS)
West	Single Family Residential	Very Low Residential (VL)	N Semi-Rural Neighborhood

**Agencies that may have an interest in the Proposed Project:**

Responsible/Trustee Agencies

State Water Resources Control Board, Division of Drinking Water  
California Regional Water Quality Control Board, Santa Ana Region

Reviewing Agencies

City of Rancho Cucamonga Public Works and Engineering Departments  
County of San Bernardino Department of Health Services  
South Coast Air Quality Management District

**1.1 California Native American Consultation**

On July 9, 2025, the CVWD notified the following tribal entity representatives of the Project and that the 30-day timeframe in which to request consultation would end 30 days of receipt of the letter, in accordance with AB 52. The following summarizes the results of the AB 52 consultation. Appendix F contains the AB 52 notification letters that were sent, as well as the letters of response. Mitigation measures have been incorporated into the Initial Study, as appropriate, to ensure potential impacts to tribal cultural resources are minimized. Any mitigation received as a result of ongoing consultation will be included with the Project as Conditions of Approval.

**Table 2  
AB 52 Consultation Summary**

Tribe	Notification Letters Sent	Comments Received	Summary of Response	Conclusion
Agua Caliente Band of Cahuilla Indians	July 9, 2025	July 28, 2025	Project not located within Tribe area	Consultation not Requested
Cahuilla Band of Indians	July 9, 2025	-	No Response	-
Gabrieleno Band of Mission Indians - Kizh Nation	July 9, 2025	July 17, 2025/ October 20, 2025	Consultation Requested	Consultation scheduled for 9/16/25. Tribe was unavailable. Rather than reschedule Tribe Provided Mitigation Measures incorporated herein.
Gabrieleno/Tongva San Gabriel Band of Mission Indians	July 9, 2025	-	No Response	-
Morongo Band of Mission Indians	July 9, 2025	-	No Response	-
Quechan Indian Tribe of the Fort Yuma Reservation	July 9, 2025	-	No Response	-

Tribe	Notification Letters Sent	Comments Received	Summary of Response	Conclusion
Yuhaaviatam of San Manuel Nation	July 9, 2025	August 13, 2025	Additional Information Requested	Cultural Resources and Tribal Cultural Resources Mitigation and Monitoring Measures Provided and Included Herein
Santa Rosa Band of Cahuilla Indians	July 9, 2025	-	No Response	-
Serrano Nation of Mission Indians	July 9, 2025	-	No Response	-
Soboba Band of Luiseno Indians	July 9, 2025	-	No Response	-

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

## 1.2 Environmental Factors Potentially Affected

Based on the analysis in Section 4, the Proposed Project could potentially affect (“Potentially Significant”) the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor and identify where mitigation measures would be necessary to reduce all impacts to less than significant levels.

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

## 1.3 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 in 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 potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

*Tuan Truong*

Signature

Nov 3, 2025

Date

## **SECTION 2: PROJECT DESCRIPTION**

### **2.1 Project Location**

The Project Site is located in the northern portion of the City of Rancho Cucamonga, occurring northeast of Almond Street and south of Angalls Canyon. The Proposed Project is situated within an open space area, east of a residential subdivision, and west of Thorpe Canyon at the base of the foothills of the San Gabriel Mountains. The Proposed Project would occur over two parcels, which are located within the City of Rancho Cucamonga, both owned by the CVWD as follows: Assessor's Parcel Numbers (APNs) 1061-451-04 and -05, which are generally located in Section 22, Township 1 North, Range 7 West and is depicted on the Cucamonga Peak U.S. Geological Survey's (USGS) 7.5-minute topographic map, and generally at latitude 34°09'46.1"N and longitude 117°36'14.9"W. Land uses surrounding the Project Site consist of single-family residential developments to the west, and natural hillside open space exists to the north, east, and south of the Project Site.

### **2.2 Background**

CVWD is an independent special district that operates under the authority of Division 12 of the California Water Code. The District was incorporated on March 25, 1955, and is governed by a five-member, elected Board of Directors. The District provides water, wastewater, and recycled water services to over 213,000 customers within its 47 square mile service area, which is located in the western area of San Bernardino County, California. The District encompasses the city of Rancho Cucamonga and portions of the cities of Fontana, Ontario, and Upland, and some unincorporated areas of San Bernardino County.

### **2.3 Project Objective**

The existing 300 linear feet of Reservoir 6 and Almond Street 14-inch and 16-inch waterlines are deteriorating due to age. The Proposed Project would relocate the existing waterlines to an area more accessible for maintenance, and excavation would be deeper than the existing waterlines to protect them from future flood scouring and damage. The Proposed Project would improve water supply conveyance from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents.

### **2.4 Project Description**

CVWD has proposed the replacement of dual 14-inch and 16-inch waterlines across a seasonal drainage within the city of Rancho Cucamonga, San Bernardino County, California. The new waterlines will connect into the existing waterlines at a western connection point located between residential development and the seasonal drainage. The eastern connection point is along the hiking trail, situated approximately 50 feet above the drainage bottom (see Figure 3: *Site Plan*).

The proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point (see Figure 4: *Project Alignment-Aerial*). The Proposed Project includes abandonment of approximately 300 linear feet of 14-inch and

16-inch waterlines which extend from the western connection point to the eastern connection point directly across the drainage (see Figure 3: *Site Plan*).

## **2.5 Project Construction**

Construction would require staging area(s) to store supplies and materials temporarily. Project construction activities include trenching, shoring, and placing the waterlines underground, then backfilling to bring the ground surface back to existing condition. Excess materials will be left on site, so no haul off is required. No grading would be performed, and no cut and fill is proposed. Equipment used for the waterline replacement for construction and installation would include an excavator, a loader, a compactor, a backhoe, and a generator. Once constructed, no permanent equipment or staff will remain at the Project Site.

This analysis assumes that the Proposed Project would be constructed over a period of approximately six (6) months. Construction is planned to generally occur within daylight hours and the time period allowed by City Ordinance. The City of Rancho Cucamonga Noise Ordinance allows construction from 7 am to 8 pm Monday through Saturday. It is anticipated that no nighttime or weekend construction would occur.

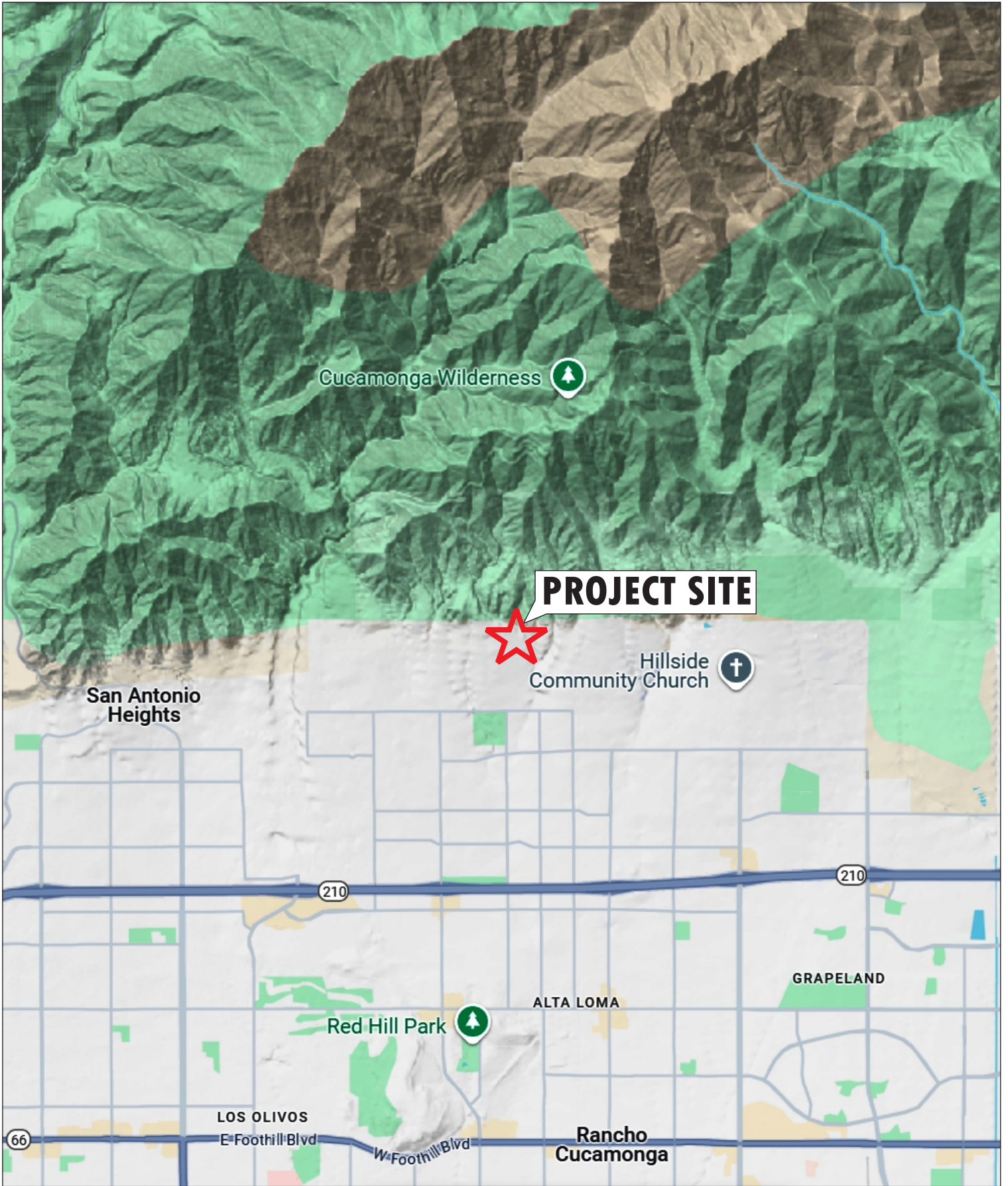
## **2.6 Environmental Setting**

The Proposed Project is located within a semi-rural neighborhood area at the base of the San Gabriel Mountain foothills, in the northern area of the City of Rancho Cucamonga. Land uses surrounding the Project Site are single-family residential uses to the west and natural hillside open space exists to the north, east, and south of the Project Site. Current CVWD operations occur on the adjacent parcel for Reservoir 6.

## **2.7 Required Permits and Approvals**

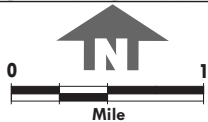
Permits and/or necessary approvals (as applicable) may be required from the following agencies for the activities described:

- State of California Department of Water Resources, Division of Drinking Water – Amended Water Supply Permit.
- State Water Resources Control Board – permit for general construction runoff and storm water pollution prevention plan (SWPPP) under the State’s General Construction Permit requirements.



**REGIONAL VICINITY**

Reservoir 6 and Almond Street Waterline Replacement  
 City of Rancho Cucamonga, California



**LILBURN**  
 CORPORATION

**FIGURE 1**



**PROJECT SITE**

APN:1061-451-04

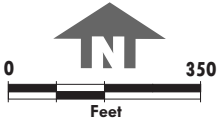
APN:106-1451-05

Reales St

Lomas Ct

Beryl St

Almond St



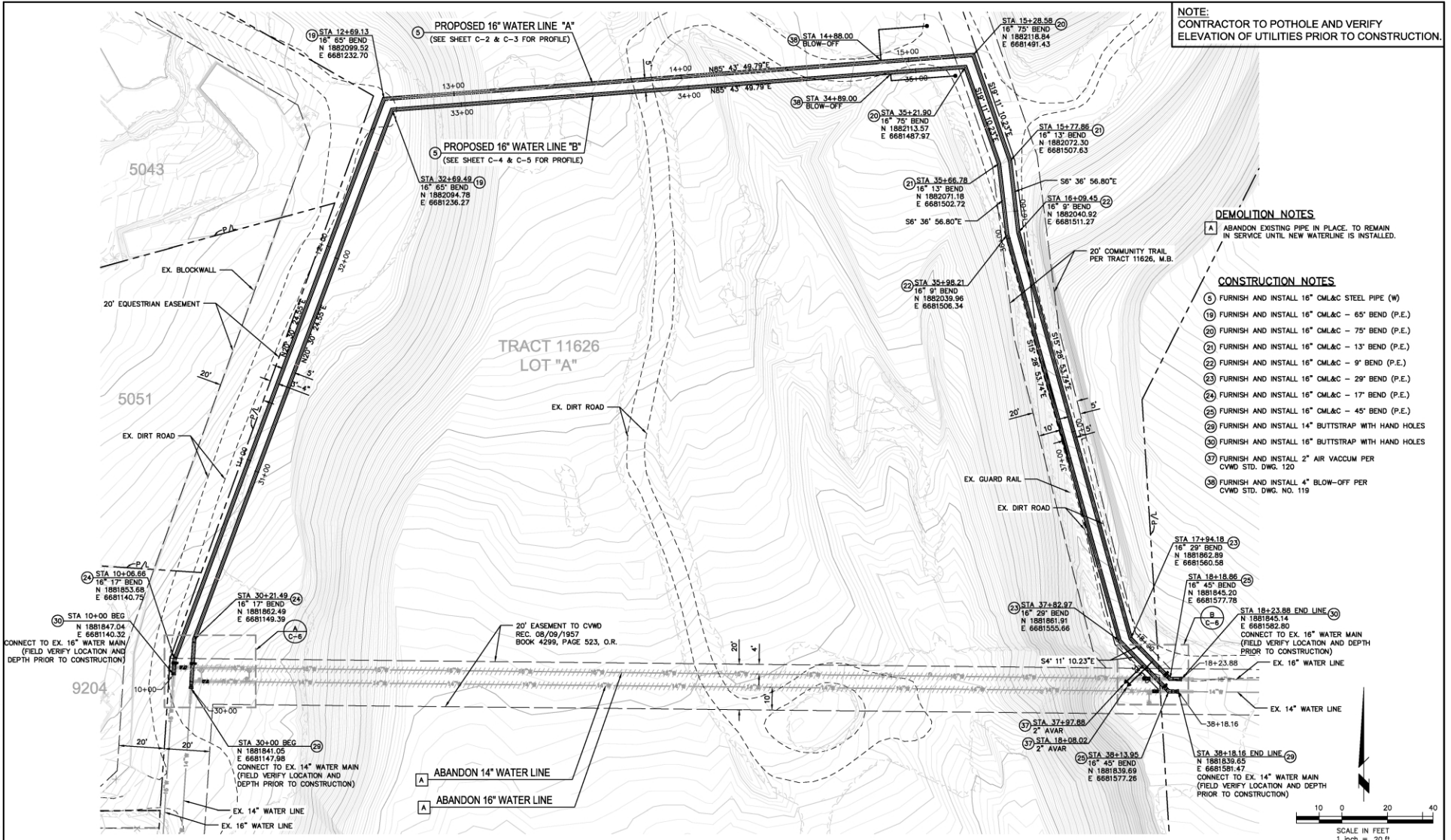
**LILBURN**  
CORPORATION

**VICINITY MAP**

Reservoir 6 and Almond Street Waterline Replacement  
City of Rancho Cucamonga, California

**FIGURE 2**

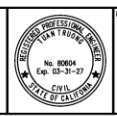
L:\sawet\ALEXSA\CADD\CADD Drawings\Capital Improvements\Cp-23026 (Reservoir 6 and Almond St Waterline Replacement)\dwg\Cp-23026 plan and profile.dwg 8/6/2025 9:39 AM



REV.	DESCRIPTION	DATE	APP'D

**Underground Service Alert**  
Call: TOLL FREE  
**811**  
TWO WORKING DAYS BEFORE YOU DIG

DESIGNED BY:  
DRAWN BY:  
CHECKED BY:  
DATE:  
DATE: 6-5-23 R.C.E. 80804 EXP. 03-31-27



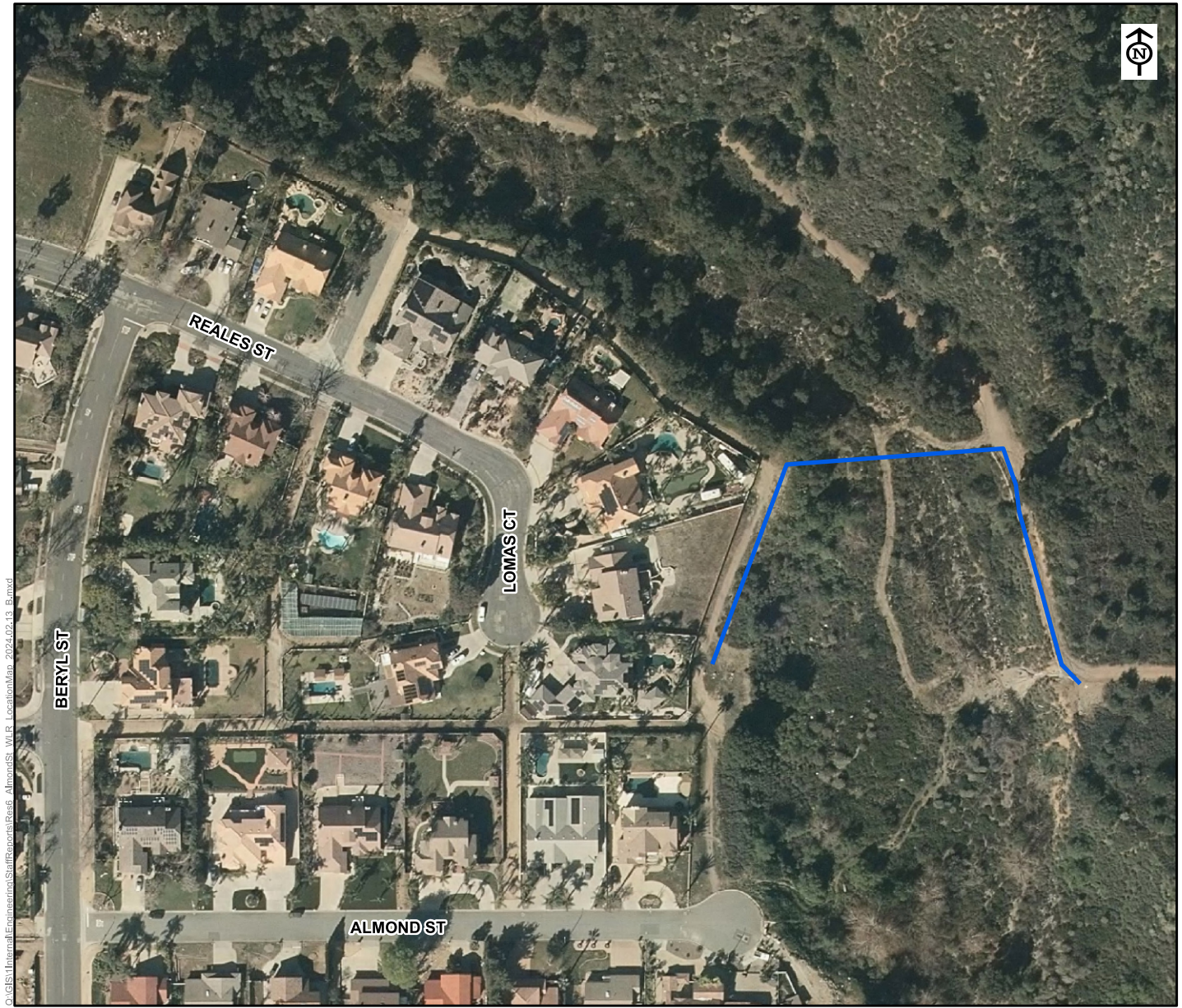
PLANS APPROVED BY:  
Tuan T. Tran, P.E.,  
ENGINEERING MANAGER (CAPITAL & DEVELOPMENT)

DESIGNED BY:  
DRAWN BY:  
CHECKED BY:  
DATE:  
DATE: 6-5-23 R.C.E. 80804 EXP. 03-31-27

**Cucamonga Valley Water District**  
1840 ASPHOLD STREET,  
RANCHO CUCAMONGA, CA 91769 (909) 987-2391

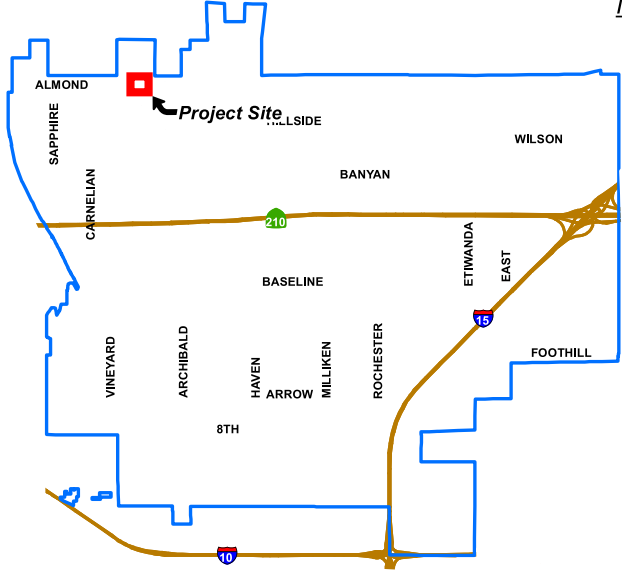
**RESERVOIR 6 WATERLINE REPLACEMENT**  
CP 23026  
PLAN VIEW 10+00 TO 18+23.88 & 30+00 TO 38+18.16

C-1  
AB  
SHT. 5 OF 10



C:\GIS\Internal\Engineering\Staff\Recon\Res\Almond\SR\_WLR\_LocationMap\_2024.02.13\_B.mxd

**INDEX MAP**  
NOT TO SCALE



**VICINITY MAP**

— Water Main

**Reservoir 6 and Almond Street  
Waterline Replacement**



Service Beyond Expectation

## **SECTION 3: DISCUSSION OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

The following discussion addresses impacts to various environmental resources, per the Initial Study Checklist questions contained in Appendix G of the State CEQA Guidelines.

### **I. AESTHETICS**

**Would the project:**

**a) Have a substantial adverse effect on a scenic vista?**

**Less than Significant Impact.** The aesthetic and visual resources in a location give visitors and residents a sense of place, which is important to creating a community experience that is comfortable and memorable. Scenic resources are typically landscape patterns and features that are visually or aesthetically pleasing and that contribute affirmatively to the definition of a distinct community or region such as trees, rock outcroppings, and historic buildings.

Rancho Cucamonga is at the eastern end of the San Gabriel Mountain range on the southern base. Views of the San Gabriel and San Bernardino Mountains are afforded from most of the city and provide a backdrop for the community. Other scenic resources in the city include stands of eucalyptus windrows, vineyards and orchards, and vegetation in flood-control channels and utility corridors.

The Project Site occurs within an existing utility corridor. The Proposed Project would replace an existing degraded portion of the Reservoir 6 and Almond Street waterline which is underground. Therefore, the Proposed Project would not significantly alter the existing visual character of the Project Site.

Additionally, the Proposed Project would be consistent and compatible with the existing land uses and would not significantly obstruct views of the foothills or San Bernardino mountains from various public streets in and around the Project Site. Therefore, potential impacts associated with scenic vistas would be less than significant, and no mitigation would be required.

The Project Site is not designated as a scenic vista nor are there scenic vistas in the vicinity of the Project Site where the Proposed Project would disrupt the view. Therefore, potential impacts associated with scenic vistas would be less than significant, and no mitigation would be required.

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

**No Impact.** The Project Site is not within a state scenic highway. Therefore, no impacts associated with scenic resources within a state scenic highway would occur, and no mitigation would be required.

**c) In nonurbanized 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?**

**Less than Significant Impact.** The Project Site has a land use designation of General Open Space and Facilities (OS) by the City of Rancho Cucamonga General Plan Land Use Map.<sup>1</sup> Construction would temporarily detract from the visual quality of the Project Site; however, construction would be limited to an area within the boundaries of the Project Site. Additionally, the Proposed Project is consistent with the applicable zoning and land use regulations of the Project Site, therefore, impacts would be less than significant; no mitigation is required.

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

**Less than Significant Impact.** The Proposed Project is in an area developed with residential land uses. Existing light sources include streetlights, and exterior security lighting in the surrounding developments.

Construction activities requiring additional lighting would be temporary short-term impacts. There would be no permanent light or glare that would increase ambient lighting levels or adversely affect day or nighttime views in the area. Therefore, Project construction and operation impacts related to substantial light or glare sources would be less than significant, and no mitigation is required.

---

<sup>1</sup> City of Rancho Cucamonga. General Plan Viewer: Land Use Map. Accessed from: <https://www.arcgis.com/apps/webappviewer/index.html?id=e29b6dcd1a374a9da53cb4f96686bd5e&find=106145104> on March 11, 2024.

## II. AGRICULTURE AND FORESTRY RESOURCES

**Would the project:**

- a) **Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?**

**No Impact.** The California Department of Conservation’s Farmland Mapping and Monitoring Program identifies the Project Site as “Grazing Land” in its California Important Farmland Finder.<sup>2</sup> Grazing land is land on which the existing vegetation is suited to the grazing of livestock. No prime farmland, unique farmland, or farmland of statewide importance occurs at the Project Site or in its immediate vicinity. Development of the Project Site would therefore not convert farmland to a non-agricultural use. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

- b) **Conflict with existing zoning for agricultural use, or a Williamson Act contract?**

**No Impact.** According to the most recent San Bernardino County Williamson Act Contract Report of 2023, the Project Site is not within a Williamson Act contract. As discussed above, no land on or near the Project Site is currently under agricultural production, nor are any parcels zoned for agricultural uses. Therefore, no impact would occur from the construction and operation of the Proposed Project.

- 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))?**

**No Impact.** The Project Site has a land use designation of General Open Space and Facilities (OS) by the City of Rancho Cucamonga General Plan. There is no forestland or timber in the vicinity, nor are there any surrounding parcels zoned for forestland or timberland. Therefore, construction and operation of the Proposed Project would not conflict with the existing zoning or cause rezoning of forest land or timberland resources, and no impact would occur.

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

**No Impact.** The Project Site does not support agricultural, or forest land uses that would be lost as a result of the Proposed Project implementation. There are no such land uses in the vicinity. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

---

<sup>2</sup> <https://maps.conservation.ca.gov/DLRP/CIFF/>. Accessed January 15, 2025.

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

**No Impact.** As previously stated, the Project Site does not support agricultural or forest land uses that would be lost as a result of the Proposed Project implementation. Thus, there are no such land uses in the vicinity. Therefore, no impacts are identified or anticipated, and no mitigation measures are required.

### III. AIR QUALITY

**Would the project:**

**a) Conflict with or obstruct implementation of the applicable air quality plan?**

**Less than Significant Impact.** The Project Site is within the South Coast Air Basin (SCAB) and under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD is responsible for updating the Air Quality Management Plan (AQMP). The AQMP was developed for the primary purpose of controlling emissions to maintain all federal and state ambient air standards for the SCAQMP. The Project proposes to construct and install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated waterlines to replace approximately 300 linear feet of the existing Reservoir 6 and Almond Street 14-inch and 16-inch waterlines. Development of the proposed improvements would not conflict with AQMP and therefore, no impact is anticipated.

**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?**

**Less than Significant Impact.** The Proposed Project would require earthmoving, material removal, and other activities such as grading. The project's construction activities were screened for emission generation using South Coast Air Quality Management District (SCAQMD) "Air Quality Handbook" guidelines, Emission Factors for On-Road Heavy Duty Diesel Trucks (2025) and SCAQMD Off-Road Mobile Source Emissions Factors (2025); results are included as four spreadsheets in Appendix A. These tables are used to generate emissions estimates for development projects. The criteria pollutants screened for included: reactive organic gases (ROG), nitrous oxides (NO<sub>x</sub>), carbon monoxide (CO), and particulates (PM<sub>10</sub> and PM<sub>2.5</sub>). Two of these, ROG and NO<sub>x</sub>, are ozone precursors.

Construction earthwork emissions are considered short-term, temporary emissions and are estimated as shown in Table 2. The following construction parameters/phases were assumed:

Waterline Installation: The waterline installation and construction equipment emissions (Backhoe, Excavator, Loader, Generator, etc.)

- 1 Backhoe
- 1 Excavator
- 1 Other Construction Equipment
- 2 Other Material Handling Equipment
- 1 Loader
- 1 Generator

**Table 3  
 Waterline Installation  
 Construction Equipment Emissions  
 (Pounds per Day)**

Source	ROG	NO <sub>x</sub>	CO	PM <sub>10</sub>	SO <sub>x</sub>
Backhoe	0.3	1.5	2.9	0.0	0.0
Excavator	0.4	1.8	4.1	0.1	0.0
Other Construction Equipment	0.7	3.2	5.6	0.1	0.0
Other Material Handling Equip	0.6	3.1	3.5	0.1	0.0
Loader	0.3	3.1	2.9	0.0	0.0
Generator	0.2	1.9	2.1	0.1	0.0
<b>Totals (lbs/day)</b>	<b>2.5</b>	<b>14.6</b>	<b>21.0</b>	<b>0.4</b>	<b>0.0</b>
SCAQMD Threshold	75	100	550	150	55
<b>Significant</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

<sup>1</sup> SCAQMD Off-Road Mobile Source Emissions Factors (2025)

As shown in Table 3, construction emissions would not exceed SCAQMD thresholds. As the Proposed Project is a waterline installation, negligible operational emissions would occur and be limited to maintenance vehicle trips. Therefore, less than significant impact is anticipated.

*Compliance with SCAQMD Rules 402 and 403*

Although the Proposed Project does not exceed SCAQMD thresholds for construction emissions, the applicant is required to comply with all applicable SCAQMD rules and regulations as the South Coast Air Basin is in non-attainment status for ozone and suspended particulates (PM<sub>10</sub>). The project shall comply with Rules 402 nuisance and 403 fugitive dust, which require the implementation of Best Available Control Measures (BACM) for each fugitive dust source; and the Air Quality Management Plan (AMCP), which identifies Best Available Control Technologies (BACT) for area sources and point sources, respectively. This would include, but not be limited to the following BACMs and BACTs:

1. The Project proponent shall ensure that any portion of the site to be graded shall be pre-watered prior to the onset of grading activities.
  - (a) The Project proponent shall ensure that watering of the site or other soil stabilization methods shall be employed on an on-going basis after the initiation of any grading activity on the site. Portions of the site that are actively being graded shall be watered regularly to ensure that a crust is formed on the ground surface and shall be watered at the end of each workday.

- (b) The Project proponent shall ensure that all disturbed areas are treated to prevent erosion.
- (c) The Project proponent shall ensure that all grading activities are suspended during first and second stage ozone episodes or when winds exceed 25 miles per hour.

Exhaust emissions from construction vehicles and equipment and fugitive dust generated by equipment traveling over exposed surfaces would increase NO<sub>x</sub> and PM<sub>10</sub> levels in the area. Although the Proposed Project does not exceed SCAQMD thresholds during construction, the applicant would be required to implement the following conditions as required by SCAQMD:

- 2. To reduce emissions, all equipment used in earthwork must be tuned and maintained to the manufacturer's specification to maximize efficient burning of vehicle fuel.
- 3. The Project proponent shall ensure that construction personnel are informed of ride sharing and transit opportunities.
- 4. The operator shall maintain and effectively utilize and schedule on-site equipment in order to minimize exhaust emissions from truck idling.
- 5. The operator shall comply with all existing and future CARB and SCAQMD regulations related to diesel-fueled trucks, which may include among others: (1) meeting more stringent emission standards; (2) retrofitting existing engines with particulate traps; (3) use of low sulfur fuel; and (4) use of alternative fuels or equipment.

**c) Expose sensitive receptors to substantial pollutant concentrations?**

**Less than Significant Impact.** The Proposed Project is to install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated waterlines to replace approximately 300 linear feet of the existing Reservoir 6 and Almond Street 14-inch and 16-inch waterlines. The purpose of the Proposed Project is to improve water supply conveyance from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents. As shown in Table 3, construction impacts are not anticipated to exceed SCAQMD thresholds. Negligible operational emissions would occur and be limited to maintenance vehicle trips. The wells and pump station providing the supply of water to the reservoir are located off-site and would continue to operate as they do currently. Therefore, as Project emissions are not anticipated to exceed SCAQMD thresholds impacts to sensitive receptors are less than significant. Less than significant impacts are anticipated, and no mitigation measures are required.

**d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?**

**Less than Significant Impact.** Although offensive odors seldom cause physical harm, they can cause agitation, annoyance, and concern to the general public. The Proposed Project would not establish any land uses associated with odors. Potential odors associated with the Proposed Project would include temporary

diesel exhaust during construction. These odors, if perceptible, are common in the environment, would dissipate rapidly as they mix with the surrounding air and would be of very limited duration. Operation of the new waterlines would not result in odors that would be perceptible by sensitive receptors in the vicinity (i.e., residential and recreational uses). Therefore, construction and operation of the 14-inch and 16-inch waterlines would not result in odors that would affect a substantial number of people. Impacts are less than significant impacts and no mitigation is required.

#### IV. BIOLOGICAL RESOURCES

The following biological resources report was prepared for the Proposed Project to determine potential impacts to biological and water resources: *General Biological Assessment Reservoir 6 and Almond Street Waterline Replacement Alternatives A and B*, prepared by Natural Resources Assessment, Inc., December 19, 2024 (see Appendix B).

##### **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?**

**Less than Significant Impact with Mitigation Incorporated.** The Project Site contains annual grassland (disturbed) located on the western slope, coastal sage occurring on the steeper slopes and bottom of Angalls Canyon, and Oak riparian woodland on the upper banks of the Angalls Canyon stream. Vegetation includes landscape trees and shrubs as well as herbaceous ground cover. Sensitive species potentially present include those listed, or candidates for listing by the U. S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW) as reported in the CNDDDB data. All sensitive species were considered as potentially present on the project site if its known geographical distribution encompassed all or part of the project area or if its distribution was near the site and its general habitat requirements were present.

The Proposed Project includes excavation for the placement of the new pipelines. Surface disturbance is minimal and limited to the sides of the canyon. No significant impacts to sensitive, protected or listed biological resources are expected to occur and no mitigation would be required.

The Project Site does contain vegetation that is suitable for nesting birds, which are protected under the Migratory Bird Treaty Act (MBTA). The MBTA prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service. Implementation of Mitigation Measure BIO-1 would reduce impacts on nesting migratory birds to less than significant:

##### **Mitigation Measure:**

**BIO-1:** Per CDFW current recommendations, regardless of the time of year, a nesting bird survey shall be performed by a qualified biologist no more than 3 days prior to vegetation removal or ground-disturbing activities. The pre-construction survey shall focus on both direct and indirect evidence of nesting, including nest locations and nesting behavior. A qualified biologist will make every effort to avoid potential nest predation as a result of survey and monitoring efforts. If active nests are found during the preconstruction nesting bird survey, the biologist will set appropriate no-work buffers around the nest which will be based upon the nesting species, its sensitivity to disturbance, nesting stage and

expected types, intensity and duration of disturbance. Established buffers shall remain on site until a qualified biologist determines whether the young have fledged or the nest is no longer active. Active nests and adequacy of the established buffer distance shall be monitored daily by the qualified biologist until the qualified biologist has determined the young have fledged or the Project has been completed. The qualified biologist has the authority to stop work if nesting pairs exhibit signs of disturbance. If no active nests are found during the pre-construction nesting bird survey, all vegetation removal or ground-disturbing activities may commence.

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

**Less than Significant Impact.** Angalls Canyon is mapped as Riverine within the project area (see Appendix B, Figure 5). Riverine is defined as "all wetlands and deepwater habitats contained within a channel, with two exceptions: 1) wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens; and 2) habitats with water containing ocean-derived salts of 0.5 ppt [parts per thousand] or greater".

Construction of the Project will not utilize the jack and bore method (trenchless installation of pipes under objects such as roads)<sup>3</sup> of installation. The open trench will be employed instead. To mitigate construction impacts, the contractor will follow industry best practices and will be required to develop and implement a Stormwater Pollution Prevention Plan (SWPPP).

Therefore, impacts to riparian habitat or other sensitive, natural communities are not expected to occur and no mitigation would be required.

**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?**

**Less than Significant Impact.** Angalls Canyon flows into a channel that eventually flows into Prado Basin, a section of the Santa Ana River. At the time of the survey, Angall Canyon had a continuous flow that appears to be permanent. This meets the Relatively Permanent Test. In addition to the presence of flow, Angalls Canyon drains into a concrete channel that eventually connects Prado Basin, a section of the Santa Ana River, an interstate water that flows to the Pacific Ocean. According to the Biological Resources Assessment Section 4.2 prepared by NRA, Inc. December 19, 2024, Angalls Canyon provides a number of Beneficial Uses as defined by the Regional Water Quality Control Board (RWQCB). These include Wildlife habitat (WILD), Groundwater Recharge (GWR), Agricultural Supply (AGR)

---

<sup>3</sup> Clearpath Utility Solutions, LLC [ClearPath Utility Solutions, LLC - Directional Drilling vs. Jack and](#) accessed 7/8/25

and possibly Municipal and Domestic Supply (MUN). Angalls Canyon would fall under the jurisdiction of the RWQCB. However, the proposed action is underground drilling for the placement of the two new pipes. Surface disturbance is expected to be minimal, temporary and limited to the sides of the canyon. No significant impacts to jurisdictional waters are expected. No mitigation should be required for impacts to protected waters in addition to Storm Water Prevention and Pollution Program requirements. Therefore, less than significant impacts would occur.

**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?**

**Less than Significant.** The Project Site is surrounded by natural hillside open space to the north, east and the south, and to the west are residence uses. The Proposed Project will replace existing water pipelines with one new pipeline that will also be underground. No above-ground facilities are included and therefore the Proposed Project would not interfere with the movement of native resident or migratory fish or wildlife species. There are no established native resident or migratory wildlife corridors identified in the vicinity. Impacts would be less than significant.

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

**Less than Significant Impact.** The City of Rancho Cucamonga has a Tree Preservation Ordinance (Title 19, Environmental Protection - Chapter 19.08) that requires a permit for removal for the removal, relocation, or destruction of a "Heritage Tree." Heritage trees include eucalyptus windrows, plants in excess of 30 feet, and single trunks in circumference of 20 inches, or multi-trunk tree(s) having a total circumference of 30 inches or more, any strand of trees dependent upon the others for survival; and any other tree as may be deemed historically or culturally significant because of size, condition, location, or aesthetic qualities.

None of the trees to be removed as part of the Proposed Project are subject to the City of Rancho Cucamonga's "Heritage Tree" ordinance because they are not the species or size identified in the ordinance. Therefore, the Proposed Project is not anticipated to conflict with local policies or ordinances protecting biological resources; the impact is less than significant, and no mitigation is required.

**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?**

**No Impact.** The Proposed Project is not within any regionally adopted Habitat Conservation Plan, Natural Communities Conservation Plan or other approved local, regional or state habitat conservation plan. Therefore, no impact would occur.

## V. CULTURAL RESOURCES

The following cultural resources study was prepared for the Proposed Project to determine potential impacts to cultural resources: *Phase I Cultural Resources Study for the Reservoir 6 and Almond Street Waterline Replacement Project*, Brian F. Smith and Associates, December 30, 2024 (see Appendix C).

**Would the project:**

- a) **Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5?**

**Less than Significant with Mitigation Incorporated.** Based on the consulted maps and aerial photographs, the property was historically bordered by agricultural land to the east and west until the residential development just west of the Proposed Project is visible on the 1995 aerial photograph. The aerial photographs illustrate that the hiking trail and easement between the residential development and seasonal drainage have been cleared, graded, and subjected to regular maintenance. There were recorded resources showing the historic settlement and agricultural development of the vicinity. However, aerial photographs and historic maps illustrate that the Project Site did not historically contain any structures.

The BFSAs report concludes that no further studies are necessary or recommended as part of the CEQA review process. However, in the event that any historic archaeological resources are inadvertently discovered, all construction work in the immediate vicinity of the discovery shall stop and a qualified archaeologist shall be consulted to determine if further mitigation measures are warranted. Mitigation Measure CR-1 would reduce impacts to a less than significant level.

### **Mitigation Measure:**

**CUL-1:** In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed within TCR-1, regarding any pre-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.

**CUL-2:** If significant pre-contact cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to YSMN for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

**CUL-3:** If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner

shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

With implementation of Mitigation Measures **CUL-1**, **CUL-2**, and **CUL-3**, potentially significant impacts would be less than significant.

**b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?**

**Less than Significant Impact.** An archaeological records search did not identify any recorded resources within or adjacent to the Proposed Project alignment. However, eight previously recorded resources within a one-mile radius of the subject property. The previously recorded resources include one prehistoric artifact scatter, historic transmission line, historic orchard and water control features, historic single-family residence, historic carriage house, historic barn, and a historic ranch property. The prehistoric site is an artifact scatter. The South-Central Coastal Information Center (SCCIC) records search also identified 22 previous studies conducted within one mile of the Proposed Project, one of which included the subject property.

The cultural resources study for the Proposed Project did not identify any archaeological resources within or adjacent to the alignment of the proposed waterlines. Further, the alignment has been previously impacted by clearing, grading, and maintenance. As such, the potential for any previously unidentified significant cultural resources to be impacted by the Project is very low. Based upon these findings, no further archaeological studies are necessary or recommended as part of the CEQA review process.

However, in the event that any prehistoric and/or historic archaeology are inadvertently discovered, all construction work in the immediate vicinity of the discovery shall stop and a qualified archaeologist shall be consulted to determine if further mitigation measures are warranted. Mitigation Measure **TCR-1** would reduce impacts to a less than significant level.

**c) Disturb any human remains, including those interred outside of formal cemeteries?**

**Less than Significant Impact.** Construction could potentially disturb human remains interred outside of a formal cemetery. Thus, the potential exists that human remains may be unearthed during earthmoving activities associated with Project construction. If human remains are discovered during construction activities, the Project proponent would be required to comply with the applicable provisions of California Health and Safety Code § 7050.5 as well as Public Resources Code § 5097, et. seq., which requires that if the coroner determines the remains to be of Native American origin, he or she would be notified by the Native American Heritage Commission, who would then identify the most likely descendants to be consulted regarding treatment and/or reburial of the remains. Mandatory compliance with these provisions of California state law would ensure that impacts to human remains, if unearthed during construction activities, would be appropriately treated. Therefore, no significant adverse impacts are identified or anticipated.

## VI. ENERGY

### Would the project:

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

### **Less than Significant Impact.**

#### Electricity

The Project Site is located within the service area of Southern California Edison (SCE) for electrical service. The Project proposes to install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated waterlines to replace approximately 300 linear feet of the existing Reservoir 6 and Almond Street 14-inch and 16-inch waterlines. The Proposed Project would not require electrical utility services during either construction or operation; therefore, no significant impacts due to wasteful, inefficient, or unnecessary consumption of energy resources are anticipated and no mitigation measures are recommended.

#### Natural Gas:

The Proposed Project would consist of the installation of 800 linear feet of two (2) new 16-inch cement mortar-lined and coated waterlines. Neither construction nor operation of the Proposed Project would require natural gas utility services. Therefore, no significant impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction are anticipated and no mitigation measures are recommended.

#### Fuel Consumption:

During construction of the Proposed Project, the use of fuel would be required during construction for operation of heavy equipment, and by employees occasionally traveling to and from the Project Site for maintenance. The Proposed Project is not expected to result in a substantial demand for fuel that would require expanded supplies or require the construction of other infrastructure or expansion of existing facilities. Fuel use during construction would not be considered inefficient, wasteful, or unnecessary. The Proposed Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources. Impacts are less than significant, and no mitigation is recommended.

- b) **Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

**No Impact.** The Proposed Project would not conflict with any applicable plan, policy or regulation of an agency adopted to reduce GHG emissions, including Title 24, AB 32, and SB 32; therefore, the Project is consistent with AB 32, which aims to decrease emissions statewide to 1990 levels by 2020 as discussed in Sections III and VIII of this Initial Study. The Proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, no significant adverse impacts are identified or anticipated, and no mitigation measures are required.

## VII. GEOLOGY AND SOILS

**Would the project:**

**a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:**

**i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

**Less than Significant Impact.** The City of Rancho Cucamonga is at the north-central section of the Chino Valley, just south of the eastern San Gabriel Mountains. These mountains are part of the Transverse Ranges and are composed of igneous and metamorphic rocks that were formed over 65 million years ago. The City of Rancho Cucamonga, as with the entirety of Southern California, is a seismically active region, with seismic hazards depending on proximity and earthquake magnitude of surrounding fault lines. The closest faults are the Etiwanda Avenue Fault (also known as the Red Hill Fault) and the Cucamonga Fault, which is a portion of the Alquist Priolo Fault Zone.

The Project Site is located within an Alquist-Priolo Fault Zone according to the San Bernardino Countywide Plan.<sup>4</sup> However, the Proposed Project would be the replacement of an already existing waterline that feeds into Rancho Cucamonga's Reservoir 6. Thus, the Proposed Project would not be a non-occupied structure and therefore would not conflict with the Alquist-Priolo Earthquake Fault Zoning Act.

Additionally, the Proposed Project would be designed in compliance with all relevant local and state seismic safety standards, including the California Building Code. Therefore, the probability of damage from surface fault rupture is considered to be low. Impacts associated with construction and operation of the Proposed Project would be less than significant and no mitigation is required.

**ii) Strong seismic ground shaking?**

**Less than Significant Impact.** Seismic activity at area faults described under item VII a.i) above and other faults in the region may result in ground shaking at the Project Site. Seismic hazard from ground shaking is typical for most of Southern California. The replacement waterline would be constructed in compliance with the latest seismic standards required by the California Building Code. Further, no habitable structures are part of the Proposed Project and CVWD staff would not be permanently located at the

---

<sup>4</sup> San Bernardino Countywide Plan. HZ-1 Earthquake Fault Zones. October 2020. Accessed March 12, 2024.

Project Site. Therefore, the Proposed Project would not increase the risk of exposure of people or structures to strong seismic ground shaking. The impact is less than significant, and no mitigation is required.

**iii) Seismic-related ground failure, including liquefaction?**

**Less than Significant Impact.** Liquefaction is known generally to occur in saturated or near saturated cohesionless soils at depths shallower than 50 feet below ground surface. Factors known to influence liquefaction potential include composition and thickness of soil layers, grain size, relative density, groundwater level, degree of saturation, and both intensity and duration of ground shaking.

The Project Site is not located in an area mapped as potentially susceptible to liquefaction (according to the City of Rancho Cucamonga General Plan Update) due to the lack of shallow groundwater and the dense nature of the materials beneath the site.

The Proposed Project would be constructed to meet applicable seismic safety standards. No habitable structures would be constructed as part of the Proposed Project. Therefore, the construction and operation of the Proposed Project would not expose people or structures to risk of substantially adverse effects from liquefaction and the impact is less than significant, and no mitigation is required.

**iv) Landslides?**

**Less than Significant Impact.** The Project Site is situated along a natural drainage slope which is a tributary of the Angalls Canyon. Therefore, the Project Site is in a location that has moderate potential for landslide susceptibility hazards.<sup>5</sup> Nonetheless, the replacement waterline would be constructed in compliance with the latest building standards required by the California Building Code. Therefore, the risk of potential landslides or mudflows are not anticipated to be significant to the Proposed Project and would result in a less than significant impact, and no additional mitigation measures are required.

**b) Result in substantial soil erosion or the loss of topsoil?**

**Less than Significant Impact.** The USDA Natural Resources Conservation Service classifies the on-site soils as Ramona sandy loam, 9 to 15 percent slopes (RmD) and Hanford coarse sandy loam, 9 to 15 percent slopes (HaD).<sup>6</sup> The Project Site is within a tributary of the Angalls Canyon. Therefore, the Project Site may be prone to more erosion factors due to its proximity to the watershed. Nonetheless, the Proposed Project would be required to adhere to the latest building standards

---

<sup>5</sup> San Bernardino Countywide Plan. HZ-2 Liquefaction and Landslides. October 2020. Accessed March 12, 2024.

<sup>6</sup> USDA Natural Resource Conservation Service. Web Soil Survey. Accessed on March 12, 2024.

required by the California Building Code, which would be anticipated to mitigate any potential erosion hazards.

During Project construction, temporary soil erosion may occur which could be exacerbated by rainfall. To control the potential for soil erosion, wind, dust, and water quality impacts, the contractor is required to comply with SCAQMD rules relating to dust control (such as SCAQMD Rule 403) and rules to protect water quality. Preparation of a Stormwater Pollution Prevention Plan (SWPPP) in compliance with Federal, State, and Local regulations is required and would ensure there would be no soil erosion or topsoil loss off-site. A less than significant impact from soil erosion or loss of topsoil would occur and no mitigation is required.

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

**Less than Significant Impact.** As previously stated, the USDA Natural Resources Conservation Service classifies the on-site soils as Ramona sandy loam, 9 to 15 percent slopes (RmD) and Hanford coarse sandy loam, 9 to 15 percent slopes (HaD). CVWD would plan to use construction methods suitable for this type of soil classification. Therefore, construction and operation of the Proposed Project would not cause the local geologic unit or soil to become unstable, or result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. Impacts would be less than significant, and no mitigation is required.

- d) **Be located on expansive soil, as defined in Table 18-1 B of the Uniform Building Code (1994), creating substantial risks to life or property?**

**Less than Significant Impact.** Expansive soils are those that are typically high in clay, moisture and have a high plasticity index. The USDA Natural Resources Conservation Service classifies the primary on-site soils as Ramona sandy loam (RmD) and Hanford coarse sandy loam (HaD). Ramona sandy loam is expected to have a clay content of approximately 18 to 27 percent, and Hanford coarse sandy loam is anticipated to have a clay content of approximately 6 to 18 percent, neither of which soil classifications have the potential for significant expansion characteristics. Therefore, construction and operation of the Proposed Project would not be located on expansive soil, as defined in Table 18-1 B of the Uniform Building Code (1994), creating substantial risks to life or property; as such, no impacts would, and no mitigation is required.

- 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?**

**No Impact.** The Proposed Project involves the replacement of approximately 300 linear feet of 14-inch and 16-inch water line with 800 linear feet of two (2) new 16-inch cement mortar-lined and coated waterlines. Therefore, no habitable structures needing wastewater would be constructed. Operations would not involve the use of septic tanks or alternative wastewater disposal systems. Therefore, no impacts related to soil compatibility with septic systems would occur.

**f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

**No Impact.** A Paleontological Assessment (see Appendix D) was prepared by BFSA Environmental Services, a Perennial Company, December 30, 2024, and is summarized herein. The presence of modern and Holocene-aged alluvial deposits at the project, their coarse consistency, and the lack of any known fossil specimens or fossil localities within a several-mile radius encompassing the project supports the conclusion that paleontological monitoring is not recommended during earth disturbance activities at the Reservoir 6 and Almond Street Waterline Replacement Project. A Paleontological Resource Impact Mitigation Program is not warranted; therefore, no mitigation is required.

## VIII. GREENHOUSE GAS EMISSIONS

**Would the project:**

- a) **Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

**Less than Significant Impact.** Gases that absorb and re-emit infrared radiation in the atmosphere are called greenhouse gases (GHGs). GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxides (N<sub>2</sub>O), fluorinated gases such as hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). Water vapor is excluded from the list of GHGs because it is short lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

Per CEQA guidelines, new project emissions are treated as standard emissions, and air quality impacts are evaluated for significance on an air basin or even at a neighborhood level. GHG emissions are treated differently, in that the perspective is global, not local. Therefore, emissions for certain types of projects might not necessarily be considered as new emissions if the project is primarily population driven. Many gases make up the group of pollutants that are believed to contribute to global climate change. However, three gases are currently evaluated and represent the highest concentration of GHG: Carbon dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>), and Nitrous oxide (N<sub>2</sub>O). SCAQMD provides guidance methods and/or Emission Factors that are used for evaluating a project's emissions in relation to the thresholds. A threshold of 10,000 MTCO<sub>2e</sub> per year has been adopted by SCAQMD for industrial type projects as potentially significant or global warming (Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold, SCAQMD, October 2008).

The Proposed Project would require excavation, pipeline placement, and backfilling. The project's construction activities were screened using Emission Factors for On-Road Heavy-Heavy Duty Diesel Trucks (2025) and SCAQMD Off-Road Mobile Source Emissions Factors (2025); see Appendix A. These tables are used to generate emissions estimates for development projects. Emissions anticipated from the Proposed Project compared to the SCAQMD threshold are shown below in Table 4.

As shown in Table 4, GHG emissions related to the Proposed Project are not anticipated to exceed the SCAQMD GHG emissions threshold. Therefore, impacts are anticipated to be less than significant.

**Table 4  
Greenhouse Gas Construction Emissions  
Waterline Installation  
Construction Equipment Metric Tons per Year**

Source/Phase	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O
Backhoe	534.4	0.0	0.2
Excavator	960.0	0.0	0.2
Other Construction Equip.	1968.0	0.1	1.0
Other Material Handling Eq	1128.0	0.1	0.5
Loader	534.4	0.0	0.2
Generator	488.0	0.0	0.1
<b>Total MTCO<sub>2</sub>e</b>	<b>336.45</b>		
SCAQMD Threshold	10,000		
<b>Significant</b>	<b>No</b>		

Source: Off-Road Mobile Source Emission Factors; SCAQMD 2025, Source N20: California Climate Action Registry General Reporting Protocol, 20091; Table A9-8-C SCAQMD Handbook; Climate Leaders EPA, Section 3, Table 2; Duration: 6-month (132 days) Construction Period; Note: GWP CH\$:28; N20: 265

As shown in Table 4, the GHG emissions related to the Proposed Project are not anticipated to exceed the SCAQMD GHG emissions threshold. Therefore, impacts are anticipated to be less than significant.

**b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

**Less than Significant Impact.** A significant impact may occur if the Proposed Project conflicts with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG.

Several initiatives, plans, policies, and regulations have been adopted at the state and local level related to reducing GHG emissions. In general, California's goals and strategies for the systematic statewide reduction of GHG emissions are embodied in the combination of Executive Order S-3-05, Assembly Bill (AB) 32, Senate Bill (SB) 375, AB 1493, Executive Order S-01-07, SB 1078, Executive Order B-30-15, and SB 32 which call for the state to meet the following milestones for reductions of GHG emissions:

- By 2010, reduce GHG emissions to 2000 levels
- By 2020, reduce GHG emissions to 1990 levels
- By 2030, reduce GHG emissions to 40 percent below 1990 levels
- By 2050, reduce GHG emissions to 80 percent below 1990 levels

At a local level, the City of Rancho Cucamonga 2020 General Plan Update sets goals to contribute directly or indirectly to reducing greenhouse gas emissions. Among actions being implemented or considered by the City are energy efficiency standards for new development, the phase-in of alternative fuel City vehicles, and other incentives and regulations related to alternative fuel usage and commercial and residential energy efficiency.

State and regional plans, policies, and regulations are generally intended to set statewide and regional policy and are not directly applicable to individual projects. Additionally, as discussed in VII a) above, GHG emissions associated with construction and operation of the Proposed Project would not be substantial and would be below SCAQMD's GHG threshold for construction or operations for industrial projects (used as a benchmark for comparison purposes in the absence of a more relevant established threshold). Further, the Proposed Project would not conflict with any applicable plan, policy, or regulation adopted for the purposes of reducing GHG emissions.

The Proposed Project would not emit substantial amounts of GHG emissions, or otherwise hinder implementation of plans, policies, and regulations to reduce GHG emissions. Therefore, impacts of construction and operation of the Proposed Project would be less than significant, and no mitigation is required.

## IX. HAZARDS AND HAZARDOUS MATERIALS

**Would the project:**

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

**Less than Significant Impact.** Construction activities associated with the Proposed Project would involve use of limited quantities of hazardous materials such as petroleum, hydrocarbons, and their derivatives (e.g., gasoline, diesel, oils, and lubricants) to operate the construction equipment. Construction activities would be short-term and would involve the limited transport, storage, use, and disposal of hazardous materials. These materials would be used with construction equipment and stored in vessels engineered for safe storage.

Similar to construction, operation of the Proposed Project could involve limited quantities of hazardous materials such as petroleum, hydrocarbons, and their derivatives (e.g., gasoline, diesel, oils, and lubricants) during periodic maintenance activities. The use or disposal of these hazardous substances would occur according to instructions provided by the product manufacturer and be subject to federal, state, and local health and safety regulations involving storage, transport, use, and disposal. Therefore, the Proposed Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Impacts would be less than significant impacts and no mitigation is required.

- 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?**

**Less than Significant Impact.** As described under item IX a) above, construction and operational activities associated with the Proposed Project have the potential to involve relatively small quantities of hazardous substances associated with the operation of equipment and vehicles. Construction vehicles on-site may require refueling or maintenance that could result in minor releases of oil, diesel fuel, transmission fluid, or other materials. Inadvertent releases of hazardous materials on construction sites are typically localized and would be cleaned up in a timely manner in compliance with state and local laws that govern proper containment, spill control, and disposal of hazardous waste generated during construction.

Mandatory compliance with all federal, state, and local regulations on the transport, use, and disposal of hazardous materials would further reduce the likelihood of an accidental release of hazardous materials into the environment. Construction and operation of the Proposed Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. Therefore, impacts would be less than significant, and no mitigation is required.

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

**No Impact.** Floyd M. Stork Elementary School is located approximately 1.2 miles southwest of the Project Site, at 5646 Jasper Street. Since there are no schools within one-quarter mile of the Project Site, no impacts are anticipated to occur, and no mitigation is required.

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

**No Impact.** Government Code Section 65962.5(a)(1) requires that Department of Toxic Substance Control (DTSC) “shall compile and update as appropriate, but at least annually, and shall submit to the Secretary for Environmental Protection, a list of all the following: (1) all hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code (“HSC”).” The hazardous waste facilities identified in HSC § 25187.5 are those where DTSC has taken or contracted for corrective action because a facility owner/operator has failed to comply with a date for taking corrective action in an order issued under HSC § 25187, or because DTSC determined that immediate corrective action was necessary to abate an imminent or substantial endangerment. This is known as the “Cortese List.” Based on the result of the database review the Project Site is not located on any site that has been identified in accordance with Section 65962.5 of the Government Code, and none exists within 1,000 feet of the Project Site. Therefore, there are no impacts, and no mitigation is required.

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

**No Impact.** The Proposed Project is located approximately 7.3 miles north of Ontario International Airport and approximately 5.3 miles northeast of Cable Airport. Therefore, neither construction nor operation of the Proposed Project would result in a safety hazard for people residing or working in the project vicinity and no impact would occur.

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

**No Impact.** The Proposed Project is not located within the vicinity of a private airstrip. Therefore, neither construction nor operation of the Proposed Project would result in a safety hazard for people residing or working in the project vicinity and no impact would occur.

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

**No Impact.** The Proposed Project is located on CVWD-owned property with an existing waterline traversing the site. All construction and staging would occur

within the confines of the CVWD property and not result in any disruption to public streets. The Proposed Project would not impair or interfere with implementation of an adopted emergency response plan or emergency evacuation plan and no impact would occur.

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

**Less than Significant with Mitigation Incorporated.** According to the Cal Fire Hazard Severity Zone Viewer map, the Proposed Project is located within a Very High Fire Severity Zone.<sup>7</sup> The Project Site and its vicinity is also subject to Santa Ana winds, which can spread fires rapidly. Construction may include the use of gas-powered hand tools such as chain saws and/or welding equipment that may produce sparks. The Project Site has a high concentration of vegetation. Therefore, there is a high potential to indirectly cause wildfire during construction. As such, implementation of Mitigation Measure HAZ-1 that requires the contractor to implement fire protection protocols during construction, such as equipment maintenance and the suspension of welding during certain Santa Ana wind conditions, to reduce potential impacts to less than significant:

**Mitigation Measure:**

**HAZ-1:** During construction, all staging areas, welding areas, or areas slated for construction using spark-producing equipment will be cleared of dried vegetation or other material that could ignite. Spark arresting equipment shall be in good working order. The CVWD and its contractor shall require all vehicles and crews working at the Project site to have access to functional fire extinguishers at all times. In addition, construction crews are required to have a spotter during welding activities to look out for potentially dangerous situations, including accidental sparks. The contractor also shall prepare a safety plan for the implementation of additional protocols when the National Weather Service issues a Red Flag Warning. The safety plan should remain on file with the CVWD during construction. Such protocols should address smoking and fire rules, storage and parking areas, use of gasoline-powered tools, use of spark arresters on construction equipment, road closures, use of a fire guard, fire suppression tools, fire suppression equipment, and training requirements.

Therefore, with the implementation of Mitigation Measure HAZ-1, impacts resulting from implementation of the Project would be reduced to a less than significant level.

---

<sup>7</sup> Cal Fire Hazard Severity Zone Viewer.  
<https://experience.arcgis.com/experience/6a9cb66bb1824cd98756812af41292a0>

## X. HYDROLOGY AND WATER QUALITY

**Would the project:**

- a) **Violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or ground water quality?**

**Less than Significant Impact.** The existing 300 linear feet of Reservoir 6 and Almond Street 14-inch and 16-inch waterlines are deteriorating due to age. The Proposed Project would relocate the existing waterlines along an 800 linear foot easement as described in section 2.4. As an underground domestic water supply line installation, the Proposed Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality.

Construction-related runoff pollutants are typically generated from waste and hazardous materials handling or storage areas, outdoor work areas, material storage areas, and general maintenance areas (e.g., vehicle or equipment fueling and maintenance, including washing). Construction projects that disturb 1 acre or more of soil are regulated under the construction general permit (CGP, Order No. 2009-009-DWQ) and its subsequent revisions (Order No. 2012-0006-DWQ) issued by the State Water Resources Control Board (SWRCB). Projects obtain coverage under the CGP by developing and implementing a Stormwater Pollution Prevention Plan (SWPPP), estimating sediment risk from construction activities to receiving waters, and specifying best management practices that would be implemented as a part of the Project's construction phase to minimize pollution of stormwater prior to and during grading and construction.

Implementation of BMPs such as sandbag barriers, geotextiles, storm drain inlet protection, sediment traps, rip rap soil stabilizers, sweep roadway from track-out, and rumble strips would prevent substantial construction site runoff and soil erosion that could violate water quality standards or waste discharge requirements.

The CVWD holds a permit with the State Water Resources Control Board issued under the Clean Water Act. The Statewide Drinking Water Systems Discharge Permit provides Clean Water Act regulatory coverage for: (1) discharges resulting from essential operations and maintenance activities of drinking water systems undertaken to comply with the federal Safe Drinking Water Act, California Health and Safety Code, and State Water Board's Division of Drinking Water permitting requirements; and (2) emergency discharges.

To comply with the Statewide Drinking Water Systems Discharge Permit, the District is required to:

- a. Establish and implement appropriate best management practices.
- b. Ensure that all planned discharges comply with the terms and requirements of the permit including applicable effluent limitations for chlorine residual and turbidity.
- c. Take all necessary steps to review and update the effectiveness and adequacy of the control measures and best management practices.

- d. Keep best management practices updated and available onsite for all system operators.
- e. Conduct monitoring and reporting in compliance with the provisions and requirements in the Monitoring and Reporting Program, Attachment E of the Statewide Drinking Water Systems Discharge Permit.
- f. Maintain self-monitoring reports including compliant and non-compliant discharge monitoring information at the system's main office and make them available upon request of State Water Board and Santa Ana Regional Water Quality Control Board (Santa Ana Water Board) staff.
- g. Submit an annual report to the SWRCB and all reporting information required by the Monitoring and Reporting Program.

Operation of the Proposed Project would not violate water quality standards or waste discharge requirements as it would occur in compliance with existing applicable standards/requirements. Therefore, with implementation of the BMPs in the required SWPPP, water quality or waste-discharge impacts from Impacts associated with project-related grading and construction and operational activities would be less than significant and no mitigation is required.

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

**Less than Significant Impact.** The CVWD's water supply sources include: groundwater pumped from the Chino Basin and Cucamonga Basin; untreated, imported surface water from Metropolitan Water District of Southern California purchased through Inland Empire Utilities Agency and treated at the District's treatment plant; local surface water from Cucamonga Canyon, Day/East Etiwanda Canyon, and Deer Canyon; and recycled water purchased from IEUA.<sup>8</sup> The Cucamonga Basin was adjudicated in 1958 and CVWD was granted groundwater production rights. The District currently has the right to produce 15,471 acre-feet per year (AFY, approximately 75 percent of total rights) from the Cucamonga Basin with additional right to divert 3,620 AFY from the Cucamonga Creek.

The Proposed Project is a waterline replacement for the existing waterlines that are deteriorating. The waterlines are utilized to convey domestic water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents. The Proposed Project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin.

Impacts to groundwater supplies would be less than significant and no mitigation is required.

---

<sup>8</sup> Cucamonga Valley Water District 2020 Urban Water Management Plan, June 2021, prepared by Stetson Engineers.

**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:**

- **result in substantial erosion or siltation onsite or offsite;**
- **substantially increase the rate or amount of surface water runoff in a manner which would result in flooding on or offsite;**
- **create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or**
- **impede or redirect flood flows?**

**Less than Significant Impact.** Proposed trenching and alteration of the ground surface would be returned to its prior construction state upon backfilling the trench. There would be no increase of run-off, flood risk, stormwater drainage systems, or cause the redirection of existing flood flows. Trenching and re-grading activities during construction of the Proposed Project may result in wind driven soil erosion and loss of topsoil. All construction activities would comply with the Project's SWPPP that would be prepared prior to construction activities to reduce or eliminate erosion and siltation on-site and off-site. There are no natural drainages that would be impacted by the Proposed Project, and the Project Site is not located in an area that would be subject to flood flows. Angalls Canyon flows into a channel that eventually flows into Prado Basin, a section of the Santa Ana River. At the time of the survey, Angalls Canyon had a continuous flow that appears to be permanent. This meets the Relatively Permanent Test. In addition to the presence of flow, Angalls Canyon drains into a concrete channel that eventually connects Prado Basin, a section of the Santa Ana River, an interstate water that flows to the Pacific Ocean. This meets the Significant Nexus test. Angalls Canyon drainage would be considered a jurisdictional water as of the 2023 regulations, subject to the provisions of the Clean Water Act and would require evaluation under the 404 permit requirements. The proposed action is underground drilling for the placement of the two new pipes. Surface disturbance is expected to be minimal, temporary and limited to the sides of the canyon. No significant impacts to jurisdictional waters are expected. No mitigation should be required for impacts to protected waters in addition to Storm Water Prevention and Pollution Program requirements.

**d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?**

**No Impact.** The Project Site is not mapped as being located within an area susceptible to tsunami inundation. Additionally, given the surface elevation and inland location of the site, the potential hazard posed by tsunami is considered negligible.

Seiches are periodic oscillations in large bodies of water such as lakes, harbors, bays, or open reservoirs. The site is not located adjacent to any bodies of water subject to seiches. Therefore, the potential for seiches to affect the site is considered low.

According to the Flood Insurance Rate Map (FIRM), the site is mapped as being located within an area designated as Zone A (FEMA, 2016). Zone A is defined as an area with a 1% annual chance of flooding, also known as a 100-year flood. The Proposed Project would relocate the existing waterlines to an area more accessible for maintenance and deeper than the existing waterlines which would protect them from future flood scouring and damage. The waterlines are utilized for over 20,000 residents.

Therefore, the Project Site is not within a tsunami or seiche zone where there could be a risk of release of pollutants due to Project inundation. There are no impacts, and no mitigation is required.

**e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

**Less than Significant Impact.** The Cucamonga Basin was adjudicated in 1958 and CVWD was granted groundwater production rights. The District currently has the right to produce 15,471 acre-feet per year (AFY, approximately 75 percent of total rights) from the Cucamonga Basin with additional right to divert 3,620 AFY from the Cucamonga Creek.

Permit requirements for the Project would include development and implementation of a SWPPP, which is subject to RWQCB review and approval. California's [Sustainable Groundwater Management Act \(SGMA\)](#)<sup>9</sup> requires State-designated medium- and high-priority basins to develop groundwater sustainability agencies (GSAs), develop groundwater sustainability plans (GSPs) and manage groundwater for long-term sustainability. The SGMA 2019 Basin Prioritization identified ninety-four basins and/or sub-basins as medium or high priority and are required to form GSAs and develop GSPs. These 94 basins, in combination with adjudicated areas which have existing governance and oversight in place, account for 98 percent of the pumping (20 million acre-feet), 83 percent of the population (25 million Californians), and 88 percent of all irrigated acres (6.7 million acres) within the state's groundwater basins.<sup>10</sup> The Cucamonga Basin has a very low-priority groundwater basin with an option to prepare a GSP.

The Proposed Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Therefore, the impacts are less than significant, and no mitigation is required.

---

<sup>9</sup> [Sustainable Groundwater Management Act \(SGMA\)](#) accessed 7/17/25

<sup>10</sup> <https://water.ca.gov/Programs/Groundwater-Management/Basin-Prioritization>.

## XI. LAND USE AND PLANNING

**Would the project:**

**a) Physically divide an established community?**

**No Impact.** The physical division of an established community is typically associated with construction of a linear feature, such as a major highway or railroad tracks, or removal of a means of access, such as a local road or bridge, which would impair mobility in an existing community or between a community and an outlying area. The Proposed Project would consist of the construction and installation of two new 16-inch waterlines of approximately 800 linear feet to replace the two existing waterlines that are deteriorating. The Proposed Project does not necessitate construction of any new public roadways, flood control channels, or other structures that would physically divide an established community. There would be no facilities constructed outside the current pipeline replacement alignment. Therefore, the Proposed Project would not divide an established community. No impacts from construction and operation of the Proposed Project would occur, and no mitigation is required.

**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?**

**Less than Significant Impact.** The Proposed Project is to construct and install new dual 16-inch underground waterlines of approximately 800 linear feet. The Project Site is within the General Plan land use district, General Open Space and Facilities. This designation is applied to lands intended for recreational, educational, public utility, and flood control uses and systems that are typically owned or controlled by the City, other public agencies, and public utility companies.<sup>11</sup> The Proposed Project will be consistent with the General Plan land use of General Open Space and Facilities, therefore, a less than significant impact is expected.

---

<sup>11</sup> City of Rancho Cucamonga General Plan, Volume 2, Chapter 3 – Open Space, p.138, [Appendix 3-1 GPU Vol 1-4.pdf](#)

## XII. MINERAL RESOURCES

**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?**

**Less than Significant Impact.** In 1975, the California legislature enacted the Surface Mining and Reclamation Act (SMARA). This act provides for the reclamation of mined lands and directs the State Geologist to classify (identify and map) the non-fuel mineral resources of the state to show where economically significant mineral deposits occur and where they are likely to occur based upon the best available scientific data. The Project Site is assigned a “MRZ-2” mineral classification.<sup>12</sup> The MRZ-2 classification is defined as significant mineral deposits are present, or a likelihood of their presence and development should be controlled.

Within the City of Rancho Cucamonga, approximately 1,119 acres are classified as containing aggregate resources, and the sphere of influence of the City has 1,411 acres containing aggregate resources (Rancho Cucamonga 2021). As of 2021, there were no active mining operations in Rancho Cucamonga. A sand-and-gravel mining operation is in the northern portion of city but is closed with no intent to resume. The Holliday Rock Campus Plant operates along Cucamonga Creek, just west of the city limits, and primarily produces sand and gravel. The Kaiser Fontana Mine is south of the city limits and primarily produces sand and gravel.

The Project Site is located with an urbanized area in the City of Rancho Cucamonga and is adjacent to single-family residential developments to the west. Although the Project Site is identified as MRZ-2, or containing known resources, the Project Site is too small and not in a location conducive to mining. Therefore, the impacts are less than significant because implementation of the Proposed Project would not 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. Therefore, the impacts are less than significant, and no mitigation is required.

- 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?**

**No Impact.** As stated previously, the Project Site is within land classified as an urban area. Construction of the cement mortar-lined and coated pipelines would not require significant amounts of aggregate; the pipe would be delivered by the Contractor to the Project Site. Therefore, implementation of the Proposed Project would not 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. There would be no impacts, and no mitigation is required.

---

<sup>12</sup> City of Rancho Cucamonga General Plan Update Draft EIR. City of Rancho Cucamonga. Figure 5.12-2-Mineral Land Classification.

### **XIII.NOISE**

An assessment of the potential noise impacts was prepared for the Proposed Project to determine the potential impacts of construction and operations noise on the surrounding residences: *Cucamonga Valley Water District Reservoir 6 and Almond Street Water Replacement Project, Noise Impact Analysis*, Ganddini Group, Inc, June 11, 2025 (see Appendix E).

Noise is defined as any unwanted or objectionable sound. When noise levels increase, there may be adverse impacts to humans and the natural environment. Noise impacts can be short-term, such as temporary noise generated from construction activities, or long-term, such as the permanent operation of new facilities.

The noise descriptors utilized in the noise analysis for this Project include but are not limited to the following:

- **Ambient Noise Level:** The composite of noise from all sources, near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.
- **Community Noise Equivalent Level (CNEL):** The average equivalent A-weighted sound level during a 24- hour day, obtained after addition of five (5) decibels to sound levels in the evening from 7:00 to 10:00 PM and after addition of ten (10) decibels to sound levels in the night before 7:00 AM and after 10:00 PM.
- **Equivalent Sound Level ( $L_{EQ}$ ):** The sound level corresponding to a steady noise level over a given sample period with the same amount of acoustic energy as the actual time-varying noise level, or the energy average noise level during the sample period.

#### **Existing Land Uses and Sensitive Receptors**

The proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point (see Figure 4: *Project Alignment-Aerial*) The State of California defines sensitive receptors as those land uses that require serenity or are otherwise adversely affected by noise events or conditions. Schools, libraries, churches, hospitals, single and multiple-family residential, including transient lodging, motels and hotel uses make up the majority of these areas.

Sensitive land uses that may be affected by the Project's temporary construction noise include the existing single-family residential property lines located adjacent to the west and east of the Proposed Project alignment disturbance areas.

#### **Would the project result in:**

- a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project site in excess of standards**

**established in the local general plan or noise ordinance, or applicable standards of other agencies?**

**Less than Significant Impact.**

Construction: Project construction noise levels will reach up to 78 dBA Leq at the nearest sensitive receptor on the west side of the proposed alignment and up to 46 dBA at the nearest sensitive receptor on east of the proposed alignment, and therefore, will not exceed the FTA daytime construction noise thresholds for impacts residential land uses (80 dBA Leq (8-hr)). Further, project construction will adhere to the hours identified as exempt in Section 17.66.050 of the Municipal Code. Impacts would be less than significant impacts and no mitigation measures are required. Notwithstanding, the BMPs described in the Noise Impact Analysis that can be implemented to further minimize construction noise at adjacent properties are provided below.

Operation: Once constructed, operations of the waterlines would include intermittent maintenance throughout the year. There would be no on-going noise associated with the operations of the facility.

**Best Management Practices**

Although Project construction noise impacts would not exceed applicable thresholds, the following additional best management practices (BMPs) can be provided on project plans and in contract specifications to further minimize construction noise emanating from the proposed project:

1. All equipment, whether fixed or mobile, will be equipped with properly operating and maintained mufflers, consistent with manufacturer standards.
2. All stationary construction equipment will be placed so that emitted noise is directed away from the noise sensitive receptors nearest the proposed alignment.
3. As applicable, all equipment shall be shut off and not left to idle when not in use.
4. To the degree possible, equipment staging will be located in areas that create the greatest distance between construction-related noise and vibration sources and existing sensitive receptors.
5. Portable stationary noise sources will be directed away and shielded from existing residences in the vicinity of the proposed alignment. Either one-inch plywood or sound blankets can be utilized for this purpose. They should reach up from the ground and block the line of sight between equipment and existing residences. The shielding should be without holes and cracks.
6. No amplified music and/or voice will be allowed on the proposed alignment during construction.

BMPs that can be implemented to further minimize construction noise at adjacent properties will result in a less than significant impact and no mitigation measures are required.

**b) Generation of excessive groundborne vibration or groundborne noise levels?**

Vibrations from temporary construction/demolition and vehicles that leave the subject parcel (e.g., trucks, trains, and aircraft) are exempt from the provisions Section 17.66.070 of the City of Rancho Cucamonga Municipal Code which establishes the City's vibration related standards. Therefore, in the absence of City-established thresholds, groundborne vibration impacts are based on guidance from the *Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual September 2018*.

**Less than Significant Impact.**

Construction

The closest existing structure to the proposed alignment is located approximately 50 feet south of the western end of the alignment and the most vibratory equipment to be used within the proposed alignment are loaders, backhoes, and excavators which would result in groundborne vibration similar to that associated with a small bulldozer (0.003 PPV inches per second or 57.5 VdB at a distance of 25 feet). Therefore, project construction would not generate groundborne vibration strong enough to result in structural damage to nearby structures. This impact is less than significant and no mitigation is required.

Operation

The most substantial sources of groundborne vibration during post-construction project operations will include the movement of passenger vehicles and trucks on paved and generally smooth surfaces. Loaded trucks generally have a VdB of 85.6 at a distance of 25 feet (Caltrans 2020). As stated previously, the nearest structure is 50 feet from the proposed alignment. Therefore, groundborne vibration levels generated by project operation would not exceed the City groundborne vibration standard for land uses of 85 VdB at a sensitive receptor. This impact would not be significant. No mitigation is required.

**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?**

**Less than Significant Impact.** As the proposed waterline alignment is located approximately 5.3 miles northeast of the nearest airport (Ontario International Airport) and would not expose people residing or working in the project area to excessive noise levels associated with airports; impacts are less than significant, and no mitigation is required.

#### **XIV. POPULATION AND HOUSING**

**Would the project:**

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

**No Impact.** The Proposed Project does not include new construction of residential development or other uses that would directly or indirectly induce population growth in the area. The Proposed Project would replace existing aged waterlines that supply water to Reservoir 6 within the CVWD. Therefore, the Proposed Project would not indirectly induce population growth by increasing the available water supply. No growth-inducing impacts are anticipated to result from construction or operation of the Proposed Project. Therefore, the Proposed Project would not induce substantial population growth in the area, either directly or indirectly, and no impact would occur, nor would mitigation be required.

- b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

**No Impact.** The Project does not propose any residential structures nor are there any residences on the Project Site. The Project would not displace any existing housing as the Project consists of the replacement of an existing waterline to be installed in kind. The Project would also not necessitate construction of replacement housing elsewhere. No impact would occur, and no mitigation would be required.

## XV. PUBLIC SERVICES

**Would the project:**

- a) **Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:**

**Fire Protection?**

**Less than Significant Impact.** Fire protection services are provided to the City of Rancho Cucamonga through the Rancho Cucamonga Fire Protection District. The closest fire station to the Project Site is the Hellman Station, No. 177 located at 9270 Rancho Street, in Rancho Cucamonga, approximately 0.6 miles south of the Project Site.

During construction, Fire Protection may be required to manage minor emergencies, such as equipment fires. However, all heavy equipment would be equipped with fire suppression devices, and construction personnel trained regarding fire suppression and emergency procedures. Fire Protection District emergency access would not be impacted during construction. The increase in fire service demand generated by the Proposed Project during construction is not anticipated to require the construction of a new fire station or improvements to either Rancho Cucamonga Fire Protection District (RCFPD) stations serving the City of Rancho Cucamonga. Operation of the Proposed Project is passive, and it would not require additional fire protection.

Therefore, construction and operation of the Proposed Project would not result in the need for construction of additional fire protection facilities, nor would it adversely affect service ratios. Impacts are less than significant and no mitigation is required.

**Police Protection?**

**Less than Significant Impact.** Police protection services are provided to the City of Rancho Cucamonga by the San Bernardino County Sheriff's Department. The closest station to the Project Site is located at 10510 Civic Center Drive in Rancho Cucamonga, approximately 4.5 miles southeast of the Project Site.

Typically, impacts on police services are analyzed based on increases in permanent residents from projects involving residential developments. The Project operations would be passive and would not require additional police protection. The Proposed Project would not result in substantial changes to population, housing or traffic that would increase demand on police protection services. Construction and operation of the Proposed Project would not result in the need for construction of additional police protection facilities nor would it adversely affect service ratios.

Therefore, construction and operation of the Proposed Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services. Impacts are less than significant, and no mitigation is required.

### **Schools?**

**No Impact.** The construction and operation of the Proposed Project would not prompt an increase of the local population that would affect student populations in the area. Therefore, the Proposed Project would not result in the need for the provision of additional schools or the physical modification to existing school facilities. There are no impacts, and no mitigation is required.

### **Recreation/Parks?**

**No Impact.** The Project Site is adjacent to multiple trails that traverse Angalls Canyon. Additionally, there is Heritage Park located approximately 0.7 miles southwest of the Project Site. None of these recreational features would be impacted by the Proposed Project. The construction and operation of the Proposed Project would not generate additional population that would increase demand for neighborhood, regional parks or other recreational facilities. Therefore, construction and operation of the Proposed Project would not affect use of the trails or any local or regional park. There are no impacts, and no mitigation is required.

### **Other Public Facilities?**

**No Impact.** The proposed waterlines are necessary to replace a portion of CVWD's aged water infrastructure. Construction and operation of the Proposed Project would not result in substantial adverse physical impacts associated with the provision of any new or physically altered governmental facilities, or any 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. Impacts are less than significant and no mitigation is required. There are no impacts, and no mitigation is required.

## XVI. RECREATION

**Would the project:**

- a) **Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

**No Impact.** As a proposed waterline Project, there would not be an increase in the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Therefore, no impacts to existing neighborhood and regional parks or other recreational centers are anticipated from construction and operation of the Proposed Project and no mitigation is required.

- b) **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?**

**No Impact.** As a proposed waterline Project, there would not be an increase in the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Therefore, no impacts to existing neighborhood and regional parks or other recreational centers are anticipated from construction and operation of the Proposed Project and no mitigation is required.

## XVII. TRANSPORTATION

**Would the project:**

- a) **Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? Several methods are utilized to determine the traffic a potential project would generate and the potential impacts of that new traffic.**

**Less than Significant Impact.** Construction of the Proposed Project would generate a small temporary number of new trips involving construction workers traveling to and from the site and the transport of construction vehicles and equipment. The limited number of trips associated with construction during the approximately six-month (132 days) construction period would not exceed the capacity of the existing circulation system.

The Proposed Project would not conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

Less than significant impacts associated with traffic load and congestion would result from construction and periodic maintenance of the Proposed Project and no mitigation measures are required.

- b) **Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?**

**Less than Significant Impact.**

The City of Rancho Cucamonga utilizes the SBCTA VMT Screening Tool (Screening Tool) to evaluate the VMT for this Project. The County and Caltrans guidelines list the following screening to determine if a presumption of a less than significant transportation impact can be made:

- **Transit Priority Area (TPA) Screening:** Projects located within a Transit Priority Area (TPA) (i.e., within ½ mile of an existing “major transit stop” or an existing stop along a “high-quality transit corridor”
- **Project Type Screening:** Projects which serve the local community such as K-12 schools, local-serving retail less than 50,000 square feet, local parks, day care centers, local serving gas stations, local serving banks, student housing projects, local serving community and other local, essential services may also be presumed to have a less than significant impact, as local-serving uses tend to shorten vehicle trips.

Also, Projects generating less than 110 daily vehicle trips are also presumed to have a less than significant impact.

- **Low VMT Screening:** Projects located within a low VMT generating area as determined by the analyst (e.g. development in efficient areas of the County will reduce VMT per person/employee and is beneficial to the region.

Construction of the Proposed Project would involve temporary trips associated with workers, delivery of construction supplies and equipment, and hauling materials to and from the Project Site. Vehicle trips would include employees that may be onsite, and construction vehicles moving materials and equipment. These trips would be temporary and would not result in a perceivable increase in vehicle miles traveled that would exceed the County's thresholds of significance.

Similarly, post-construction activities would involve inspection and general maintenance trips which would occur bi-weekly or monthly. The Proposed Project would not conflict with or be inconsistent with CEQA Guidelines Section 15064.3 Subdivision (b)(1).

Therefore, the Proposed Project does not conflict with an applicable plan, ordinance, or policy establishing measure of effectiveness for the performance of the circulation system. No public transit, pedestrian facilities, or bicycle lanes exist in the area of the Project Site; thus, no significant impacts are expected, and no mitigation measures are required.

c) **Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

**Less than Significant Impact.** Almond Street would be accessible for CVWD service trucks and equipment. The Proposed Project's construction would occur within the site's boundaries and additional access would not be required. The Proposed Project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Therefore, the impact is less than significant, and no mitigation is required.

d) **Result in inadequate emergency access?**

**Less than Significant Impact.** All construction activities, including equipment staging, would occur within the Project Site, which would not impede emergency access along the Almond Street cul-de-sac. Construction and operation of the Proposed Project would not hinder emergency access to or from the Site. Therefore, less than significant emergency access impacts are expected from construction and operation of the Proposed Project, and no mitigation is required.

## XVIII. TRIBAL CULTURAL RESOURCES

**Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, 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**

**Less than Significant with Mitigation Incorporated.** According to PRC Chapter 2.5, Section 21074, tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and items with cultural value to a California Native American tribe that are either included or determined to be eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources as defined in Section 5020.1.

There are no tribal resources that have been identified as eligible for listing to the California Register of Historic Places within or near the Project Site (see Appendix C). Therefore, there would be no impact to known tribal cultural resources.

Of the 10 tribes notified of the Project, the YSMN responded and identified that the Proposed Project area exists within Serrano ancestral territory and, therefore, is of interest to the Tribe. However, due to the nature and location of the Proposed Project and given the YSMN Cultural Resources Department's present state of knowledge, the YSMN indicated they had no concerns with the Project's implementation. However, the YSMN requested that the mitigation measures be included in the Project approvals to protect potential unknown tribal archaeological resources. Mitigation Measures TCR-1 and TCR-2 incorporates the YSMN request. Mitigation Measures TCR-3 through TCR-5 are included as requested by the Gabrieleño Band of Mission Indians-Kizh Nation). Appendix F includes response letters and recommended mitigation requested by both tribes. Implementation of Mitigation Measures TCR-1 through TCR-5 would reduce potential impacts to tribal cultural resources to less than significant.

- 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 5024.1. 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.**

**Less than Significant with Mitigation Incorporated.** See item XVIII a) above. Although no known tribal cultural resources are located at the Project Site or vicinity, with implementation of the mitigation measures below, the Proposed Project would not cause a substantial adverse change in the significance of a tribal cultural resource, and impacts would be less than significant.

**Mitigation Measures (Yuhaaviatam of San Manuel Nation):**

**TCR-1:** The Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN) shall be contacted, as detailed in CUL-1, of any pre-contact cultural resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a Cultural Resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with YSMN, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents YSMN for the remainder of the project, should YSMN elect to place a monitor on-site.

**TCR-2:** Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to YSMN. The Lead Agency and/or applicant shall, in good faith, consult with YSMN throughout the life of the project.

**Mitigation Measures (Gabrieleño Band of Mission Indians-Kizh Nation):**

**TCR-3:** Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities.

- A. The project applicant/lead agency shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any “ground-disturbing activity” for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). “Ground-disturbing activity” shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.
- B. A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.
- C. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or “TCR”), as well as any discovered Native American (ancestral) human

remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request to the Tribe.

- D. On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to the project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs.

**TCR-4:** Unanticipated Discovery of Tribal Cultural Resource Objects (Non-Funerary/Non-Ceremonial):

- A. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes.

**TCR-5:** Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects

- A. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.
- B. If Native American human remains and/or grave goods are discovered or recognized on the project site, then Public Resource Code 5097.9 as well as Health and Safety Code Section 7050.5 shall be followed.
- C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2).
- D. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods.
- E. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

**NOTE:** Any/all revisions to the Kizh's proposed TCR Conditions of Approval set forth above must be requested in writing, and not more than ten (30) calendar days from the date that we consulted on the subject Project so that we can conclude consultation. Requested revisions shall be delivered to the Kizh via email at [admin@gabrielenoindians.org](mailto:admin@gabrielenoindians.org), and in a Word document, redline format. Please include as the email subject: "REQUEST FOR MITIGATION REVISIONS," and identify the project name and location/address. If revisions are not requested within 10 calendar days of consultation, the Kizh's proposed Conditions of Approval are presumed accepted as proposed (i.e., as set forth above).

## **XIX. UTILITY AND SERVICE SYSTEMS**

**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?**

**Less than Significant Impact.** The Proposed Project is the installation of two new 16-inch waterlines to replace two existing waterlines that are deteriorating. The Proposed Project has been planned by CVWD to ensure an adequate water supply to its customers.

Upon operation, the Proposed Project would not require the use of wastewater, natural gas, or electric power facilities. Therefore, implementation of the Proposed Project would not require or result in the relocation or construction of new or expanded wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. Therefore, the impacts are less than significant, and no mitigation is required.

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

**Less than Significant Impact.** The Proposed Project is the construction and installation of two new 16-inch waterlines to replace two existing waterlines that are deteriorating. The Proposed Project would not result in the use of additional water supplies or increased water demand. Additionally, as an urban water supplier, CVWD is required to prepare and adopt an Urban Water Management Plan (UWMP), periodically review its UWMP, and incorporate updated and new information into an updated UWMP at least once every five years. In 2020, CVWD prepared an update to its 2015 UWMP which was submitted to and approved by the California Department of Water Resources (DWR). The UWMP provides urban water suppliers (including CVWD) with a planning document for long-term resource planning to ensure adequate water supplies are available to meet existing and future water supply needs. In addition, the 2020 UWMP incorporates water supply reliability determination resulting from potential prolonged drought, regulatory revisions, and/or changing climatic conditions. Water conveyance is an integral part of being able to service its customers during normal, dry and multiple dry years. The construction of the waterlines is proposed to serve the existing needs of CVWD's customers and would not directly or indirectly result in additional demands on the water system. Therefore, no significant adverse impacts are identified or anticipated and no mitigation measures are required.

- 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?**

**Less than Significant Impact.** The Proposed Project is the construction and installation of two new 16-inch waterlines to replace two existing waterlines that

are deteriorating. The Project does not include an office or facilities that require wastewater treatment. During construction, employees may utilize portable toilets that would be provided by a licensed vendor. Therefore, implementation of the Proposed Project would not 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. The impacts are less than significant, and no mitigation is required.

**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?**

**Less than Significant Impact.** Implementation of the Proposed Project would not generate additional solid waste beyond initial construction (i.e., clearing) activities. The CVWD contractor would be responsible for all waste removal and disposal. The nearest sanitary landfill to the site is the Mid-Valley Sanitary Landfill operated by the County of San Bernardino, located at 2390 N. Alder Avenue, Rialto, CA. The Mid-Valley Sanitary Landfill has a daily throughput of 7,500 tons with a remaining capacity as of 2023 of 54.2 million tons and a permitted capacity of 101.3 million tons.<sup>13</sup> The temporary generation of construction debris would not 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. Therefore, impacts are less significant, and no mitigation is required.

**e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

**Less than Significant Impact.** All collection, transportation, and disposal of solid waste generated by the Project would comply with all applicable federal, state, and local statutes and regulations. Construction waste generated by the project would enter the City's waste stream but would not adversely affect the City's ability to meet the requirements of AB 939, AB 341, or AB 1826, since the project's waste generation would represent a temporary and nominal percentage of the waste created within the City. The Project would comply with all regulatory requirements regarding solid waste, and impacts associated with solid waste disposal regulations would be less than significant.

---

<sup>13</sup> CalRecycle. Solid Waste Information System (SWIS) Database. Accessed. March 28, 2024.

## XX. WILDFIRE

**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?**

**Less than Significant Impact.** The Proposed Project is within a Very High Fire Severity Zone.<sup>14</sup> All Project construction, including equipment staging, would occur on-site and not block roadways used by emergency personnel. The CVWD's Hazard Mitigation Plan guidelines would be followed. Once constructed, access to the pipelines would be provided by Almond Street, which would allow emergency personnel to access the Project Site. The Proposed Project would not substantially impair an adopted emergency response plan or emergency evacuation plan. As such, the impact would be less than significant, and no mitigation would be required.

- 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 wildfire?**

**Less than Significant with Mitigation Incorporated.** The Project area elevations range from 2,083 feet to approximately 2,115 feet. The Project vicinity is within the foothills of Rancho Cucamonga, which has been identified by the City as being within a Very High Fire Severity Zone and is subject to high winds. The Project parcels are bordered on the north, and east by open space, hillside residential to the east and very low density residential to the west. Given that the topography of the site has a gentle slope, there is a less significant impact that due to slope, prevailing winds, and other factors, implementation of the Proposed Project would exacerbate wildfire risks, and thereby expose Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire.

However, Project construction may include the use of gas-powered hand tools such as chain saws and/or welding equipment that may produce sparks. The Project Site and its vicinity are also subject to Santa Ana winds, which can spread fires rapidly. As such, implementation of Mitigation Measure HAZ-1 (refer to Section IX) that requires the contractor to implement fire protection protocols during construction, such as equipment maintenance and the suspension of welding during certain Santa Ana wind conditions, to reduce potential impacts to less than significant.

- c) **Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other**

---

<sup>14</sup> San Bernardino Countywide Plan. HZ-5 Fire Hazard Severity Zones. October 2020. Accessed March 15, 2024.

**utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?**

**No Impact.** The Proposed Project is the construction and installation of two new 16-inch waterlines to replace two existing waterlines that are deteriorating. Operations of the Project consist of personnel visits for inspection and testing to assess waterline maintenance. There is no part of the Project construction or operation that would 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. There are no impacts, and no mitigation is required.

**d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

**Less than Significant Impact.** A natural drainage originates within Angalls Canyon to the north and drains to the south into a catch basin and the man-made Demens Creek Channel. The site drainage is designed in a manner that would mimic existing drainage patterns which would reduce potential flooding from storm events, even in a post-fire condition. Therefore, because the existing Project Site has a gentle slope and site grading would not substantially change existing drainage conditions, there is a less than significant impact to exposing people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. No mitigation is required.

## XXI. MANDATORY FINDINGS OF SIGNIFICANCE

- 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?**

**Less than Significant with Mitigation Incorporated.** The Project Site is vacant and is situated along a natural drainage slope which is a tributary of the Angalls Canyon. There are also no cultural or archaeological sites within the Project boundaries or surroundings.

The Project would be required to comply with Project-specific mitigation measures relative to biological including Mitigation Measure **BIO-1** that requires a pre-construction nesting bird survey, and Mitigation Measures **CUL-1** through **CUL-3** that requires the preparation of a Cultural Resource Monitoring and Management Plan to accommodate unanticipated cultural resources and identify procedures upon discovery of unanticipated human remains. Mitigation Measures **TCR-1** through **TCR-5** would address tribal mitigation in the event of unanticipated discoveries specifically. Implementation of these measures would ensure that Project-specific impacts would be less than significant.

Thus, the Proposed Project would not 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, reduce the number or restrict the range of a rare or an endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. Therefore, impacts are 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)?**

**Less than Significant Impact.** Cumulative impacts are defined as two or more individual effects that, when considered together, are considerable or that compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the development when added to the impacts of other closely related past, present, and reasonably foreseeable or probable future developments. Cumulative impacts can result from individually minor but collectively significant developments taking place over a period. The CEQA Guidelines, Sections 15130 (a) and (b), states:

- (a) Cumulative impacts shall be discussed when the project's incremental effect is cumulatively considerable.
- (b) The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided of the effects attributable to the project. The discussion should be guided by the standards of practicality and reasonableness.

The Proposed Project to construct and install 800- linear feet of two (2) new 16-inch cement mortar-lined and coated waterlines to replace approximately 300 linear feet of the existing Reservoir 6 and Almond Street 14-inch and 16-inch waterlines that are deteriorating. The waterlines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents. The immediate Project vicinity is built out with residential uses. Public works projects are permitted use within the Open Space Conservation and General Open Space and Facilities, and the Proposed Project would be consistent with the City of Rancho Cucamonga General Plan. Impacts identified in this Initial Study can be reduced to a less than significant impact. Therefore, no significant adverse impacts are identified or are anticipated, and no mitigation measures are required.

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

**Less than Significant with Mitigation Incorporated.** This Initial Study was prepared consistently with the Environmental Checklist Form, as suggested in Section 15063(d)(3) of the State CEQA Guidelines, as amended, and includes a series of questions about the project for each of the listed environmental topics. The Form evaluates whether or not there would be significant environmental effects associated with the development of the project on the natural environment and the human environment, and provides mitigation measures, when required, to reduce impacts to a less than significant level. The form requires analysis in 20 subject categories as well as Mandatory Findings of Significance.

Mitigation measures (MM) were determined necessary to reduce environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly in the following categories:

- Hazards and Hazardous Materials (MM **HAZ-1**)
- Wildfire (MM **HAZ-1**)

With mitigation incorporated, the Proposed Project would not directly or indirectly cause substantial adverse effects on human beings.

## **SECTION 4: LIST OF PREPARERS**

### **Lead Agency:**

Cucamonga Valley Water District  
Engineering Department  
10440 Ashford Street  
Rancho Cucamonga, CA 91729  
Ms. Jiwon Seung, Assistant Engineer  
Mr. Ben Roden, Assistant Engineer

### **Consultant – Author:**

Lilburn Corporation  
1905 Business Center Drive  
San Bernardino, CA 92408  
Ms. Cheryl A. Tubbs, Project Principal  
Mr. Anthony DeLuca, Project Manager

### **Technical Contributors:**

BFSA Environmental Services, a Perennial Company, Andrew Garrison MA., RPA,  
(Cultural Resources)

BFSA Environmental Services, a Perennial Company, Todd Wirths, MS, Senior  
Paleontologist, (Paleontological Resources)

Ganddini Group, Inc. Roma Stromberg INCE, MS and Catherine Howe MS, (Noise)

Lilburn Corporation, Frank Amendola, Project Manager, (Air Quality, GHG)

Natural Resources Assessment, Inc. Karen Kirtland, Biologist, (Biological Resources)

## **SECTION 5: REFERENCES**

California Department of Toxic Substances Control, EnviroStor website. Available online: <http://www.envirostor.dtsc.ca.gov/public> . Accessed March 19, 2025.

City of Rancho Cucamonga, September 2021., *General Plan Update and Climate Action Plan Draft Environmental Impact Report*, State Clearinghouse No. 2021050261.

City of Rancho Cucamonga, 2021. *Plan RC, City of Rancho Cucamonga General Plan*.

Stetson Engineers, June 2021. *Cucamonga Valley Water District 2020 Urban Water Management Plan*.

### **5.1 Project Specific References**

*CalEEMod Output Data*, April 11, 2025, Lilburn Corporation

*Cucamonga Valley Water District Reservoir 6 and Almond Street Water Replacement Project, Noise Impact Analysis*, June 11, 2025, Ganddini Group, Inc

*Cultural Resources Study for the Reservoir 6 and Almond Street Waterline Replacement Project*, December 30, 2024, BFSA Environmental Services, a Perennial Company

*General Biological Assessment*, December 19, 2024, Natural Resources Assessment Inc

*Paleontological Assessment for the Reservoir 6 and Almond Street Waterline Replacement Project*, December 30, 2024, BFSA Environmental Services, a Perennial Company

## **Appendix A**

### CalEEMod Emissions Output

**Cucamonga Valley Water District  
Pipeline Installation-Construction Equipment Emissions**

Operation	Emission Factor	Units	Equation Variables		Emissions				
			1	2	PM-10 lbs/day	ROG lbs/day	CO lbs/day	NOX lbs/day	SOX lbs/day
<b>Excavation Equipment Exhaust Emissions</b>			Pieces of Equipment	Operating Hours					
PM-10									
Backhoe	0.006	lbs/hr	1	8	0.0				
Excavator	0.009	lbs/hr	1	8	0.1				
Other Construction Equipment	0.007	lbs/hr	2	8	0.1				
Other Material Handling Equipment	0.012	lbs/hr	1	8	0.1				
Loader	0.006	lbs/hr	1	8	0.0				
Generator	0.008	lbs/hr	1	8	0.1				
ROG									
Backhoe	0.034	lbs/hr	1	8		0.3			
Excavator	0.056	lbs/hr	1	8		0.4			
Other Construction Equipment	0.044	lbs/hr	2	8		0.7			
Other Material Handling Equipment	0.070	lbs/hr	1	8		0.6			
Loader	0.034	lbs/hr	1	8		0.3			
Generator	0.029	lbs/hr	1	8		0.2			
CO									
Backhoe	0.359	lbs/hr	1	8			2.9		
Excavator	0.509	lbs/hr	1	8			4.1		
Other Construction Equipment	0.347	lbs/hr	2	8			5.6		
Other Material Handling Equipment	0.436	lbs/hr	1	8			3.5		
Loader	0.359	lbs/hr	1	8			2.9		
Generator	0.267	lbs/hr	1	8			2.1		
NOX									
Backhoe	0.186	lbs/hr	1	8				1.5	
Excavator	0.227	lbs/hr	1	8				1.8	
Other Construction Equipment	0.202	lbs/hr	2	8				3.2	
Other Material Handling Equipment	0.384	lbs/hr	1	8				3.1	
Loader	0.386	lbs/hr	1	8				3.1	
Generator	0.233	lbs/hr	1	8				1.9	
SOX									
Backhoe	0.001	lbs/hr	1	8					0.0
Excavator	0.001	lbs/hr	1	8					0.0
Other Construction Equipment	0.001	lbs/hr	2	8					0.0
Other Material Handling Equipment	0.002	lbs/hr	1	8					0.0
Loader	0.001	lbs/hr	1	8					0.0
Generator	0.001	lbs/hr	1	8					0.0
<b>Total</b>					<b>0.4</b>	<b>2.5</b>	<b>21.0</b>	<b>14.6</b>	<b>0.1</b>

Sources: Off-Road Mobile Source Emission Factors; SCAQMD 2025

**Cucamonga Valley Water District  
GHG- Pipeline Installation-Construction Equipment**

		Equation Variables			GHG Emissions		
Operation	Emission Factor	Units	1	2	CO2 lbs/day	CH4 lbs/day	N2O g/day
<b>Excavation Equipment Exhaust Emissions</b>			Pieces of Equipment	Operating Hours			
CO2							
Backhoe	66.8	lbs/hr	1	8	534.4		
Excavator	120.0	lbs/hr	1	8	960.0		
Other Construction Equipment	123.0	lbs/hr	2	8	1968.0		
Other Material Handling Equipment	141.0	lbs/hr	1	8	1128.0		
Loader	66.8	lbs/hr	1	8	534.4		
Generator	61.0	lbs/hr	1	8	488.0		
CH4							
Backhoe	0.003	lbs/hr	1	8		0.0	
Excavator	0.005	lbs/hr	1	8		0.0	
Other Construction Equipment	0.004	lbs/hr	2	8		0.1	
Other Material Handling Equipment	0.006	lbs/hr	1	8		0.1	
Loader	0.003	lbs/hr	1	8		0.0	
Generator	0.003	lbs/hr	1	8		0.0	
N2O*				Miles Per Day			
Backhoe	0.080	g/mile	1	2			0.2
Excavator	0.101	g/mile	1	2			0.2
Other Construction Equipment	0.246	g/mile	2	2			1.0
Other Material Handling Equipment	0.246	g/mile	1	2			0.5
Loader	0.101	g/mile	1	2			0.2
Generator	0.050	g/mile	1	2			0.1
<b>Total lbs/g/day</b>					5612.80	0.22	2.14
<b>Total lbs per year</b>					740889.60	29.46	0.62
<b>Total MTCO2e</b>					336.00	0.37	0.07
<b>Total</b>					<b>336.45</b>		

Sources: Off-Road Mobile Source Emission Factors; SCAQMD 2025  
Source N2O: California Climate Action Registry General Reporting Protocol, 2009I;  
Table A9-8-C SCAQMD Handbook; Climate Leaders EPA, Section 3, Table 2  
Duration: 6 Month (132 days) Construction Period  
Note: GWP CH4: 28; N2O: 265

## **Appendix B**

### General Biological Assessment



*NATURAL RESOURCES ASSESSMENT, INC.*

**General Biological Assessment  
Reservoir 6 and Almond Street Waterline Replacement  
Alternatives A and B  
Cucamonga Valley Water District  
Rancho Cucamonga, California**

**Prepared for:**

**Lilburn Corporation  
1905 Business Center Drive  
San Bernardino CA 92408**

**Prepared by:**

**Natural Resources Assessment, Inc.  
3415 Valencia Hill Drive  
Riverside, California 92507**

**December 19, 2024**

**Project Number: LIL23-102**

*3415 Valencia Hill Drive, Riverside, California 92507 Telephone 951 686 4483 Fax 951 686 8418*

[www.naturalresourcesassessment.com](http://www.naturalresourcesassessment.com)

**CERTIFICATION**

I hereby certify that the statements furnished below and in the attached exhibits present data and information required for this jurisdictional delineation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.



Karen Kirtland

*NATURAL RESOURCES ASSESSMENT, INC.*

*December 19, 2024*

***Table of Contents***

---

**1.0 INTRODUCTION ..... 1**

**2.0 SITE LOCATION AND PROJECT DESCRIPTION ..... 1**

**3.0 METHODS ..... 1**

    3.1 Data Review ..... 1

    3.2 Field Surveys and Site Assessment..... 4

**4.0 FINDINGS ..... 4**

    4.1 Weather, Topography and Soils..... 4

    4.2 Vegetation ..... 5

        4.2.1 Annual Grassland ..... 5

        4.2.2 Coastal Sage Scrub ..... 5

        4.2.3 Oak Riparian Woodland ..... 5

    4.3 Wildlife..... 8

    4.4 Sensitive, Protected and Listed Biological Resources..... 8

**5.0 JURISDICTIONAL WATERS ..... 9**

    5.1 Army Corps of Engineers..... 9

    5.2 Regional Water Quality Control Board..... 10

    5.3 California Department of Fish and Wildlife ..... 11

**6.0 RAPTORS, MIGRATORY BIRDS, AND HABITAT ..... 12**

**7.0 OFFSITE AND TEMPORARY IMPACTS ..... 12**

**8.0 REFERENCES ..... 13**

***Figures***

---

Figure 1. Project Location and Vicinity ..... 2

Figure 2. Project Aerial and Layout ..... 3

Figure 3. Project Soils. .... 6

Figure 4. Vegetation Map..... 7

Figure 5. Wetland Inventory Designation..... 10

***Appendices***

---

- Appendix A Site Photos
- Appendix C Hydrological Soil Classification System
- Appendix D Plants and Animal Species Observed
- Appendix E Sensitive Resources Table

## **1.0 Introduction**

Lilburn Corporation contracted Natural Resources Assessment, Inc. (NRAI) on behalf of Cucamonga Valley Water District (CVWD) to prepare a general biological assessment for the proposed upgrade of existing waterlines in Rancho Cucamonga, San Bernardino County.

The biological assessment was required as part of the environmental documentation for the project.

## **2.0 Site Location and Project Description**

The project alignment alternatives start just north of the eastern end of Almond Street (Figures 1 and 2). CVWD proposes to install 850 linear feet of two (2) new 16-inch cement mortar-lined and coated steel waterline to replace approximately 400 linear feet of the existing Reservoir 6 and Almond Street 14-inch and 16-inch waterlines which are experiencing deterioration. The pipelines are also located in a flood zone with portions currently exposed due to erosion from flood scouring. The pipelines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents.

This project will relocate the existing pipelines in an area more accessible for maintenance and deeper than the existing pipelines which will protect them from future flood scouring and damage. The alignment area starts just north of the eastern end of Almond Street and extends from the western bank of Angalls Canyon to the former fire road on the west bank. It then follows the fire road south to the connection on the west bank.

The proposed project is the installation of approximately 850 linear feet of two (2) new 16-inch cement mortar-lined and coated waterline to replace approximately 400 linear feet of existing 14-inch and 16-inch waterlines.

## **3.0 Methods**

### **3.1 Data Review**

NRAI conducted a data search for information on plant and wildlife species known occurrences within the vicinity of the project. Information sources reviewed included:

- Information provided by the City of Rancho Cucamonga for the project site.
- U.S. Army Corps 404 requirements, State Water Resources Control Board requirements, California Department of Fish and Wildlife 1602 requirements.
- Calflora, a website for information on plant species.
- CNPS Inventory for information on plant species
- Information, Planning, and Conservation System (IPAC) data.
- Biogeographic Information & Observation System (BIOS) data.

- USFWS National Wetland Inventory (NWI) and Environmental Protection Agency (EPA) Water Program “My Waters”.
- United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Web Soil Survey to identify hydric soils on site.

NRAI used the information to focus our field survey efforts. Please see Section 6.0 for a complete listing of documents reviewed.

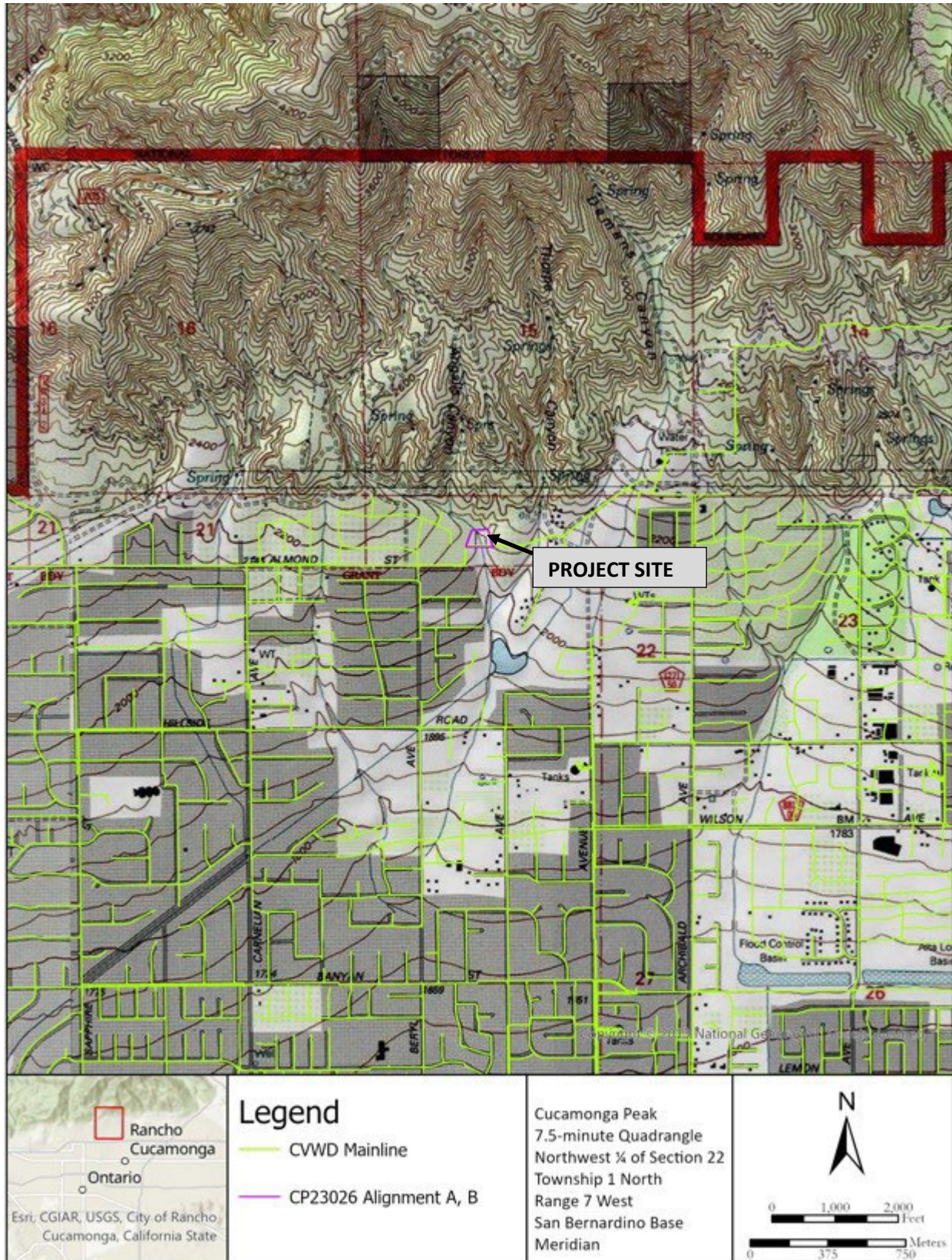


Figure 1. Project Location and Vicinity.



Figure 2. Project Aerial and Layout.

### **3.2 Field Surveys and Site Assessment**

Ms. Karen Kirtland of NRAI and Mr. Ricardo Montijo (subconsultant to NRAI) attended a field meeting with the Cucamonga Valley Water District (CVWD) and city representatives on 19 March 2024 to discuss the project and conduct a brief evaluation of the overall area of Angalls Canyon. We walked the roads around the project area and noted the general habitats and site conditions. We used this evaluation to focus our research on the potential sensitive biological resources in the general vicinity of the project.

We conducted a full biological field assessment, including field surveys of the two proposed alignments on 2 May 2024. Ms. Kirtland and Mr. Montijo evaluated the surrounding habitats, making notes on the general and sensitive biological resources present and taking representative photographs (Appendix A).

### **3.3 Weather, Topography and Soils**

The weather at the start of the March 19, 2024 survey was fifty degrees Fahrenheit in the morning. The sky was thinly overcast, with three mile per hour (mph). At the end of the survey temperatures were sixty degrees Fahrenheit, the skies were thinly overcast, and winds were three mph.

The topography of the project site is a steep-sided canyon, with a mostly flat bottom eroded by stream action into small, braided streams. The area of the canyon occupied by the existing pipeline runs due south (Figure 1). The elevations along the north boundary ranges from approximately 2120 feet (646 meters) above mean sea level (msl) at the top of slope to 2080 feet (634 meters) msl on the bottom of the canyon. The elevations along the south boundary range from 2100 feet (640 meters) msl at the top of slope to 2070 feet (631 meters) msl on the canyon bottom (Figure 1).

There are four soils within the project site boundaries (Figure 3). The NRCS classifies soils as hydric or non-hydric, as well as classifying the hydrological potential as one of four distinct Hydrologic Soil Groups (HGS) or a mix of two of those groups (Appendix B).

The Cieneba-Rock Outcrop complex (Cr) is found on 30 to 50 percent slopes. The Cieneba component typically occurs on mountain slopes and hillslopes, while the Rock Outcrop typically occurs on ridges and mountain slopes. The parent material is residuum that has weathered from granite. Cieneba-Rock complex is classified as a non-hydric soil that is somewhat excessively drained. It is placed in HGS D. It is non-saline and never floods or ponds.

Hanford coarse sandy loam (HaD) is found on nine to fifteen percent slopes. It typically occurs on alluvial fans and is formed from alluvial derived from granite. Hanford coarse sandy loam is a well-drained soil that is non-saline to very slightly saline. It is placed in HGS A and is considered a non-hydric soil. This soil never floods or ponds.

Psamments, Fluvents, and Frequently Flooded Soils (Ps) are somewhat excessively drained soils. These soils are found along drainage ways. Psamments are somewhat excessively drained while no such

classification exists for Fluvents and Frequently Flooded Soils. Flooding of both soil types is frequent, while ponding never occurs. Both soils are in HGS A. Psammments are non-hydric soils, while Fluvents are hydric soils. Frequently Flooded Soils are not given a hydric rating or are in one of the HGS group.

Ramona sandy loam (RmD) occurs on nine to fifteen percent slopes. This soil is an alluvium derived from granite and occurs on alluvial fans and terraces. It is a well-drained soil that does not flood or pond. It is non-hydric and is in the HGS C group.

### 3.4 Vegetation

There are five vegetation types within the general area of the two alignments (Figure 4). Annual grassland (disturbed) is on the top of the western slope. Coastal sage occurs on the steeper slopes and bottom of Angalls Canyon. Oak riparian woodland on the upper banks of the Angalls Canyon stream.

Landscape tree and shrubs as well as an herbaceous ground cover occur on the western slope of the alignment area.

#### 3.4.1 Annual Grassland

Annual grassland (disturbed) on the project site is a mix of weedy non-native and native species. Common non-native species observed were Italian thistle (*Carduus pycnocephalus*), star-thistle (*Centaurea melitensis*), garden rocket (*Eruca vesicaria*), castor bean (*Ricinus communis*) and red-stemmed filaree (*Erodium cicutarium*). Common native species included small-flowered fiddleneck (*Amsinckia menziesii*), caterpillar phacelia (*Phacelia cicutaria*) and sand pygmy weed (*Crassula connata*).

The annual grassland formed a dense cover in open flat areas. This community occurs predominately on the top of the western bank.

#### 3.4.2 Coastal Sage Scrub

Coastal sage scrub on the project site is a mix of shrub species such as laurel sumac (*Malosma laurina*), California sagebrush (*Artemisia californica*) and California buckwheat (*Eriogonum fasciculatum*). Annual plant species in this habitat include common Pacific pea (*Lathyrus vestitus*), Johnson's honeysuckle (*Lonicera subspicata*) and morning glory (*Calystegia macrostegia*).

This community occurs on the steeper sides of the western and eastern slopes of the canyon.

#### 3.4.3 Oak Riparian Woodland

Oak riparian woodland occurs in separate stands along the slopes and bottom of Angall Canyon. Coast live oak (*Quercus agrifolia*) is the only oak species found in this community. Other woody species include toyon (*Heteromeles arbutifolia*), honeysuckle (*Lonicera subspicata*) and southern bush monkeyflower (*Diplacus longiflorus*).

Herbaceous species in this community include poison oak (*Toxicodendron diversilobum*), horehound (*Marrubium vulgare*) and California mugwort (*Artemisia douglasiana*), branching phacelia, strigose lotus (*Acmispon strigosus*), and chilicothe (*Marah macrocarpa*).

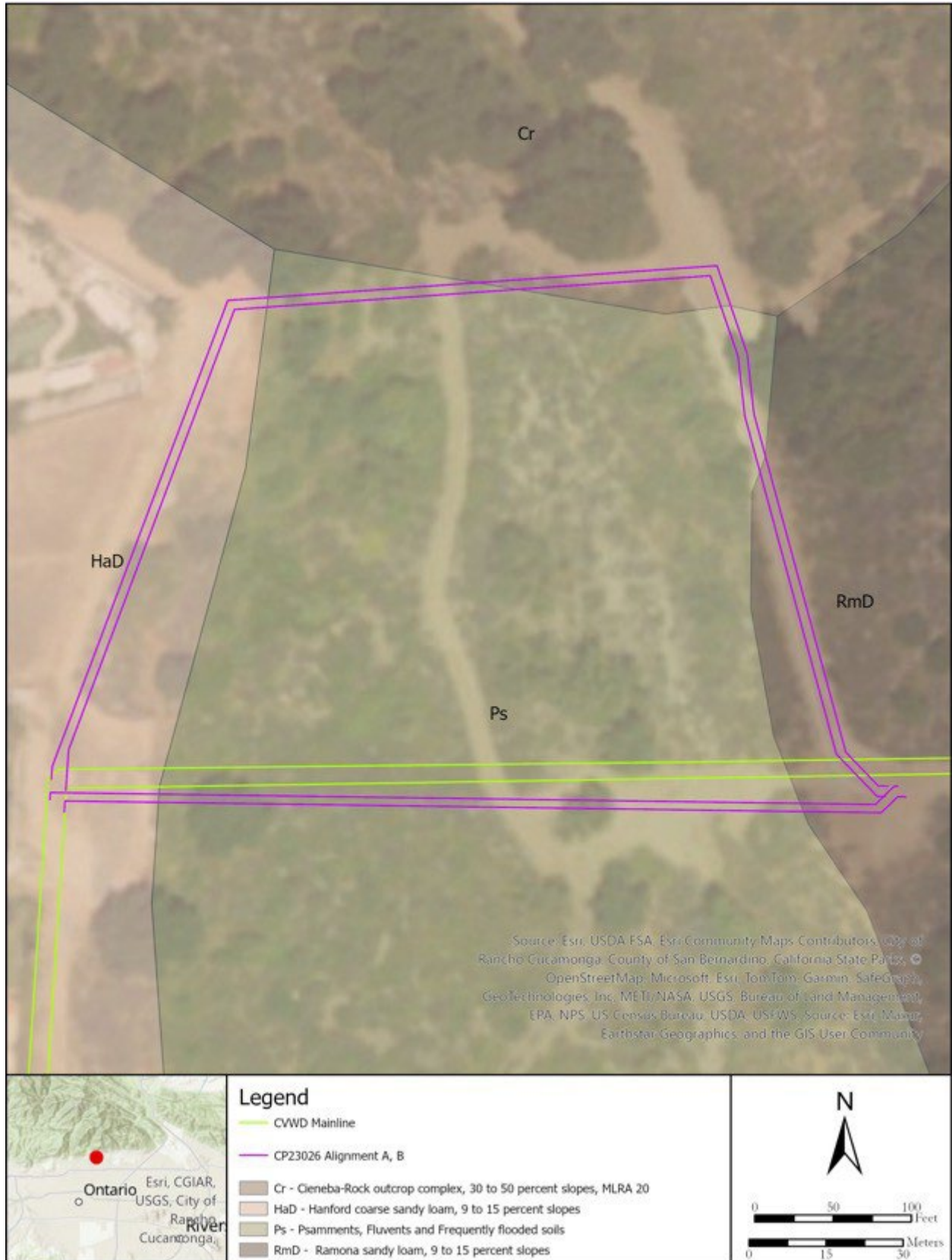


Figure 3. Project Soils.



There is a single row of California sycamore trees (*Platanus racemosa*) along the creek at the bottom of Angall Canyon. Plant species growing along the line of sycamores include strigose lotus, mulefat, and golden yarrow (*Eriophyllum confertiflorum*).

### 3.5 Wildlife

Wildlife species observed included insects, reptiles, birds, and mammals.

Butterfly species observed included mourning cloak (*Nymphalis antiopa*) and Sara orangetip (*Anthocharis sara*). One moth species, white-lined sphinx moth (*Hyles lineata*) was also seen.

Western fence lizard (*Sceloporus occidentalis*) was found in scrub habitats.

Bird species observed included mourning dove (*Zenaida macroura*) and house finch (*Haemorhous mexicanus*) in the annual grassland, landscaped, and non-native communities. California towhee (*Pipilo crissalis*), California quail (*Callipepla californica*), and California scrub jay (*Aphelocoma californica*) were observed in more open scrub habitats, while spotted towhee (*Pipilo maculatus*), blue-gray gnatcatcher (*Poliophtila caerulea*) and ruby-crowned kinglet (*Regulus calendula*) were more common in denser scrub communities.

The oak riparian woodland community supported acorn woodpecker (*Melanerpes formicivorus*), Bullock's oriole (*Icterus bullockii*), plain titmouse (*Baeolophus inornatus*), wrenit (*Chamaea fasciata*) and western woodpeewee (*Contopus sordidulus*).

Red-tailed hawk (*Phainopepla nitens*) and common raven (*Corvus corax*) were heard calling and flying over the project area.

Sign or sightings of mammals included California mule deer (*Odocoileus hemionus californicus*), California ground squirrel (*Spermophilus beecheyi*) and Audubon's cottontail (*Sylvilagus audubonii*).

Appendix C provides a list of wildlife species observed.

### 3.6 Sensitive, Protected and Listed Biological Resources

Sensitive species potentially present include those listed, or candidates for listing by the U. S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW) as reported in the CNDDDB data. All sensitive species were considered as potentially present on the project site if its known geographical distribution encompassed all or part of the project area or if its distribution was near the site and its general habitat requirements were present (Appendix D).

The proposed action includes excavation for the placement of the new pipeline. Surface disturbance is minimal and limited to the sides of the canyon. No significant impacts to sensitive, protected or listed biological resources are expected to occur and no mitigation would be required.

## 4.0 Jurisdictional Waters

The identification of jurisdictional waters in this report is subject to final determination by the various permitting agencies.

Angalls Canyon is mapped as Riverine within the project area (Figure 5). Riverine is defined as "all wetlands and deepwater habitats contained within a channel, with two exceptions: 1) wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens; and 2) habitats with water containing ocean-derived salts of 0.5 ppt [parts per thousand] or greater. A channel is "an open conduit either naturally or artificially created which periodically or continuously contains moving water, or which forms a connecting link between two bodies of standing water (Langbein and Iseri 1960:5)" (Federal Geographic Data Committee. 2013)<sup>1</sup>.

### 4.1 Army Corps of Engineers

The Corps regulates discharges of dredged or fill material into waters of the United States. These watersheds include wetlands and non-wetland bodies of water that meet specific criteria. The lateral limit of Corps jurisdiction extends to the Ordinary High-Water Mark (OHWM) and to any wetland areas extending beyond the OHWM; thus, the maximum jurisdictional area is represented by the OHWM or wetland limit, whichever is greater.

In 2023, the Corps redefined two standard terms found in the regulation that set the standards for determining jurisdiction. These standards are Relatively Permanent and Significant Nexus.

**"Relatively Permanent" is a test that** provides important efficiencies and clarity for regulators and the public by readily identifying a subset of waters that will virtually always significantly affect paragraph (a)(1) waters. To meet the relatively permanent standard, the waterbodies must be relatively permanent, standing, or continuously flowing waters connected to paragraph (a)(1) waters or waters with a continuous surface connection to such relatively permanent waters or to paragraph (a)(1) waters."<sup>2</sup>

Waters classified as (a)(1) are: 1) Traditional navigable waters, such as oceans and major rivers; 2) Territorial seas; and) Interstate waters but not interstate wetlands.

**Significant Nexus is a test that** clarifies if certain waterbodies, such as tributaries and wetlands, are subject to the Clean Water Act based on their connection to and effect on larger downstream waters that Congress fundamentally sought to protect. A significant nexus exists if the waterbody (alone or in combination) significantly affects the chemical, physical, or biological integrity of traditional navigable waters, the territorial seas, or interstate waters."<sup>3</sup>

---

<sup>1</sup> <https://www.fws.gov/media/classification-wetlands-and-deepwater-habitats-united-states>

<sup>2</sup> <https://www.epa.gov/system/files/documents/2022-12/Public%20Fact%20Sheet.pdf>

<sup>3</sup> *ibid*

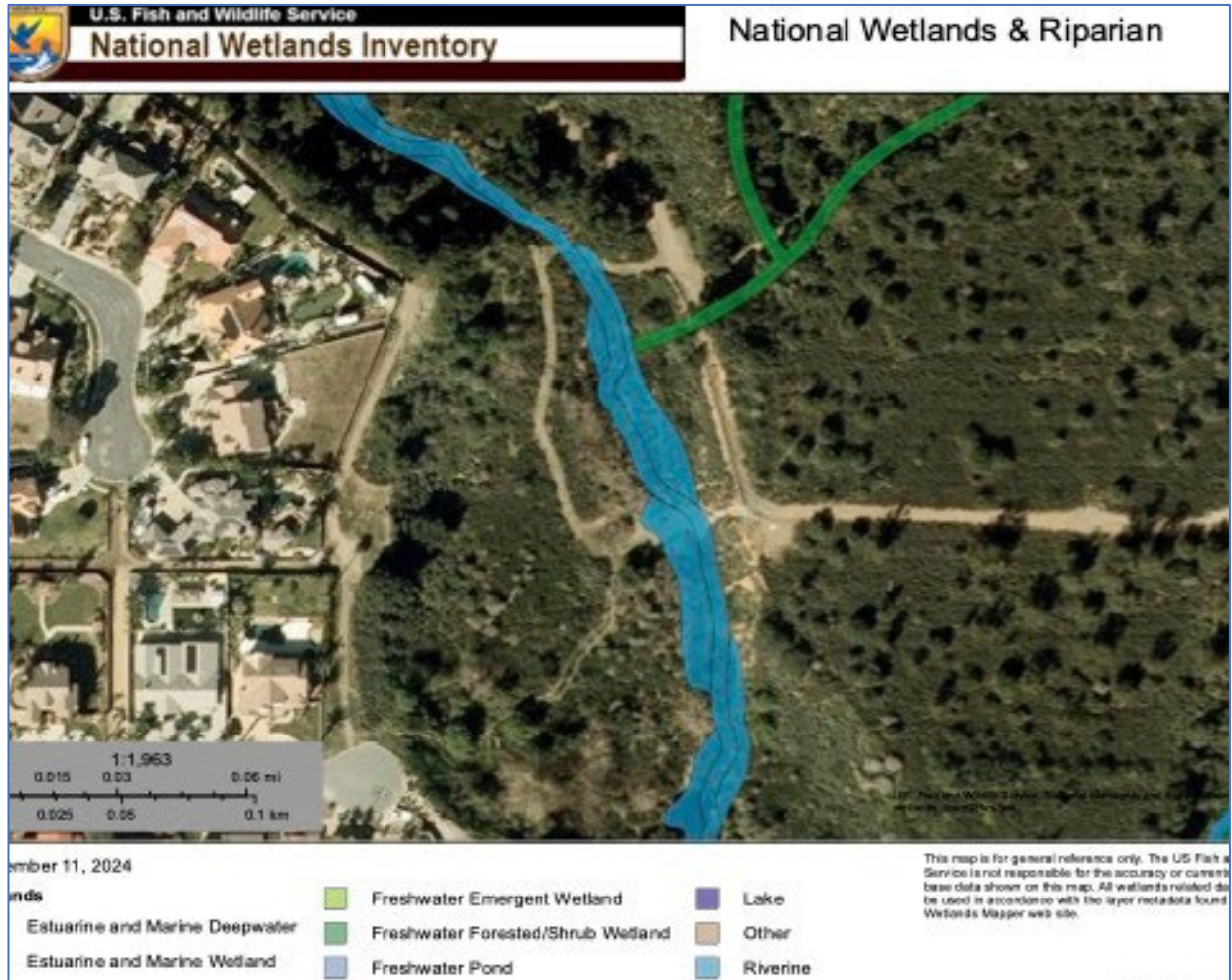


Figure 5. Wetland Inventory Designation.

Angall Canyon flows into a channel that eventually flows into Prado Basin, a section of the Santa Ana River. At the time of the survey, Angall Canyon had a continuous flow that appears to be permanent. This meets the Relatively Permanent Test. In addition to the presence of flow, Angall Canyon drains into a concrete channel that eventually connects Prado Basin, a section of the Santa Ana River an interstate water that flows to the Pacific Ocean. This meets the Significant Nexus test. Angalls Canyon drainage would be considered a jurisdictional water as of the 2023 regulations, subject to the provisions of the Clean Water Act and would require evaluation under the 4040 permit requirements.

#### 4.2 Regional Water Quality Control Board

The Corps has delegated the authority for use of 404 permits to each individual state. The use of a 404 permit in California is regulated by the State Water Resources Control Board (SWRCB) under Section 401 of the Clean Water Act regulations. The Board has authority to issue a 401 permit that allows the use of a 404 permit in the state, with the authority in the state being vested in regional offices known as Regional Water Quality Control Boards (RWQCB).

The Act identifies beneficial uses of waters of the state that the RWQCB use to evaluate jurisdiction. These beneficial uses (BUs) include Warm Freshwater Habitat (WARM), Wildlife Habitat (WILD), Groundwater Recharge (GWR), Agricultural Supply (AGR), and Non-Contact Water Recreation (REC2) (which is limited by fencing), beneficial use of “rare, threatened or endangered species habitat”, Municipal and Domestic Supply (MUN), Agricultural Supply (AGR), Industrial Service Supply (IND), and Industrial Process Supply (PROC).

Under the Porter-Cologne Act of 2003, the SWRCB has extended its responsibilities to include impacts to water quality from non-point source pollution. In addition, the SWRCB has the responsibility to require that projects address ground water and water quality issues, which would be evaluated as part of the geotechnical and hydrology studies. Their authority extends to all waters of the State (of California).

Angalls Canyon provides a number of Beneficial Uses as defined by the RWQCB. These include WILD, GWR, AGR and possibly MUN. Angalls Canyon would fall under the jurisdiction of the RWQCB.

#### **4.3 California Department of Fish and Wildlife**

The California Department of Fish and Wildlife (CDFW), through provisions of the State of California Administrative Code, is empowered to issue agreements for any alteration of a river, stream or lake where fish or wildlife resources may adversely be affected. Streams (and rivers) are defined by the presence of a channel bed and banks, and at least an intermittent flow of water. Lateral limits of jurisdiction are not clearly defined, but generally include any riparian resources associated with a stream or lake, CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream or lake as defined by CDFW.

The CDFW further defines a stream as: “A stream is a body of water that flows at least periodically or intermittently through a bed or channel having banks and that supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation.” Title 14, Section 1.72. Stream (Includes Creeks and Rivers).

The wildlife values of Angalls Canyon are high for species in the area and moderate for migratory species. Surface water and riparian habitat are present. Based on our field observations the CDFW may claim jurisdiction over this drainage.

#### **Jurisdictional Findings**

The proposed action is underground drilling for the placement of the two new pipes. Surface disturbance is expected to be minimal, temporary and limited to the sides of the canyon. No significant impacts to jurisdictional waters are expected. No mitigation should be required for impacts to protected waters in addition to Storm Water Prevention and Pollution Program requirements.

## **5.0 Raptors, Migratory Birds, and Habitat**

At the time of the survey, the project area had nesting habitat for ground-, shrub-, and tree-nesting species. A breeding bird survey following the recommended guidelines of the MBTA is required to determine if nesting is occurring in this area.

1. If the start of construction<sup>4</sup> occurs between February 1 and August 31, then a qualified biologist shall conduct a breeding bird survey no more than three days prior to the start of construction to determine if nesting is occurring
2. If occupied nests are found, they shall not be disturbed unless the qualified biologist verifies through non-invasive methods that either (a) the adult birds have not begun egg-laying and incubation; or (b) the juveniles from the occupied nests are capable of independent survival.
3. If the biologist is not able to verify one of the above conditions, then no disturbance shall occur within a distance specified by the qualified biologist for each nest or nesting site. The qualified biologist will determine the appropriate distance in consultation with the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service.

## **6.0 Offsite and Temporary Impacts**

The construction plans for this project have not been prepared. As we understand it, there are no offsite areas that will be used in the construction of the pipeline.

No temporary impacts are expected since all construction is expected to be confined to occur within the grading area.

---

<sup>4</sup> "Construction" includes selection of staging areas, demolition, tree, trash and debris removal, placement of equipment and machinery on to the site preparatory to grading, and any other project-related activity that increases noise and human activity on the project site beyond existing levels. Emergency measures are exempt from this definition.

## 7.0 References

- Burt, W. H., 1986. A Field Guide to the Mammals in North American North of Mexico. Houghton Mifflin Company, Boston, Massachusetts.
- California Department of Fish and Wildlife, 2012. Staff Report on Burrowing Owl Mitigation. Report prepared by the State of California Natural Resources Agency, Department of Fish and Wildlife, March 7, 2012.
- California Department of Fish and Wildlife, 2024. Special Animals. The Resources Agency, Department of Fish and Wildlife, Sacramento, California.
- California Department of Fish and Wildlife, 2024. Biogeographic Information & Observation System (BIOS) at <https://www.wildlife.ca.gov/Data/BIOS>. Accessed August 5, 2024.
- Federal Geographic Data Committee. 2013. Classification of wetlands and deepwater habitats of the United States. FGDCSTD0042013. Second Edition. Wetlands Subcommittee, Federal Geographic Data Committee and U.S. Fish and Wildlife Service, Washington, DC.
- Garrett, K. and J. Dunn, 1981. Birds of Southern California. Los Angeles Audubon Society. The Artisan Press, Los Angeles, California.
- Grenfell, W. E., M. D. Parisi, and D. McGriff, 2003. "A Check-list of the Amphibians, Reptiles, Birds and Mammals of California". California Wildlife Habitat Relationship System, California Department of Fish and Wildlife, Sacramento, California.
- Hickman, J. C., ed. 1993. The Jepson Manual: Higher Plants of California. University of California Press.
- Hickman, J. C., ed. 1993. The Jepson Manual: Higher Plants of California. University of California Press.
- Langbein, W. B., and K. T. Iseri. 1960. General introduction and hydrologic definitions manual of hydrology. Part 1. General surface water techniques. U.S. Geol. Surv. Water Supply Pap. 1541A.
- Shuford, W. D., and Gardali, T., editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.
- Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available online at <http://websoilsurvey.nrcs.usda.gov/>. Accessed June 12, 2024.
- U.S. Fish and Wildlife Service, 2024. Information, Planning, and Conservation System (IPAC). <http://ecos.fws.gov/ecp/report/table/critical-habitat.html>. Accessed August 5, 2024.

**Appendix A Site Photos**

---



Photo 1. Overview of the project area, looking east. View of oak woodlands on the sides of the canyon.



Photo 2. North-south alignment of the project, looking north.



Photo 3. Looking west along the northern pipeline alignment from the canyon bottom.



Photo 4. Northern pipeline alignment. Bottom of the canyon looking east.



Photo 5. Northern pipeline alignment. Bottomo of canyon looking west.



Photo 6 Southern pipeline alignment. Looking east down canyon slope.



Photo 7. East side of the canyon at point where southern pipeline will connect to existing line.



Photo 8. Southern drainage alignment, looking east to terminus.

**Appendix B Hydrological Soil Classification System**

---

<b>Hydrologic Soil Group</b>	<b>Description</b>
Hydrologic Soil Group A	The soils have a high infiltration rate even when thoroughly wetted. They chiefly consist of deep, well drained to excessively drained sands or gravels. They have a high rate of water transmission. (Low runoff potential).
Hydrologic Soil Group B	The soils have a moderate infiltration rate when thoroughly wetted. They chiefly are moderately deep to deep, moderately well drained to well drained soils that have moderately fine to moderately coarse textures. They have a moderate rate of water transmission.
Hydrologic Soil Group C	The soils have a slow infiltration rate when thoroughly wetted. They chiefly have a layer that impedes downward movement of water or have moderately fine to fine texture. They have a slow rate of water transmission.
Hydrologic Soil Group D	The soils have a very slow infiltration rate when thoroughly wetted. They chiefly consist of clay soils that have a high swelling potential, soils that have a permanent highwater table, soils that have a claypan or clay layer at or near the surface, and shallow soils over nearly impervious material. They have a very slow rate of water transmission. (High runoff potential).
Dual Hydrologic Soil Group	Dual hydrologic groups, A/D, B/D, and C/D, are given for certain wet soils that can be adequately drained. The first letter applies to the drained condition, the second to the undrained. Only soils that are rated D in their natural condition are assigned to dual classes. Soils may be assigned to dual groups if drainage is feasible and practical.

***Appendix C Plants and Animal Species Observed***

---

**PLANT SPECIES OBSERVED**

Survey dates: March 19 and May 2, 2024. Asterisk (\*) indicates species not native to California.

++ denotes CNPS List species

Latin Name	Common Name
<b>Lycophytes</b>	
<b>Selaginellaceae</b>	
<i>Selaginella bigelovii</i> Underw.	<b>Spike Moss Family</b> Bigelow's Club Moss
<b>Polypodiopsida (class)</b>	
<b>Ferns</b>	
<b>Polypodiaceae</b>	
<i>Polypodium californicum</i> Kauff	<b>Chain Fern Family</b> California Polypody
<b>Pteridaceae</b>	
<i>Pellaea andromedifolia</i> (Kaulf.) Fée	<b>Maidenhair Fern Family</b> Coffee Fern
<b>Eudicots</b>	
<b>Flowering Plants</b>	
<b>Anacardiaceae</b>	
<i>Malosma laurina</i> (Nutt.) Nutt. ex Abrams	<b>Sumac Family</b> Laurel Sumac
<i>Toxicodendron diversilobum</i> (Torr. & A. Gray) Greene	Poison Oak
<b>Asteraceae</b>	
<i>Anthemis cotula</i> L.	<b>Sunflower Family</b> Mayweed
<i>Artemisia californica</i> Less.	California Sagebrush
<i>Artemisia douglasiana</i> Besser	California Mugwort
<i>Baccharis salicifolia</i> (Ruiz & Pav.) Pers. ssp. <i>salicifolia</i>	Mulefat
<i>Carduus pycnocephalus</i> L.*	Italian Thistle
<i>Centaurea melitensis</i> L.*	Tocalote, Star Thistle
<i>Eriophyllum confertiflorum</i> (DC. A. Gray)	Golden Yarrow
<i>Lepidospartum squamatum</i> (A. Gray) A. Gray	Scalebroom
<i>Pseudognaphalium biolettii</i> Anderb.	Two-color Rabbit Tobacco
<i>Pseudognaphalium californicum</i> (DC.) Anderb.	Ladies' Tobacco
<i>Silybum marianum</i> (L.) Gaertn.*	Milk Thistle
<i>Sonchus asper</i> (L.) Hill*	Spiny Sowthistle
<b>Boraginaceae</b>	
<i>Amsinckia menziesii</i> (Lehm.) A. Nelson & J. F. Macbr. var. <i>menziesii</i>	<b>Borage Family</b> Small Flowered Fiddleneck
<i>Cryptantha intermedia</i> (A. Gray) Greene	Common Cryptantha
<i>Cryptantha muricata</i> (Hook. & Arn.) A. Nelson & J. F. Macbr.	Prickly Cryptantha
<i>Phacelia cicutaria</i> Greene	Caterpillar Phacelia
<b>Brassicaceae</b>	
<i>Eruca vesicaria</i> (L.) Cav. ssp. <i>sativa</i> (Mill.) Thell.*	<b>Mustard Family</b> Garden Rocket
<i>Hirschfeldia incana</i> (L.) Lagr. -Fossat*	Short-pod Mustard
<i>Raphanus sativus</i> L. *	Jointed Charlock, Wild Radish
<b>Cactaceae</b>	
<i>Opuntia littoralis</i> (Engelm.) Cockerell	<b>Cactus Family</b> Coastal Pricklypear

Latin Name	Common Name
<b>Crassulaceae</b>	<b>Stonecrop Family</b>
<i>Crassula connata</i> (Ruiz & Pav.) A. Berger	Sand Pymy Weed
<b>Caprifoliaceae</b>	<b>Honeysuckle Family</b>
<i>Lonicera subspicata</i> var. <i>denudata</i>	Johnston's Honeysuckle
<b>Convulvulaceae</b>	<b>Morning Glory Family</b>
<i>Calystegia macrostegia</i> (Greene) Brummitt ssp. <i>arida</i>	Southern California Morning Glory
<b>Cucurbitaceae</b>	<b>Cucumber Family</b>
<i>Marah macrocarpa</i> (Greene) Greene	Chilicothe
<b>Euphorbiaceae</b>	<b>Euphorb Family</b>
<i>Ricinus communis</i> L. *	Castor Bean
<b>Fabaceae</b>	<b>Legume Family</b>
<i>Acmispon glaber</i> (Vogel) Brouillet var. <i>brevialatus</i> (Ottley) Brouillet	Short-winged Deerweed
<i>Acmispon strigosus</i> (Nutt.) Brouillet	Strigose lotus
<i>Lathyrus vestitus</i> Nutt.	Common Pacific Pea
<i>Melilotus indicus</i> (L.) All.*	Indian Clover
<i>Vicia villosa</i> Roth ssp. <i>villosa</i> *	Hairy Vetch
<b>Fagaceae</b>	<b>Beech Family</b>
<i>Quercus agrifolia</i> Nee <i>agrifolia</i>	Coast Live Oak
<b>Geraniaceae</b>	<b>Geranium Family</b>
<i>Erodium botrys</i> (Cav.) Bertol. *	Big Heronbill
<i>Erodium cicutarium</i> L.*	Red-stemmed Filaree
<b>Lamiaceae</b>	<b>Mint Family</b>
<i>Marrubium vulgare</i> L.*	Horehound
<i>Salvia apiana</i> Jeps.	White Sage
<i>Salvia mellifera</i> Greene	Black Sage
<b>Malvaceae</b>	<b>Mallow Family</b>
<i>Malva parviflora</i> L.	Cheeseweed
<b>Myrtaceae</b>	<b>Myrtle Family</b>
<i>Eucalyptus camaldulensis</i> Dehnh.*	Blue Gum
<b>Oleaceae</b>	<b>Olive Family</b>
<i>Olea europea</i> L. *	European Olive
<b>Onagraceae</b>	<b>Four O'clock Family</b>
<i>Epilobium ciliatum</i> Raf. ssp. <i>ciliatum</i>	Fringed Willowherb
<i>Eulobus californicus</i> Torr. & A. Gray	California Primrose
<b>Papaveraceae</b>	<b>Poppy Family</b>
<i>Eschscholzia californica</i> Cham.	California Poppy
<b>Plantaginaceae</b>	<b>Plantain Family</b>
<i>Keckiella cordifolia</i> (Benth.) Straw	Heart-leaved Penstemon
<i>Penstemon spectabilis</i> Thurb. ex A. Gray var. <i>subviscosus</i> (D. D. Keck) McMinn	Showy Penstemon
<b>Phrymaceae</b>	<b>Lopseed Family</b>
<i>Diplacus longiflorus</i> Nutt.	Southern Bush Monkeyflower

Latin Name	Common Name
<b>Platanaceae</b>	<b>Sycamore Family</b>
<i>Platanus racemosa</i> Nutt.	California Sycamore
<b>Polygonaceae</b>	<b>Buckwheat Family</b>
<i>Eriogonum fasciculatum</i> Benth. var. <i>foliolosum</i> (Nutt.) S. Stokes ex Abrams	California Buckwheat
<i>Rumex crispus</i> L.*	Curly Dock
<b>Rhamnaceae</b>	<b>Buckthorn Family</b>
<i>Frangula californica</i> (Eschsch.) A. Gray ssp. <i>californica</i>	California Coffeeberry
<i>Ceanothus crassifolius</i> Torr.	Hoary Leaved Ceanothus
<i>Ceanothus leucodermis</i> Greene	Chaparral Whitethorn
<i>Ceanothus megacarpus</i> Nutt.	Big Pod Ceanothus
<b>Rosaceae</b>	<b>Rose Family</b>
<i>Heteromeles arbutifolia</i> (Lindley) Roemer	Toyon
<b>Rubiaceae</b>	<b>Coffee Family</b>
<i>Galium aparine</i> L.	Common Bedstraw
<b>Scrophulariaceae</b>	<b>Figwort Family</b>
<i>Myoporum laetum</i> G. Forst. *	Ngaio Tree
<b>Solanaceae</b>	<b>Nightshade Family</b>
<i>Datura wrightii</i> Regel	Jimsonweed
<i>Nicotiana glauca</i> Graham*	Tree Tobacco
<i>Solanum laciniatum</i> Aiton *	Kangaroo Apple
<b>Tamaricaceae</b>	<b>Tamarix Family</b>
<i>Tamarix ramosissima</i> Ledeb.	Tamarisk
<b>Viburnaceae (Adoxaceae)</b>	<b>Viburnum or Moschatel Family</b>
<i>Sambucus mexicana</i> C. Presl ex DC.	Blue Elderberry
<b>Monocots</b>	<b>Grasses And Allies</b>
<b>Arecaceae</b>	<b>Palm Family</b>
<i>Washingtonia robusta</i> H. Wendl. *	Mexican Fan Palm
<b>Agavaceae</b>	<b>Agave Family</b>
<i>Agave americana</i> L.	Century Plant
<i>Hesperoyucca whipplei</i> (Torr.) Trel.	Chaparral Yucca
<b>Cyperaceae</b>	<b>Sedge Family</b>
<i>Cyperus involucratus</i> Rottb. *	Umbrella Plant
<b>Poaceae</b>	<b>Grass Family</b>
<i>Avena barbata</i> Pott. Ex Link*	Slender Oats
<i>Avena fatua</i> L.	Wild Oats
<i>Bromus diandrus</i> Roth*	Ripgut Brome
<i>Bromus hordeaceus</i> L.*	Soft Chess
<i>Bromus rubens</i> L. *	Red Brome
<i>Hordeum murinum</i> L.*	Foxtail Barley
<i>Elymus condensatus</i> J. Pressl.	Giant Rye
<i>Melica imperfecta</i> Trin.	West Coast Melic

Latin Name	Common Name
<i>Muhlenbergia rigens</i> (Benth.) Hitchc.	Deergrass
<i>Stipa miliacea</i> (L.) Hoover var. <i>miliacea</i> *	Smilo Grass
<b>Themidaceae</b>	<b>Brodiaea Family</b>
<i>Dipterostemon capitatum</i> (Benth.) Rydb.	Blue Dicks

Taxonomy and nomenclature follow Hickman 2012 for plants, Hall 1981 and Stebbins 1966 for animals.

### Alphabetical List of Plants and Alignment Occurrence

Scientific Name	Family	Alignment
<i>Acmispon glaber</i>	Fabaceae	A
<i>Acmispon glaber</i>	Fabaceae	B
<i>Agave americana</i>	Agavaceae	A
<i>Amsinckia menziesii</i>	Boraginaceae	A
<i>Anthemis cotula</i>	Asteraceae	A
<i>Artemisia californica</i>	Asteraceae	A
<i>Artemisia douglasiana</i>	Asteraceae	A
<i>Artemisia douglasiana</i>	Asteraceae	B
<i>Avena barbata</i>	Poaceae	B
<i>Avena fatua</i>	Poaceae	A
<i>Baccharis salicifolia</i> ssp. <i>salicifolia</i>	Asteraceae	A
<i>Bromus diandrus</i>	Poaceae	A
<i>Bromus hordeaceus</i>	Poaceae	A
<i>Bromus rubens</i>	Poaceae	A
<i>Calystegia macrostegia</i> ssp. <i>arida</i>	Convulvulaceae	A
<i>Carduus pycnocephalus</i>	Italian Thistle	A
<i>Ceanothus crassifolius</i>	Rhamnaceae	B
<i>Ceanothus leucodermis</i>	Rhamnaceae	A
<i>Ceanothus megacarpus</i>	Rhamnaceae	B
<i>Centaurea melitensis</i>	Asteraceae	A
<i>Centaurea melitensis</i>	Asteraceae	B
<i>Corethrogyne filaginifolia</i>	Asteraceae	A
<i>Crassula connata</i>	Crassulaceae	A
<i>Cryptantha intermedia</i>	Boraginaceae	B
<i>Cryptantha muricata</i>	Boraginaceae	B
<i>Diplacus longifolius</i>	Phrymaceae	B
<i>Dipterostemon capitatum</i>	Themidaceae	A
<i>Elymus condensatus</i>	Poaceae	A
<i>Eriogonum fasciculatum</i>	Polygonaceae	A
<i>Eriogonum fasciculatum</i>	Polygonaceae	B
<i>Eriophyllum confertiflorum</i>	Asteraceae	A
<i>Erodium botrys</i>	Geraniaceae	A

Scientific Name	Family	Alignment
<i>Erodium cicutarium</i>	Geraniaceae	A
<i>Eruca versicaria</i>	Brassicaceae	A
<i>Eucalyptus camaldulensis</i>	Myrtaceae	A
<i>Frangula crocea</i>	Rhamnaceae	B
<i>Galium aparine</i>	Rubiaceae	A
<i>Helianthus annuus</i>	Asteraceae	A
<i>Hesperoyucca whipplei</i>	Agavaceae	A
<i>Heteromeles arbutifolia</i>	Rosaceae	A
<i>Heterotheca grandiflora</i>	Asteraceae	A
<i>Hirschfeldia incana</i>	Brassicaceae	A
<i>Hirschfeldia incana</i>	Brassicaceae	B
<i>Hordeum marinum</i>	Poaceae	A
<i>Keckiella cordifolia</i>	Plantaginaceae	A
<i>Lactuca serriola</i>	Asteraceae	A
<i>Lepidospartum squamatum</i>	Asteraceae	A
<i>Lonicera subspicata</i>	Caprifoliaceae	A
<i>Lonicera subspicata</i>	Caprifoliaceae	B
<i>Malosma laurina</i>	Anacardiaceae	A
<i>Malva parviflora</i>	Malvaceae	A
<i>Marah macrocarpa</i>	Cucurbitaceae	A
<i>Marrubium vulgare</i>	Lamiaceae	A
<i>Melica imperfecta</i>	Poaceae	A
<i>Melilotus indica</i>	Fabaceae	A
<i>Muhlenbergia rigens</i>	Poaceae	A
<i>Nicotiana glauca</i>	Solanaceae	A
<i>Nicotiana glauca</i>	Solanaceae	B
<i>Opuntia littoralis</i>	Cactaceae	A
<i>Pellaea andromedifolia</i>	Pteridaceae	B
<i>Penstemon spectabilis</i>	Plantaginaceae	B
<i>Phacelia cicutaria</i>	Boraginaceae	A
<i>Phacelia cicutaria</i>	Boraginaceae	B
<i>Platanus racemosa</i>	Platanaceae	A
<i>Polypodium californicum</i>	Polypodiaceae	B
<i>Pseudognaphalium biolettii</i>	Asteraceae	A
<i>Pseudognaphalium californicum</i>	Asteraceae	A
<i>Quercus agrifolia</i>	Fagaceae	A
<i>Quercus agrifolia</i>	Fagaceae	B
<i>Raphanus sativus</i>	Brassicaceae	A
<i>Salvia apiana</i>	Lamiaceae	A
<i>Salvia mellifera</i>	Lamiaceae	A

Scientific Name	Family	Alignment
<i>Salvia mellifera</i>	Lamiaceae	B
<i>Sambucus mexicana</i>	Viburnaceae	A
<i>Selaginella bigelovii</i>	Selaginellaceae	A
<i>Senecio vulgaris</i>	Asteraceae	A
<i>Silybum marianum</i>	Asteraceae	A
<i>Silybum marianum</i>	Asteraceae	B
<i>Sonchus oleraceus</i>	Asteraceae	A
<i>Stipa miliacea</i> var. <i>miliacea</i>	Poaceae	A
<i>Tamarix ramosissima</i>	Tamaricaceae	A
<i>Toxicodendron diversilobum</i>	Anacardiaceae	A
<i>Vicia villosa</i> ssp. <i>villosa</i>	Fabaceae	A
<i>Washingtonia robusta</i>	Arecaceae	A

**WILDLIFE SPECIES OBSERVED**

Survey dates: March 19 and May 2, 2024. Asterisk (\*) indicates species not native to California.

Latin Name	Common Name
<b>Class Insecta - Insects</b>	
<b>Nymphalidae</b>	<b>Brush-footed Butterflies</b>
<i>Nymphalis antiopa</i>	Mourning Cloak
<b>Pieridae</b>	<b>Brush-footed Butterflies</b>
<i>Anthocharis sara</i>	Sara Orangetip
<b>Sphingidae</b>	<b>Sphinx Moths</b>
<i>Hyles lineata</i>	White-lined Sphinx Moth
<b>Class Reptilia - Reptiles</b>	
<b>Phrynosomatidae</b>	<b>Spiny Lizards</b>
<i>Sceloporus occidentalis</i>	Western Fence Lizard
<b>Class Aves - Birds</b>	
<b>Accipitridae</b>	<b>Hawks</b>
<i>Accipiter cooperii</i>	Cooper's Hawk
<i>Buteo jamaicensis</i>	Red-tailed Hawk
<b>Aegithalidae</b>	<b>Bushtits</b>
<i>Psaltriparus minimus</i>	Bushtit
<b>Columbidae</b>	<b>Doves and Pigeons</b>
<i>Zenaida macroura</i>	Mourning Dove
<b>Corvidae</b>	<b>Crows, Jays, and Ravens</b>
<i>Aphelocoma californica</i>	California Scrub-jay
<i>Corvus corax</i>	Common Raven
<b>Emberizidae</b>	<b>New World Sparrows</b>
<i>Artemisiospiza belli</i>	Bell's Sparrow
<i>Melospiza melodia</i>	Song Sparrow
<i>Melospiza crissalis</i>	California Towhee
<i>Pipilo maculatus</i>	Spotted Towhee
<b>Fringilidae</b>	<b>Finches</b>
<i>Haemorhous mexicanus</i>	House Finch
<i>Spinus psaltria</i>	Lesser Goldfinch
<b>Icteridae</b>	<b>Blackbirds</b>
<i>Icterus bullockii</i>	Bullock's Oriole
<b>Mimidae</b>	<b>Mimic Thrushes</b>
<i>Mimus polyglottos</i>	Northern Mockingbird
<b>Odontophoridae</b>	<b>New World Quails</b>
<i>Callipepla californica</i>	California Quail
<b>Paridae</b>	<b>Tits and Chickadees</b>
<i>Baeolophus inornatus</i>	Plain Titmouse
<b>Parulidae</b>	<b>New World Warblers</b>

Latin Name	Common Name
<i>Oreothlypis celata</i>	Orange-crowned Warbler
<i>Setophaga petechia</i>	Yellow Warbler
<b>Picidae</b>	<b>Woodpeckers</b>
<i>Colaptes auratus</i>	Northern Flicker
<i>Melanerpes formicivorus</i>	Acorn Woodpecker
<i>Picoides nuttallii</i>	Nuttall's Woodpecker
<b>Poliophtilidae</b>	<b>Gnatcatchers</b>
<i>Poliophtila caerulea</i>	Blue-gray Gnatcatcher
<b>Ptilogonatidae</b>	<b>Silky Flycatchers</b>
<i>Phainopepla nitens</i>	Phainopepla
<b>Regulidae</b>	<b>Kinglets</b>
<i>Regulus calendula</i>	Ruby-crowned Kinglet
<b>Sylviidae</b>	<b>Typical Warblers</b>
<i>Chamaea fasciata</i>	Wrentit
<b>Trochilidae</b>	<b>Hummingbirds</b>
<i>Calypte anna</i>	Anna's Hummingbird
<i>Selasphorus sp.</i>	Unknown Selasphorus Hummingbird
<b>Troglodytidae</b>	<b>Wrens</b>
<i>Thryomanes bewickii</i>	Bewick's Wren
<i>Troglodytes aedon</i>	House Wren
<b>Tyrannidae</b>	<b>Tyrant Flycatchers</b>
<i>Sayornis nigricans</i>	Black Phoebe
<i>Contopus sordidulus</i>	Western Wood-pewee
<b>Class Mammalia - Mammals</b>	
<b>Canidae</b>	<b>Dogs and Coyotes</b>
<i>Canis latrans</i>	Coyote
<b>Cervidae</b>	<b>Deer, Elk</b>
<i>Odocoileus hemionus californicus</i>	California Mule Deer
<b>Leporidae</b>	<b>Wrens</b>
<i>Sylvilagus audubonii</i>	Desert Cottontail
<b>Sciuridae</b>	<b>Squirrels</b>
<i>Spermophilus beecheyi</i>	California Ground Squirrel

**Appendix D Sensitive Resources Table**

---

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
<b>Plants</b>				
San Gabriel manzanita <i>Arctostaphylos glandulosa</i> ssp. <i>gabrielensis</i>	Shrub. Granitic soils. Chaparral. Sierra Madre, San Bernardino and San Gabriel mountains. 950 - 2000 meters (3120 - 6600 feet).	March flowering period	FESA: ND USFS: S CESA: ND CNPS: 1B.2	None. Site has suitable habitat and soils; below recorded elevation.
Singlewhorl burrobrush <i>Ambrosia monogyra</i>	Perennial shrub. Sandy soils Washes, dry riverbed. Below 500 meters (1650 feet). Southern California and east of the Sierras to Arizona, New Mexico, Nevada and Texas. Also in Baja California Sonora, Mexico.	August - November flowering period	FESA: ND CESA: ND CNPS: 2B.2	None. Site lacks dry washes and dry riverbeds; above recorded elevation.
Marsh sandwort <i>Arenaria paludicola</i>	Perennial herb. Boggy meadows, swamps and freshwater marshes. Below 300 meters (985 feet). San Bernardino, Los Angeles, coastal counties. Mexico. In San Bernardino mostly along Santa Ana River.	May - Aug flowering period	FESA: END CESA: END CNPS: 1B.1	None. Site lacks freshwater marshes, swamps and meadows.
Mojave milkweed <i>Asclepias nyctaginifolia</i>	Perennial herb. Sandy soils. Arroyos, dry slopes. 1000 - 1700 meters (3280 - 5600 feet). Mojave Desert.	May - June	FESA: ND CESA: ND CNPS: 2B.1	None. Site does not contain suitable habitat and is west of the recorded range (with the exception of one historical record in the coastal area).
San Antonio milk-vetch <i>Astragalus lentiginosus</i> var. <i>antonius</i>	Perennial herb. Yellow pine forest, red fir forest, lodgepole forest. 1400 - 2600 meters (4600 - 8530 feet). San Gabriel Mountains.	April - July	FESA: ND USFS: S CESA: ND CNPS: 1B.3	None. Site does not contain suitable habitat and is below the recorded elevation.
Big Bear Valley woolly pod <i>Astragalus leucolobus</i>	Perennial herb. Dry rocky areas, openings in sandy woods and stony shores, pebble plains. 1450 - 2900 meters (4760 - 9500 feet). Tehachapi and San Jacinto mtns, Transverse Ranges.	May - July flowering period	FESA: C2* BLM: BLMS CESA: ND CNPS: 1B.2	None. Site lacks suitable habitat.
Coulter's saltbush <i>Atriplex coulteri</i>	Perennial herb. Alkaline or clay soils. Dunes, open sites, coastal areas. Coastal strand, coastal sage scrub and valley grasslands communities. Below 500 meters (1640 feet).	March - Oct flowering period	FESA: ND CESA: ND CNPS: 1B.2	None. Site lacks suitable soils and land features (dunes, open sites).

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Nevin's barberry <i>Berberis nevinii</i>	Shrub. Sandy and gravelly soils. Washes in coastal sage scrub and chaparral. Below 650 meters (2150 feet). Southwestern California coast inland to San Bernardino and Riverside counties.	Year round	FESA: END CESA: END CNPS: 1B.1	None. Species was not observed.
Upswept moonwort <i>Botrychium ascendens</i>	Rhizomatous fern. Leaf deciduous. Moist meadows, open woodland near streams or seeps. Yellow pine forest. 1500 - 3200 meters (4900 - 10,500 feet). Cascades, Sierra Nevada, east of Sierra Nevada. Historical locations in San Gabriel, San Bernardino mtns.	July - August	FESA: ND USFS: S CESA: ND CNPS: 2B.3	None. Suitable habitat does not exist on site.
Scalloped moonwort <i>Botrychium crenulatum</i>	Rhizomatous fern. Leaf deciduous. Meadows, freshwater- marsh bogs and fens. Yellow pine forest. 1500--3600 meters, 4900 - 11,820 feet. Inner coastal ranges, eastern California mtns, San Bernardino and San Gabriel mtns.	June - September	FESA: ND USFS: S CESA: ND CNPS: 2B.2	None. Suitable habitat does not exist on site.
Slender mariposa lily <i>Calochortus clavatus</i> var. <i>gracilis</i>	Perennial herb. Shaded foothill canyons in chaparral. Below 1000 meters, 3280 feet. Western Transverse Ranges from near the coast to the San Bernardino Mountains.	March - June	FESA: ND USFS: S CESA: ND CNPS: 1B.2	None. Was not observed during the surveys.
Palmer's mariposa lily <i>Calochortus palmeri</i> var. <i>palmeri</i>	Perennial bulbiferous herb. Meadows and moist places in early spring. 710 - 2390 meters, 2330 - 7840 feet. Chaparral and yellow pine forest. San Bernardino Mts. to Tehachapi Mts. East San Luis Obispo.	April - July	FESA: ND USFS: S BLM: S CESA: ND CNPS: 1B.2	None. No suitable moist or mesic habitats.
Plummer's mariposa lily <i>Calochortus plummerae</i>	Perennial bulbiferous herb. Dry, rocky areas (granitic, rocky substrate) in foothill woodland, valley grassland, coastal sage scrub, chaparral, yellow pine forest. 100 - 1700 meters, 330 - 5580 feet. Coastal ranges from Ventura east to Transverse and Peninsular ranges.	May - July	FESA: ND USFS: S CESA: ND CNPS: 4.2	None. Species not observed.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Lucky morning-glory <i>Calystegia felix</i>	Annual herb. Historically associated with wetland and marshy places, but possibly in drier situations as well. Possibly silty loam and alkaline soils. 30 - 215 meters, 100 - 705 feet. San Bernardino Valley, Chino and Chino Hills.	March - September	FESA: ND CESA: ND CNPS: 1B.1	None. Suitable marshland, wetland habitat is not present. Species not observed.
Pygmy poppy <i>Canbya candida</i>	Annual herb. Granitic, gravelly and sandy soils. Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland. 600 - 1460 meters, 1970 - 4790 feet. Western Mojave, southeastern slopes Sierra Nevada.	March - June	FESA: ND USFS: S CESA: ND CNPS: 4.2	None. Site does not support habitats preferred by this species.
Western sedge <i>Carex occidentalis</i>	Perennial rhizomatous herb. Meadows and seeps in lower montane coniferous forest. 1645 - 3135 meters, 5395 - 10,285 feet. San Gabriel, San Bernardino and San Jacinto mountains.	June - August	FESA: ND CESA: ND CNPS: 2B.3	None. Site does not support habitats preferred by this species.
Salt marsh bird's beak <i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	Annual herb (hemiparasitic). Salt marsh, dunes, coastal areas below 10 meters, 100 feet elevation. Southern California coast. Streams and rivers inland with saline soils.	May-Oct (Nov)	FESA: END BLM: S CESA: END CNPS: 1B.2	None. Site does not support saline soils or marshes.
Parry's spineflower <i>Chorizanthe parryi</i> var. <i>parryi</i>	Annual herb. Found occasionally in opening occasionally rocky or sandy soils. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. 275 - 1220 meters, 900 - 4005 feet. Scattered locations Lancaster - Ventura, west Riverside Co.	April - June	FESA: ND USFS: S BLM: S CESA: ND CNPS: 1B.1	Unlikely. Site supports openings in canyon bottom; but preferred plant communities limited.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
White-bracted spineflower <i>Chorizanthe xanti</i> var. <i>leucotheca</i>	Annual herb. Sometimes on gravelly, sandy soils. Coastal scrub (alluvial fans) Mojavean desert scrub, pinyon and juniper woodland. 300 - 1200 meters, 985 - 3935 feet. Lower slopes of mountains from western Mojave south to San Jacinto Range.	April - June	FESA: ND USFS: S BLM: S CESA: ND CNPS:1B.2	None. Site does not support suitable habitat.
California saw-grass <i>Cladium californicum</i>	Perennial rhizomatous herb. Meadows and seeps, marshes and swamps (alkaline, freshwater), 60 - 1600 meters, 195 - 5250 feet. Mtns. east of Salton Sea, ranges east of the Sierra Mtns, southern coastal ranges and Transverse Ranges.	Jun - September	FESA: ND USFS: S CESA: ND CNPS: 2B.2	None. No suitable mesic habitats are present.
Peirson's spring beauty <i>Claytonia peirsonii</i> ssp. <i>peirsonii</i>	Perennial herb. Granitic and metamorphic soils on scree and talus. Subalpine coniferous forest, upper montane coniferous forest. 1510 - 2745 meters, 4955 - 9005 feet. San Gabriel Mtns.	(Mar)May-Jun	FESA: ND USFS: S CESA: ND CNPS: 1B.2	None. Site lacks suitable soil conditions.
Slender-horned spineflower <i>Dodecahema leptoceras</i>	Annual. Alluvial fans and river systems. Chaparral, cismontane woodland, coastal scrub. 200 - 760 meters, 655 - 2495 feet. Tehachapi Range south to scattered locations San Bernardino and Riverside cos.	Apr - Jun	FESA: END CESA: END CNPS: 1B.1	None. Site does not support alluvial fan communities.
Many-stemmed dudleya <i>Dudleya multicaulis</i>	Perennial herb. Often on clay. Chaparral, coastal scrub, valley and foothill grassland. 15 - 790 meters, 50 - 2590 feet. Coastal, Transverse and Peninsular ranges.	April - July	FESA: ND USFS: S BLM: S CESA: ND CNPS: 1B.2	None. Site has chaparral, but no open clay soil areas.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Santa Ana River woolly star <i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	Perennial herb. Chaparral, coastal scrub (alluvial fans). Sometimes sandy or gravelly soils 91 - 610 meters, 300 - 2000 feet. Lytle Creek, Cajon Creek and Santa Ana River systems from Transverse Range to Santa Ana Mtns.	Apr - Sep	FESA: END CESA: END CNPS: 1B.1	None. Species was not observed.
Johnson's buckwheat <i>Eriogonum microthecum</i> var. <i>johnstonii</i>	Perennial deciduous shrub. Rocky areas, subalpine coniferous forest, upper montane coniferous forest. 1829 - 2926 meters, 6000 - 9600 feet. San Gabriel and San Bernardino mtns.	Jul - Sep	FESA: ND USFS: S CESA: ND CNPS: 1B.3	None. Site does not support suitable habitat, below recorded elevation.
Los Angeles sunflower <i>Helianthus nuttallii</i> ssp. <i>parishii</i>	Perennial rhizomatous herb. Marshes and swamps (freshwater, coastal saltwater). 10 - 1525 meters, 35 - 5005 feet. Los Angeles river basin (upper), Orange County (upper tidal), Desert slope San Gabriel Mtns. (Telegraph Peak map), Lytle, Cajon, Santa Ana River watersheds	Aug - Oct	FESA: ND USFS: S CESA: ND CNPS: 1A	None. No suitable marsh or swamp habitat on site.
Parish's alumroot <i>Heuchera parishii</i>	Perennial rhizomatous herb. Rocky, sometimes carbonate soils. Alpine boulder and rock fields, lower montane coniferous forest, subalpine coniferous forest, upper montane coniferous forest. 1500 - 3800 meters, 4920 - 12470 feet. Desert slopes San Bernardino mtns.	June - Aug	FESA: ND USFS: S CESA: ND CNPS: 1B.3	None. No suitable rocky or carbonate substrates present. General habitat is not present.
Mesa horkelia <i>Horkelia cuneata</i> var. <i>puberula</i>	Perennial herb. Sandy or gravelly soils. Coastal scrub, cismontane woodland, chaparral. 70 - 810 meters, 230 - 2660 feet. Central to southern coastal ranges, extending into San Bernardino, Riverside cos.	Feb-Jul (Sep)	FESA: ND USFS: S BLM: S CESA: ND CNPS: 1B.1	May Occur. Potentially present along creek bottom.
Knotted juncus <i>Juncus nodosus</i>	Perennial rhizomatous herb. Meadows and seeps (mesic), marshes and swamps (lake margins). 30 - 1980 meters, 100 - 6495 feet. Eastern desert ranges into Nevada. One population approximate location San Gabriel Mtns.	Jul -Sep	FESA: ND CESA: ND CNPS: 2B.3	None. The project area does not support meadows, seeps, marshes or swamps.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Robinson's pepper grass <i>Lepidium virginicum</i> var. <i>robinsonii</i>	Annual herb. Chaparral, coastal sage scrub. 1 - 885 meters, 5 - 2905 feet. South Coast Ranges, Channel Islands. One population Sierra Nevada.	Jan - Jul	FESA: ND CESA: ND CNPS: 4.3	May Occur. Not observed during the survey.
Short-sepaled lewisia <i>Lewisia brachycalyx</i>	Perennial herb. Mesic habitats. Meadows and seeps, lower montane coniferous forest. 370 - 2300 meters, 4495 - 7545 feet. San Gabriel, San Bernardino Mtns., Peninsular Range east of San Diego.	(Feb) Apr - Jun (Jul)	FESA: ND USFS: S CESA: ND CNPS: 2B.2	None. No meadows or seeps present.
Lemon lily <i>Lilium parryi</i>	Perennial bulbiferous herb. Mesic habitats. Lower and upper montane coniferous forest, meadows and seeps, riparian forest. 1220 - 2745 meters. 4005 - 9005 feet. Scattered locations, Transverse and Peninsular ranges.	Jul - Aug	FESA: ND USFS: S CESA: ND CNPS: 1B.2	None. No suitable meadows and seeps; below documented elevation.
San Gabriel linanthus <i>Linanthus concinnus</i>	Annual herb. Openings in rocky soils. Chaparral, lower and upper montane coniferous forests. 1520 - 2800 meters, 4985 - 9185 feet. San Gabriel Mountains.	Apr - Jun	FESA: ND USFS: S CESA: ND CNPS: 1B.2	None. Site lacks suitable rocky habitats.
Peirson's lupine <i>Lupinus peirsonii</i>	Perennial herb. Gravelly, rocky soils, Joshua tree woodlands, pinyon and juniper woodland, lower and upper montane coniferous forests. 1000 - 2500 meters, 3280 - 8205 feet. San Gabriel Mountains.	Apr - Jun	FESA: ND USFS: S CESA: ND CNPS: 1B.2 IUCN: NT	None. Site lacks suitable soils and is located outside of known habitats.
Parish's desert-thorn <i>Lycium parishii</i>	Perennial shrub. Sandy to rocky slopes and canyons Coastal sage scrub, creosote bush scrub. 135 - 1000 meters, 445 - 3280 feet. Cajon and Lytle wash areas. San Bernardino Valley and montane areas around the Coachella and Imperial Valley areas.	March - April	FESA: ND CESA: ND CNPS: 2B.3	None. Site lacks suitable habitat.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Parish's bush mallow <i>Malacothamnus parishii</i>	Perennial deciduous shrub. Coastal sage scrub and chaparral. 305 - 455 meters, 1000 - 1495 feet. San Gabriel Mountains.	June - July	FESA: ND CESA: ND CNPS: 1A	None. Site has suitable scrub habitat, site higher than recorded elevation.
Jokerst's monardella <i>Monardella australis</i> ssp. <i>jokerstii</i>	Perennial rhizomatous herb. Steep scree or talus slopes between breccia, drainages. Alluvial Terraces, Scree, slopes, talus, washes. Chaparral, lower montane coniferous forest. 1350 - 1750 meters, 4430 - 5740 feet. San Gabriel Mountains.	July - Sept	FESA: ND USFS: S CESA: ND CNPS: 1B.1	None. Site lacks microhabitats of step scree or talus slopes.
Hall's monardella <i>Monardella macrantha</i> ssp. <i>hallii</i>	Perennial rhizomatous herb. Broad-leaved upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland. 730 - 2195 meters, 2395 - 7200 feet. San Gabriel, San Bernardino and Santa Ana mountains, Peninsular Range south of Temecula.	Jun - Oct.	FESA: ND USFS: S BLM: S CESA: ND CNPS: 1B.3	None. Site lacks habitats preferred by this species.
Pringle's monardella <i>Monardella pringlei</i>	Annual herb. Sandy soils within coastal sage scrub. 300 - 400 meters, 984 -1310 feet. Known from only two locations in Colton. Not been rediscovered during subsequent surveys.	May - June	FESA: ND CESA: ND CNPS: 1A	None, Site lacks suitable habitat.
California muhly <i>Muhlenbergia californica</i>	Perennial rhizomatous herb. Mesic soils, seeps and streambanks. Chaparral, coastal sage scrub, lower montane coniferous forest, meadows and seeps. 100 - 2000 meters, 330 - 6560 feet. Transverse Ranges from Los Angeles through to Little San Bernardino Mountains	June - Sept	FESA: ND CESA: ND CNPS: 4.3	May Occur. Suitable habitat exists in the bottom of the canyon.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Aparejo grass <i>Muhlenbergia utilis</i>	Perennial rhizomatous herb. Some on serpentine or alkaline soils. Chaparral, cismontane woodland, coastal scrub, meadows and seeps. marshes and swamps. 25 - 2325 meters, 80 - 7630 feet. Scattered locations southern Coastal Ranges, San Gabriel Mtns, Sierra Nevada, White and Inyo mtns.	March - October	FESA: ND CESA: ND CNPS: 2B.2	May Occur. Species may be present along the bottom of the canyon.
Prostrate vernal pool navarretia <i>Navarretia prostrata</i>	Annual herb. Mesic soils. Coastal scrub, meadows and seeps, valley and foothill grassland with alkaline soils vernal pools. Central Coastal Range, Peninsular Ranges from Los Angeles to Baja CA.	April - July	FESA: ND BLM: S CESA: ND CNPS: 1B.2	None. Site lacks suitable mesic soils and habitats preferred by this species.
Robbin's nemacladus <i>Nemacladus secundiflorus</i> var. <i>robbinsii</i>	Annual herb. Openings in chaparral, valley and foothill grassland. 350 - 1000 meters, 1150 - 5680 feet. Scattered localities. Coastal Ranges, Tehachapi and San Gabriel ranges.	April - Jun	FESA: ND USFS: S BLM: S CESA: ND CNPS: 1B.2	None. No suitable habitat is present.
Short-joint beavertail <i>Opuntia basilaris</i> var. <i>brachyclada</i>	Perennial stem. Chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland. 425 - 1800 meters, 1395 - 5905 feet. Tehachapi Range, Peninsular Ranges.	Apr-Jun (Aug)	FESA: ND USFS: S BLM: S CESA: ND CNPS: 1B.2	None. Site lacks suitable habitat. Species not observed.
Woolly mountain-parsley <i>Oreonana vestita</i>	Perennial herb. Lower and upper montane coniferous forest, subalpine coniferous forest. Gravelly soils and talus slopes (sometimes). 1615 - 3500 meters, 5300 - 11485 feet. Southern Sierra Transverse Ranges.	March - Sep	FESA: ND USFS: S BLM: S CESA: ND CNPS: 1B.3	None. Site does not support habitat types preferred by this specie.
Rock Creek broomrape <i>Aphyllum valida</i> ssp. <i>valida</i> (syn. <i>Orobancha valida</i> ssp. <i>valida</i> )	Parasitic perennial herb. Granitic soils. Chaparral, pinyon and juniper woodland. 1030 - 2000 meters, 3380 - 6560 feet. Tehachapi Mountains, Transverse Ranges.	May - Sep	FESA: ND USFS: S BLM: S CESA: ND CNPS: 1B.2	None. Site lacks suitable soils and habitats.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Rock-loving oxytrope <i>Oxytropis oreophila</i> var. <i>oreophila</i>	Perennial herb. Sometimes gravelly or rocky soils. Alpine boulder and rock field, subalpine coniferous forest. 3400 - 3800 meters, 11155 - 12470 feet. Transverse Ranges.	Jun - Sep	FESA: ND USFS: S CESA: ND CNPS: 2B.3	None. Site lacks suitable soils and habitat. Below known elevation range.
San Bernardino grass-of-parnassus <i>Parnassia cirrata</i> var. <i>cirrata</i>	Perennial herb. Mesic sites, streambanks. Lower and upper montane coniferous forest, meadows and seeps. 1250 - 2440 meters, 4100 - 8005 feet. San Gabriel and San Bernardino mountains. Maybe Mexico.	Aug - Sep	FESA: ND USFS: S CESA: ND CNPS: 1B.3	None. Site lacks suitable mesic habitat. Below known elevation range.
Brand's star phacelia <i>Phacelia stellaris</i>	Annual herb. Coastal dunes, coastal scrub. 1 - 400 meters, 5 - 1310 feet. Western Transverse Range.	Mar - Jun	FESA: ND CESA: ND CNPS: 1B.1	None. Site lacks coastal habitats and similar inland habitats.
White cudweed <i>Pseudognaphalium leucocephalum</i>	Biennial or short-lived perennial herb. Coastal sage scrub and chaparral. Below 500 meters (1,650 feet). Southern coastal ranges and slopes. Ventura to San Diego ranges (excluding San Jacinto Mtns), San Bernardino and San Gabriel Mtns.	August - November flowering period	FESA: ND CESA: ND CNPS: 2B.2	Unlikely. Site has suitable scrub habitat, higher than recorded elevation.
Sanford's arrowroot <i>Sagittaria sanfordii</i>	Perennial rhizomatous herb (emergent). Marshes and swamps (shallow freshwater). 0 - 650 meters, 0 - 2135 feet. Historically Coastal Ranges and Central Valley, Transverse Ranges. Extirpated from southern California and mostly extirpated from Central Valley.	May -Oct (Nov)	FESA: ND BLM: S CESA: ND CNPS: 1B.2	None. Site lacks marshes and swamps. Reported as extirpated from southern California.
Black-bog rush <i>Schoenus nigricans</i>	Perennial herb. Marshes and swamps (often alkaline). 150 - 2000 meters, 490 - 6560 feet. Scattered locations. Mountain areas east of Death Valley and Fort Irwin. Cajon pass area.	Aug - Sep	FESA: ND USFS: S CESA: ND CNPS: 2B.2	None. Site lacks marshes and swamps.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Chaparral ragwort <i>Senecio aphanactis</i>	Annual herb. Sometimes alkaline soils. Chaparral, cismontane woodland, coastal scrub. 15 - 800 meters, 50 - 2625 feet. Coastal and Transverse Ranges.	Jan - Apr (May)	FESA: ND CESA: ND CNPS: 2B.2	May Occur. Not observed during survey.
Salt spring checkerbloom <i>Sidalcea neomexicana</i>	Perennial herb. Alkaline, mesic conditions. Chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, playas. 15 - 1530 meters, 50 - 5020 feet. Southern Coastal, Transverse, Peninsular ranges into the western Mojave around Joshua Tree National Park.	Mar - Jun	FESA: ND USFS: S CESA: ND CNPS: 2B.2	None. Mesic conditions limited to active streambed; no alkaline soils.
Prairie wedge grass <i>Sphenopholis obtusata</i>	Perennial herb. Mesic conditions. Cismontane woodland, meadows and seeps. 300 - 2000 meters, 985 - 6560 feet. Scattered. Eastern side of Northern Coastal Ranges, Sierra Range, San Gabriel and San Bernardino Mtns, Peninsular Ranges.	April - Jul	FESA: ND CESA: ND CNPS: 2B.2	None. Mesic conditions limited to active streambed.
Laguna Mountains jewelflower <i>Streptanthus bernardinus</i>	Perennial herb. Open slopes, chaparral, lower montane coniferous forest. 670 -2500 meters, 2200 - 8205 feet. Transverse Ranges including San Jacinto. Little San Bernardino Mtns., Laguna Mtns. and mountains around San Diego.	May - Aug	FESA: ND CESA: ND CNPS: 4.3	None. Site lacks open slopes preferred by this species.
San Bernardino aster <i>Symphotrichum defoliatum</i>	Perennial rhizomatous herb. Freshwater wetlands and wetlands in coastal sage scrub, oak woodland. Below 2050 meters (6725 feet). Southern coastal ranges and slopes. Ventura to San Diego ranges, San Bernardino and San Gabriel Mtns.	July - November	FESA: ND USFS: S CESA: ND CNPS: 1B.2	None. Site lacks suitable wetlands, freshwater marsh communities.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Greata's aster <i>Symphotrichum greatae</i>	Perennial rhizomatous herb. Mesic conditions. Chaparral, broad-leafed upland forest, cismontane woodlands, lower montane coniferous forest, and riparian woodland. 300 - 2010 meters, 985 - 6595 feet. Tehachapi Mtn area, San Gabriel and San Bernardino mtns.	Jun - Oct	FESA: ND BLM: S CESA: ND CNPS: 1B.3	None. Site lacks mesic conditions outside of perennial flow of the creek.
Rigid fringepod <i>Thysanocarpus rigidus</i>	Annual herb. Dry, rocky slopes. Pinyon and juniper woodland. 600 - 2200 meters, 1970 - 7220 feet. Scattered. Eastern mountains near Ivanpah, San Gabriel Mtns., Santa Rosa Mtns.	Feb - May	FESA: ND USFS: S BLM: S CESA: ND CNPS: 1B.2	None. Project does not support suitable habitat.
Grey-leaved violet <i>Viola pinetorum</i> ssp. <i>grisea</i>	Perennial herb. Meadows and seeps, subalpine coniferous forest, upper montane coniferous forest. 1500 -3400 meters, 4920-11155 feet. Sierra, Tehachapi, San Gabriel, San Bernardino mtns.	April - Jul	FESA: ND BLM: S CESA: ND CNPS: 1B.2	None. Site lacks meadows and seeps. Below known elevation.

**Fishes**

Santa Ana sucker <i>Catostomus santaanae</i>	Streams with perennial flows, suitable water quality and substrate to support breeding, feeding and sheltering. Life history stages require a variety of coarse substrate types, such as gravel, cobble, or mixtures of gravel or cobble with sand, and a variety of riverine features, like shallow riffles and deeper runs and pools.	Year round	FESA: THR CESA: ND AFS: TH IUCN: VU	None. Stream habitat does not provide required variety of habitats.
Arroyo chub <i>Gila orcuttii</i>	Slow-moving streams with bottoms of sand or mud, Also with gravel, cobbles, and boulders, usually at depths greater than 40 centimeters (15.75 inches). Native streams: Malibu Creek, Santa Clara, San Luis Rey, and Santa Margarita drainages.	Year round	FESA: ND USFS: S CESA: ND AFS: VU Native populations	None. Stream lacks suitable depth.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Santa Ana speckled dace <i>Rhinichthys osculus</i> ssp. 3	Genetically distinct unnamed subspecies of nominate speckled dace. Mainly perennial streams with water temperatures <20°C (68°F). Riffles, runs and pools in low-gradient streams, sand to boulder substrates in slow water, various So Cal streams.	Year round	FESA: ND USFS: S CESA: ND AFS: TH	Unlikely. Creek is very shallow and swift.
Mohave tui chub <i>Siphateles bicolor mohavensis</i>	Formerly found in the deep pools and slough-like areas of the Mojave River, this species now only occurs in highly modified refuge sites in San Bernardino County.	Year round	FESA: END CESA:END AFS: EN	None. Closest populations extirpated; pools and slough-like habitat absent from site.
<b>Amphibians</b>				
Arroyo toad <i>Anaxyrus californicus</i>	Narrow and shallow washes and arroyos with open water; sand or gravel beds for breeding; pools with sparse overstory vegetation. Clay, sandy or gravel soils in shallow pools for juveniles. Bordering upland habitats are low-elevation hills with scattered vegetation, sandy, fine gravel, and pliable soils accompanied by rocks of various sizes. Dispersal and winter habitat can extend up to 1 kilometer (0.6 miles) from streambed. Coastal ranges, Transverse and Peninsular Ranges.	Jan - Jul (southern CA)	FESA: END IUCN: EN CESA: ND	Unlikely. Creek bottom has sandy and gravelly soils, but adjacent slopes are steep-sided and are densely vegetated.
San Gabriel Mountains slender salamander <i>Batrachoseps gabrieli</i>	Extensive rock talus cover on forested slopes, often near a stream. Lives under large rocks, logs and bark. California endemic known from at least 13 locations. Streams from San Gabriel Canyon, eastern San Gabriel Mountains to Kimbark and Waterman Canyon, extreme western San Bernardino Mountains. 850 - 2800 meters, 2800 - 7800 feet.	Nov - April. Active on rainy or wet nights with moderate temperatures.	FESA: ND IUCN: DD USFS: S CESA: ND	None. Site lacks suitable rock cover.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Foothill yellow-legged frog <i>Rana boylei</i>	Breeding stream habitat shallow, rocky and at least partially exposed to direct sunlight. Foothill and mountain streams from the Pacific Coast to the western slopes of the Sierra Nevada and Cascades mountains. Known from western San Gabriel Mtns. Up to approximately 1,524 meters, 5000 feet. Oregon to California.	Year round Mostly active during daylight.	FESA: ND IUCN: NT USFS: S BLM: S CESA: END	None. Site outside of the known range.
California red-legged frog <i>Rana draytoni</i>	Near ponds in humid forests, woodlands, grasslands, coastal scrub. Streamsides with plant cover. Most common in lowlands or foothills. Frequently found in woods adjacent to streams. For breeding, permanent or ephemeral water sources; lakes, ponds, reservoirs, slow streams, marshes, bogs, and swamps. Ephemeral wetland habitats require animal burrows or other moist refuges for estivation in dry periods. Coastal ranges.	Year round	FESA: THR CESA: ND CDFW: SSC	None. Site outside of the known range. The nearest occurrences are near the Santa Rosa Plateau and within the Upper Las Virgenes Canyon Open Space Preserve in the Simi Hills in eastern Ventura.
Southern mountain yellow-legged frog <i>Rana muscosa</i>	Habitats in southern California are rocky streams in narrow canyons and in the chaparral belt. Historically, in streams that range from rocky, steep drainages to those with a gentle gradient, marshy margins, and sod banks. Large clear pools up to three feet deep are best habitat. Absent from most of historical range. Southern population. Santa Barbara coast east to Transverse Ranges; San Jacinto Mtns.	Mostly active during daylight in warm temperatures. Overwinters underwater up to nine months.	FESA: END IUCN: EN USFS: S CESA: END	None. Population locations well document, Not known from this canyon.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Spadefoot toad <i>Spea hammondi</i>	Open areas with sandy or gravelly soils. Mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Rain pools without bullfrogs, fish, or crayfish are necessary for breeding. Endemic to California and northern Baja California. Ranges from near Redding south throughout the Central Valley and its associated foothills, South Coast Ranges, coastal southern California south of the Transverse Range and west of the Peninsular range, into northwest Baja California.	Nocturnal Mostly stays buried underground in earth-filled burrows. Active for short period each year to breed and lay eggs in rain pools, typically between October to May, depending on rainfall. Occasionally emerges during rains at other times of the year. Burrows are probably away from the dried breeding pools.	FESA: ND BLM: S CESA: ND CDFW: SSC IUCN: NT	None. Canyon lacks suitable rain pools.
Coast Range newt <i>Taricha torosa</i>	Wet forests, oak forests, chaparral, and rolling grasslands. In southern California it occurs in drier chaparral, oak woodland, and grasslands. Endemic to California. Coast and coast range mountains Mendocino County to San Diego County. Disjunct population in southern Sierra Nevada from northern Kern County at Breckenridge Mountain north to a zone of hybridization with the Sierra Newt along the Kaweah River in Tulare County.	Terrestrial, diurnal. Undercover during temperature extremes.	FESA: ND CESA: ND CDFW: SSC	May Occur. Suitable habitat present.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
<b>Reptiles</b>				
Silvery legless lizard <i>Anniella stebbinsi</i>	Moist warm loose soil in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. Leaf litter under trees and bushes in sunny areas and stabilized dunes often suitable habitat. Often found under rocks, boards, driftwood, and logs and leaf litter under bushes and trees. Southern California south of Transverse Ranges to northern Baja California, Mexico.	Year round Mostly underground	FESA: ND USFS: S CESA: ND CDFW: SSC	May Occur. Suitable habitat on site.
Southwestern pond turtle <i>Actinemys pallida</i>	Ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, and either rocky or muddy bottoms, Woodland, forest, and grassland. prefers pools to shallower areas in streams. Logs, rocks, cattail mats, and exposed banks are required for basking. May enter brackish water and even seawater. Woodland, forest, and grassland.	Year round. Hibernates underwater or burrowing into moist soils in winter. Estivates by burrowing into moist soil during hot, dry summer days.	FESA: PT BLM: S USFS: S CESA: ND CDFW: SSC IUCN: VU	None. Suitable streams and other water habitats suitable for this species are not present.
California glossy snake <i>Arizona elegans occidentalis</i>	Arid scrub, rocky washes, grasslands, chaparral. Microhabitats of open areas with loose soil for burrowing, Sea level to 2200 meters (7218 feet). Coastal and Peninsular ranges from near San Francisco into Baja California.	Late Feb - Nov depending on weather. Most active May. Less active summer. Under rocks or burrows during the day.	FESA: ND CESA: ND CDFW: SSC	May Occur. Suitable habitat on canyon slopes.
San Diego tiger whiptail (coastal whiptail) <i>Aspidoscelis tigris stejnegeri</i>	Chaparral, woodland, riparian areas. Primarily in hot, dry open areas with sparse foliage. Ventura south to Baja California, west of Peninsular Ranges, south of Transverse Ranges. Sea level - 2130 meters (7000 feet) for species. Subspecies slightly variable.	Diurnal	FESA: ND CESA: ND CDFW: SSC	May Occur. Suitable habitat present on site.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Southern rubber boa <i>Charina umbratica</i>	Variety of moist woodlands, coniferous forests, chaparral, and wet meadows. Usually near streams. Sea level to 1,524 - 24338 meters (5000 - 8000 feet). Prefers old large logs, rock piles as hibernacula, as well as dense leaf litter. High soil moisture seems important, although has been found on dry slopes. San Bernardino, San Jacinto Mountains and Mount Pinos.	April - October Evening, or heavily overcast days with high humidity and 60 - 70 degrees. Hibernates Nov - Mar	FESA: ND USFS: S CESA: THR CDFW: SSC IUCN: VU	None. Site lacks high humidity habitats. Outside of known range.
San Diego (coast) horned lizard <i>Phrynosoma blainvillii</i>	Open areas of sandy soil with low vegetation. Valleys, foothills and semiarid mountains. Grasslands, coniferous forests, woodlands, and chaparral. Commonly found in lowlands along sandy washes with scattered shrubs and along dirt roads. Often found near ant hills feeding on ants. Coastal areas from NW to Baja to San Francisco Bay. Inland CA from Shasta Reservoir and Kern Plateau east and south to southern California. West of Sierras and deserts.	Year round. Diurnal activity during warm and moderate weather.	FESA: ND BLM: S CESA: ND IUCN: LC	May Occur. Canyon bottom may support habitat for this species.
Two-striped garter snake <i>Thamnophis hammondi</i>	Generally found near water sources - pools, creeks, cattle tanks, and others, often in rocky areas. Oak woodland, willow, coastal sage scrub, scrub oak, sparse pine, chaparral, and brushland. Sea level to 2130 meters (6988 feet). Monterey County south along western slopes of south Coast Ranges, Transverse and Peninsular ranges into northern Baja California.	Diurnal, primarily aquatic. Also active at night dusk during hot weather in some areas. Can be active most of the year depending on weather conditions. Has been found from January to November.	FESA: ND CESA: ND USFS: S BLM: S IUCN: LC	May Occur. Suitable aquatic habitats occur on site.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
<b>Birds</b>				
Tricolored blackbird <i>Agelaius tricolor</i>	Historic habitat wetlands with cattails, bulrushes, willows. Habitat loss results in nesting in agricultural fields, patches of Himalayan blackberry near stock ponds and irrigated pastures in the foothills of the Sierra Nevada, California. Foraging in cultivated fields, feedlots associated with dairy farms, and wetlands. Mostly Central Valley, and suitable habitats in Coastal, Peninsular, Transverse ranges	Year round	FESA: ND USFWS: BCC BLM: S CESA: THR IUCN: EN NABCI: RWL	None. No suitable wetland or agricultural habitat.
California rufous-crowned sparrow <i>Aimophila ruficeps canescens</i>	Dry, open hillsides with grasses, rocks, and scattered shrubs. Open areas of coastal sagebrush, open chaparral, scrub oaks, pinyon pine, and other woody plants. Sea level up to about 3,048 meters (10,000 feet) (in Mexico). Mainly coastal California, Sierras and White - Inyo mountain ranges.	Year round	FESA: ND CESA: ND	May Occur. Suitable habitat on canyon hillsides.
Sharp-shinned hawk <i>Accipiter striatus</i>	Nests in woodland, coniferous deciduous forest. Winter visitor and migrant to coastal Southern California. Forages over a variety of habitats.	Fall & winter; scarce in summers	FESA: ND USFWS: BCC CESA: ND	Occurs. Observed during the survey.
Cooper's hawk <i>Accipiter cooperi</i>	Woodland and semi-open habitats, riparian groves and mountain canyons. Uncommon permanent resident in coastal, mountains, and deserts of Southern California. Transients are fairly common on coast in fall.	Year-round	FESA: ND USFWS: BCC CESA: ND	May Occur. Site provides suitable foraging or nesting habitats.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Golden eagle <i>Aquila chrysaetos</i>	Open areas. Grasslands, brushlands, deserts, oak savannas, open coniferous forests and montane valleys. Nesting primarily in rugged mountainous country. Uncommon resident in Southern California, except non-breeding populations in Central Valley and Imperial Desert.	Year round Most of California	FESA: ND USFWS: BCC CESA: ND BLM: S CDF: S IUCN: LC	None. Project location is in a well-wooded canyon and no suitable nesting areas.
Bell's sage sparrow <i>Artemisospiza belli belli</i>	[Nominate species habitat description] Coastal sagebrush, chaparral, open, scrubby habitats. In the mountains of southern California, they also occur in big sagebrush ( <i>Artemisia tridentata</i> ). Mojave Desert, low scrub big sagebrush, saltbush, bitterbrush, shadscale, creosote bush. Throughout so. California and coastal ranges further north.	Year round California	FESA: ND USFWS: BCC CESA: ND	May Occur. Scrub habitats on slope provide suitable habitat.
Long-eared owl <i>Asio otus</i>	Roost and nest in dense vegetation. Forage in open grasslands, shrublands, open coniferous or deciduous woodlands. Sea level to above 1981 meters (6500 feet). Nests are found in coniferous or deciduous forests near open meadows.	Year round California, except eastern deserts.	FESA: ND CESA: ND IUCN: LC	None. Site woodlands do not provide dense cover
Burrowing owl <i>Athene cunicularia</i>	Open, treeless areas with low, sparse vegetation, gently sloping terrain. Grasslands, deserts, steppe environment, golf courses, pastures, agricultural fields, airport medians, road embankments, cemeteries and urban vacant lots. Often associated with high densities of burrowing mammals such as prairie dogs, ground squirrels, and tortoises. Western US, Florida and Caribbean.	Year round California	FESA: ND USFWS: BCC BLM: S CESA: ND IUCN: LC	None. Site does not provide open, treeless habitat areas.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Oak %tmouse <i>Baeolophus inornatus</i>	Warm, open, dry oak or oak-pine woodlands. Will use scrub oaks or other brush as long as woodlands are nearby. Restricted range from southwest Oregon to northwest Baja California. One population in the Cape District of south Baja California. In a few areas they use habitats without oaks.	Breeding season; some limited areas year-round	FESA: ND USFWS: BCC CESA: ND	Occurs. There are clusters of oak trees on the adjacent slopes suitable for this species.
Swainson's hawk <i>Buteo swainsoni</i>	Open habitats for foraging. Historically native prairie and grassland habitat. Now found in hay and alfalfa fields, pastures, grain crops, and row crops, or perched atop adjacent fence posts and overhead sprinkler systems. Scattered stands of trees near agricultural fields and grasslands for nesting sites. Breeding season eastern California to Plains area; migration to South America.	Nesting season Early spring - late summer	FESA: ND USFWS: BCC BLM: S CESA: THR IUCN: LC	None. Suitable open habitats are absent.
Wrentit <i>Chamaea fasciata</i>	Coastal scrub and chaparral along the coast. Away from the coast dense shrublands with coyote bush, manzanita, California lilac, and blackberry thickets in foothills and desert regions of California. Oak woodlands and mixed hardwood and evergreen forests in northwestern California and northwestern Oregon. Sometimes suburban yards and parks if there is plenty of dense shrubbery to hide in.	Year round.	FESA: ND USFWS: BCC CESA: ND	Occurs. Suitable chaparral habitat is present.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	[Nominate species habitat] Wooded habitat with dense cover and water nearby. Woodlands with low, scrubby, vegetation, overgrown orchards, abandoned farmland, and dense thickets along streams and marshes. Rare breeders in riparian woodlands of willows, cottonwoods and dense stands of mesquite to breed. Subspecies along Colorado River; formerly along major rivers in California,	Fall and Spring migration	FESA: THR USFWS: BCC BLM: S CESA: END IUCN: LC NABCI: RWL	None. Suitable dense cover woodlands are not present.
Olive-sided flycatcher <i>Contopus cooperi</i>	Boreal forest and western coniferous forests. Sea level TO 3048 meters 10,000 feet). some parts of the Rockies in forests of spruce, fir, Douglas-fir, hemlock, western redcedar, and tamarack or larch. Southern California and northern Baja California, they inhabit mostly pine forest.	Breeding n. California, Migratory s. California.	FESA: ND USFWS: BCC CESA: ND	None. Site does not support pine forest nesting habitat.
Black swift <i>Cypseloides niger</i>	Nest on cliff ledges behind or near waterfalls and sea caves. Forage over forests and open areas in California found from sea level to 2286 meters (7500 feet).	Mostly migration; nests in coastal sea cliffs, Sierras, Cascades in California.	FESA: ND USFWS: BCC CESA: ND IUCN: LC NABCI: YWL	None. No suitable nest sites. May be observed foraging in air over project site.
White-headed woodpecker <i>Dryobates albolarvatus gravirostris</i>	Pine forests in mountains, western North America. Especially old-growth ponderosa pine and sugar pine with partly open canopies, limited understory, and an abundant pine seed crop. Often found in recently burned forests. Dead trees needed for nesting. Canada, Pacific NW and Idaho to mountains of southern California.	Year round	FESA: ND USFWS: BCC in certain regions CESA: ND	None. No suitable pine forest habitats.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Nuttall's woodpecker <i>Dryobates nuttallii</i>	Oak woodlands. Less common riparian woodlands. Also wooded suburban areas and woodlands near streams, especially farther south in their range where oak trees are scarcer. 274 - 1676 meters, 900 - 5500 feet elevation.	Year round	FESA: ND USFWS: BCC in some regions CESA: ND	Occurs. Suitable oak woodland habitat is present.
Southwestern willow flycatcher <i>Empidonax traillii extimus</i>	Willow riparian or other shrubs near standing or running water. Breeds and nests in willow riparian forest. Rare and local in southern California.	May - Sept.	FESA: END CESA: END NABCI: RWL	None. Riparian woodland habitat does not exist on site.
Cassin's finch <i>Haemorhous cassinii</i>	Coniferous forest types over a broad elevational range. Often found in mature forests of lodgepole and ponderosa pine. Winter range is similar to breeding habitat but with the bulk of populations at somewhat lower elevations. North American western interior mountains, central British Columbia to northern New Mexico and Arizona. Mostly between 3,000 and 10,000 feet of elevation.	Non-breeding season southern California mountains; year-round in Sierra Nevada Range	FESA: ND USFWS: BCC CESA: ND	None. Site does not contain suitable habitat.
Bullock's oriole <i>Icterus bullockii</i>	Riparian and open woodlands, urban parks. Large trees are spaced well apart or isolated groups. Nest in sycamores, cottonwoods, willows, deciduous oaks, madrones, and large mesquite trees. Live oaks, pecans, orchard trees, salt cedar and occasionally conifers. Similar open woodland habitats during migration and winter, also pine, pine-oak, and fir forests.	Breeding California	FESA: ND USFWS: BCC in some regions CESA: ND IUCN: YWL	Occurs. Suitable habitat present.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
California black rail <i>Laterallus jamaicensis coturniculus</i>	[Nominate species habitat] Variety of wet meadows, marsh edges (including along creeks and rivers), around farm ponds, and hayfields with standing water. Migrating birds and wintering birds select habitats with the same characteristics as breeding habitats. Southern California forages along Colorado River.	Year round	FESA: ND USFWS: BCC BLM: S CESA: THR IUCN: NT NABCI: RWL	None. No marsh habitat is present.
Western screech-owl <i>Megascops kennicottii cardonensis</i>	Forested habitats, especially in bands of deciduous trees along canyons and other drainages. Common trees include cottonwood, aspen, alder, water birch, oak, and bigleaf maple. Also in suburbs, parks, deserts, coastal areas, and in mountains up to about 1828 meters, 6000 feet.	Year round	FESA: ND USFWS: BCC in some regions CESA: ND	May Occur. Suitable tree habitat exists on site.
California gnatcatcher <i>Polioptila californica californica</i>	Coastal sage scrub, desert scrub, coastal dune scrub. In California they are dominated by California sagebrush. Generally, below 487 meters (1600 feet), sometimes occur at higher elevation at inland scrub sites. Cismontane southern California and Baja California in low-lying foothills and valleys.	Year-round	FESA: THR CESA: ND NABCI: YWL	None. Site lacks suitable foraging or nesting coastal scrub habitats.
Allen's hummingbird <i>Selasphorus sasin</i>	Open areas in and around coastal forest, scrub, and chaparral. Western coast US. Eucalyptus, redwood, and Douglas-fir in US. Mexican wintering grounds include oak-pine forest, edges, and scrubby clearings with abundant flowers. Sea level - 348 meters, 1000 feet. Western coast breeding, moving through interior CA in migration. US - Mexico	Breeding season coastal, Most migrate through interior CA.	FESA: ND CESA: ND CDFW: BCC	May Occur. Suitable habitat for migration exists in and around the project site. An unknown <i>Selasphorus</i> hummingbird was observed during the survey but was not positively identified.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Yellow warbler <i>Setophaga petechia</i>	Breeding season in thickets and other disturbed or regrowing habitats, particularly along streams and wetlands. In the west, often found among willows. In the west found at sea level to about 2743 meters (9000 feet). On their wintering grounds Yellow Warblers live in mangrove forests, dry scrub, marshes, and forests, typically in lowlands but occasionally up to 2590 meters (8500 feet).	Breeding season coastal and inland California. Migrates through deserts. Nonbreeding Colorado River	FESA: ND USFWS: BCC CESA: ND	Occurs. The site has thickets and similar habitats.
Lawrence's goldfinch <i>Spinus lawrencei</i>	Breeds in open oak woodlands and scattered meadows, weedy fields and other brushy habitat near areas with some water; riparian habitats Nonbreeding habitat coastal scrub, pinyon pine–juniper woodlands, thickets, desert arroyos, cultivated fields, orchards, gardens, and parks.	Year-round Mar to Sep breeding period	FESA: ND USFWS: BCC CESA: ND	Likely. This site has some brushy areas along the stream.
Black-chinned sparrow <i>Spizella atrogularis</i>	Breeding season in arid brushlands on rugged mountain slopes from sea level to almost 2700 meters, 8,858 feet. Winter resident populations occupy habitat similar to but downslope from breeding areas. Other populations inhabit desert grasslands. California, Southwest US and Baja California. Winter in Baja California and Mexico.	Spring, summer and fall in US Winter in Mexico.	FESA: ND USFWS: BCC CESA: ND	None. Site does not contain arid brushlands or rugged mountain slopes.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
California spotted owl <i>Strix occidentalis occidentalis</i>	Prefer older forests with structural characteristics necessary for nesting, roosting, and foraging. Sierra Nevada populations prefer mid-elevation ponderosa pine, mixed conifer, white fir, and mixed-evergreen forests. Lower numbers are found the lower elevation oak woodlands of the western foothills. Central coast and southern California populations occur in riparian /hardwood forests and woodlands, live oak/big cone fir forests, and redwood/California laurel forests. Nests are typically found in areas of high canopy cover, a high number of large trees, and downed trees. Sierra Nevada, Coastal, Transverse, and Peninsular mountain ranges, and Sierra San Pedro Martir in Baja California.	Year round	FESA: PE* CESA: ND *Transverse and Peninsular populations; Sierra Nevada populations: PT	None. Suitable older dense forests are not present.
California Thrasher <i>Toxostoma redivivum</i>	Chaparral. Smaller numbers nest in sagebrush habitats. Underbrush with copious leaf litter required Mojave Desert, breed in a mixture of scrub oak, Joshua tree, California juniper and juniper scrub. California and a small part of Baja California	Year round	FESA: ND USFWS: BCC CESA: ND	May occur. The scrub habitat on site is likely occupied by this species.
Least Bell's vireo <i>Vireo bellii pusillus</i>	Riparian forests and willow thickets. Breeds and nests only in southwestern California; winters in Baja California.	Apr - Sept Breeding	FESA: END CESA: END IUCN: NT NABCI: YWL	None. Suitable mix of willow and thickets not present.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
<b>Mammals</b>				
Pallid bat <i>Antrozous pallidus</i>	Variable habitat. Prefer rocky outcrops in dry to semi-arid areas. Oak and pine forested areas, open farmland. Roosting sites: caves, rock crevices, mines, hollow trees, and buildings. Semi-dark day roosts. Dark night roosts. Both near water. Western Canada - Central Mexico.	Year-round Oct - Feb breeding period	FESA: ND USFS: S BLM: S CESA: ND IUCN: LC WBWG: H	None. Suitable habitat and roosting sites are not present.
Northwestern San Diego pocket mouse <i>Chaetodipus fallax fallax</i>	Wide variety of habitats including chaparral and grasslands to scrub forests and deserts. Low growing vegetation or rocky outcroppings, sandy soil for digging burrows. Sea level to 1400 meters (4593 feet). San Bernardino, Riverside and San Diego counties south to Baja California.	Year round Nocturnal	FESA: ND CESA: ND	None. Site habitats and soils are not suitable.
Pallid pocket mouse <i>Chaetodipus fallax pallidus</i>	Rocky/gravelly areas usually with a yucca overstory. Desert scrub at higher elevations near or in the pine-juniper belt. Gravelly or sandy soil substrates. San Diego to Baja California.	Year round Nocturnal	FESA: ND CESA: ND	None. Site habitats and soils are not suitable.
San Bernardino kangaroo rat <i>Dipodomys merriami parvus</i>	Primary and secondary alluvial fan scrub habitats, with sandy soils deposited by fluvial (water) rather than aeolian (wind) processes. The preferred substrate appears to be sandy and sandy loam soils and very little herbaceous ground cover. In isolated populations along the Santa Ana and San Jacinto drainage systems.	Year round Nocturnal	FESA: END CESA: CE	None. Suitable alluvial habitat is not present.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Western mastiff bat <i>Eumops perotis californicus</i>	Variety of habitats, Dry desert washes, flood plains, chaparral oak woodland and ponderosa pine belt, grassland and agricultural areas. High roosts >3 meters (10 feet). Needs roosts of significant rock features offering crevices and other suitable openings. Southern California to the Southwest, Mexico and South America. In California, it is most common in broad open areas.	Year round Nocturnal	FESA: ND BLM: S CESA: ND WBWG: H	None. Site lacks roosting habitat.
Hoary bat <i>Lasiurus cinereus</i>	Prefers woodland, mainly coniferous forests but hunts over open areas or lakes. Winter in Canada and most of US, summers in Southwest and South America. Generally roosts in trees.	Winter Nocturnal	FESA: ND CESA: ND IUCN: LC WBWG: M	Unlikely. No coniferous forests or similar habitat within the project boundaries.
Western yellow bat <i>Lasiurus xanthinus</i>	Dense riparian woodlands Dry thorny environments in the southwestern US, dry tropical to semi-wet tropical forests. Commonly prefer tall trees near water for roosts. Southwestern US, Baja and Mexico.	Year round Nocturnal	FESA: ND CESA: ND IUCN: LC WBWG: H	None. No suitably dense forests are present on site.
Black-tailed jackrabbit. <i>Lepus californicus bennettii</i>	[Nominate species habitat] Desert scrubland, prairies, farmlands, dunes. Arid regions and areas of short grass rangeland. Sea level to 3800 meters (12,470 feet). Cover includes, sagebrush-creosote bush, mesquite-snakeweed and juniper-big sagebrush, agricultural fields. Southwest US. <i>L.c. bennettii</i> occurs west of the Transverse and Peninsular Ranges.	Year round	FESA: ND CESA: ND CDFW: SSC	May Occur. Site is surrounded by suitable habitat, although human presence probably reduces activity in the canyon.
South coast marsh mole <i>Microtus californicus stephensi</i>	[Nominate species habitat] Grasslands, coastal marshlands to dry upland and savannah habitats. <i>M.c. stephensi</i> is confined to coastal marsh habitats. Coastal regions west of the deserts from Oregon to Baja.	Year round	FESA: ND CESA: ND CDFW: SSC	None. Habitat for subspecies is not present.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Lodgepole chipmunk <i>Neotamias speciosus speciosus</i>	Subalpine mixed conifer forests of lodgepole pine, red fir, and Jeffery pine. White fir, Douglas fir, ponderosa pine, sugar pine, incense cedar, and California black oak woodlands. 1500 - 3,300 meters (4920 -10,657 feet). Eastern Sierra Nevada, San Bernardino, San Jacinto, and San Gabriel mountains.	Year round Hibernate winters	FESA: ND CESA: ND CDFW: SSC	None. Site does not provide suitable habitat.
San Diego desert woodrat <i>Neotoma lepida intermedia</i>	Chaparral, coastal sage scrub, alluvial fan scrub, desert scrub and juniper woodland scrub. Uses rock and vegetation/debris piles for burrows. Southern California Mojave, Colorado and Great Basin deserts.	Year round	FESA: ND CESA: ND CDFW: SSC	May Occur. Canyon bottom provides rock and vegetation piles suitable for burrows.
Pocketed free-tailed bat <i>Nyctinomops femorosaccus</i>	Dry, semiarid desert areas. Roosting sites in rocky outcrops, buildings, and crevices in cliffs and small caves; near water sources. Sea level to 2250 meters (7381 feet). Southwestern US and Mexico.	Year round	FESA: ND CESA: ND IUCN: LC WBWG: M	None. No suitable roosting habitat is present. May forage over site.
Big-free tailed bat <i>Nyctinomops macrotis</i>	Rocky and rugged arid habitats Deserts (Including dune habitats) chaparral, forest, scrub forest. Suburban areas. Also found roosting in buildings and terrestrial plants such as ponderosa pines, <i>Douglas</i> firs and desert shrubs. Usually below 1798 meters (5900 feet). Southwestern North America into northern and central Mexico, and throughout South America.	Spring and fall breeding season Migratory	FESA: ND CESA: ND IUCN: LC WBWG: MH	None. No suitable rocky or rugged habitat is present.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Desert bighorn sheep <i>Ovis canadensis nelsoni</i>	Restricted to east-facing, lower elevation slopes of the Peninsular Ranges (in California), typically below 1402 meters (4600 feet). Need steep topography for lambing, rearing and escaping predators. Peninsular Ranges in Southern California, from the San Jacinto and Santa Rosa mountains, and south to the United States-Mexico border.	Year round. Elevational changes due to seasonal conditions.	FESA: ND USFS: S BLM: S CESA: ND	None. Project is on the west slopes of the Transverse Ranges.
Los Angeles pocket mouse <i>Perognathus longimembris brevinasus</i>	[Nominate species habitat]. Arid and semiarid habitats with grasses, sagebrush and other scrubby vegetation. Rocky to sandy soils. Coastal sage scrub, alluvial fan scrub and desert scrub. <i>P.l. brevinasus</i> occurs from interior Los Angeles county east and south to western San Bernardino and Riverside counties, interior San Diego county.	Year round Nocturnal. Does not truly hibernate or aestivate but does occasionally go into torpor in response to weather and food availability.	FESA: ND CESA: ND CDFW: SSC	None. Site does not support suitable habitats.
American badger <i>Taxidea taxus</i>	Most abundant in drier, open stages of most shrub, forest and herbaceous habitats. Friable soils for digging, food for foraging and uncultivated ground.	Year round. More active spring and summer	FESA ND CESA: ND CDFW: SSC IUCN: LC	May Occur. Suitable cover and soils in the canyon.

**Mollusks**

Western ridge mussel <i>Gonidea angulata</i>	More common in streams than lakes. Prefer constant water flow and well-oxygenated stable substrates in areas of low gradient. In silt, clay, and sand to boulders substrates. Rarely in continuously turbid waters. British Columbia east to Idaho and south to Nevada and California.	Year round	FESA: ND CESA: ND	None. No suitable streams. Species of concern because of retraction in historical range. Petitioned for listing as endangered in 2020
---	--	------------	----------------------	---

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
<b>Invertebrates</b>				
Crotch bumblebee <i>Bombus crotchii</i>	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .	May - Sept Appearance Sex- and age-dependent	FESA: ND CESA: CE IUCN: EN	None. No suitable habitat.
San Gabriel Mountains elfin butterfly <i>Callophrys mossii hidakupa</i>	Rocky outcrops, woody canyons and cliffs. British Columbia to southern California, east to Wyoming and Colorado. Larvae feed on <i>Sedum</i> , <i>Sedella</i> , <i>Dudleya</i> and <i>Parvisedum</i> species.	March - June Adult	FESA: ND USFS: S CESA: ND	May Occur. Suitable habitat occurs in the canyon.
Greenest tiger beetle <i>Cicindela tranquebarica viridissima</i>	Inhabits woodlands adjacent to the Santa Ana River basin. Usually found in open areas between trees. Nominate species habitat is wet, dry, dense, empty, or other habitat attributes. Examples include banks and mud flats of creeks dry lake beds, tidal flats, roadside ditches, packed gravelly-sandy roads near water, open ground, old fields, stubble fields, saline and alkali flats, blowouts, sand pits, prairie grasslands, forest trails and forest roads.	Year-round	FESA: ND CESA: ND	May Occur. Site is fairly far from the Santa Ana River, but there is little available information on this subspecies.
Monarch butterfly <i>Danaus plexippus</i>	Fields, roadsides, open areas, wet areas and urban gardens with milkweed and flowering plants. Milkweed is essential for egg-laying and food for caterpillars. Overwintering habitat a specific microclimate for protection and moderate temperatures. Conditions vary between populations. Monarchs west of the Rocky Mountains primarily overwinter at specific sites along the Pacific Coast, California. Eucalyptus, Monterey pines, Monterey cypress trees are roost sites.	Winter Overwinters CA	FESA: C CESA: ND	May Occur. Could be transient on site in winter and fall . Site lacks trees and plants required for roosting.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
California diplectronan caddisfly <i>Diplectrona californica</i>	Cold, fast running streams. As of 2023, only two known occurrences, Claremont, Los Angeles County, Thurman Flats, San Bernardino County,	Year round Mostly underwater	FESA: ND CESA: ND	Unlikely. Stream is probably not the right temperature to support this species. Insufficient information for firm determination.
Quino checkerspot butterfly <i>Euphydryas editha quino</i>	Grasslands and open areas in coastal sage scrub. Patchy shrub or small tree landscapes with openings of several meters between large plants, or a landscape of open swales alternating with dense patches of shrubs. Areas must contain food plants (plantain and owl's clover) with low levels of non-native vegetation, open or bare soils with sparse shrub cover. Current known range is western Riverside County, northern San Diego counties and northern Baja California.	Spring	FESA: END CESA: ND	None. Site lacks suitable habitat, food sources on or nearby the site.
White cuckoo bee <i>Neolarra alba</i>	Old field, suburban and orchard habitats, urban/edificarian, cropland and hedgerows. Host plants include Cryptantha and Lotus species. Likely nests in burrows of Perditia, a ground-nesting genus. California west of the mountains.	Unknown, subterranean	FESA: ND CESA: ND Possibly extinct.	May Occur. Insufficient information for firm determination.
San Gabriel Mountains blue butterfly <i>Plebejus saepiolus aureolus</i>	[Nominate species habitat description] Boreal western North America from central Alaska south along mountains to southern California and southwestern New Mexico; east across southern Canada and northern Great Lakes area to Maine. The last known populations of <i>P.s. aureolus</i> were in the wet meadows of the Big Pine Recreation Area in the San Gabriel mountains of southern California. This area was drained.	May - July Adult flight	FESA: ND USFS: S CESA: ND Presumed extinct	None. No wet meadow habitat is present.

**Sensitive Biological Resources**

Resource	Habitat And Distribution	Activity Period	Status Designation	Occurrence Probability
Delhi sands flower-loving fly <i>Rhaphiomidas terminatus abdominalis</i>	Fine, sandy soils, often with wholly or partially consolidated dunes. These soil types are generally classified as the "Delhi" series (primarily Delhi fine sand). Restricted to western Riverside and San Bernardino Counties.	Above-ground emergence August and September. Not visible during the rest of the year.	FESA: ND CESA: ND	No. Suitable soils required for the preferred habitat are not present.

**Sensitive Habitats and Plant Communities**

Southern California Arroyo Chub/Santa Ana Sucker Stream	Broad slow-moving streams with bottoms of sand or mud, Also with gravel, cobbles, and boulders, usually at depths greater than 40 centimeters (15.75 inches).	Year-round	Declining stream type.	Not present.
Coastal and valley freshwater marsh	Flat or rolling terrain, with depressions and low spots at or near water table. Declining due to draining and alteration for agriculture.	Year-round, although size can change with available surface water and groundwater levels.	Declining plant community	Not present.
Canyon live oak ravine forest	Steep, narrow canyons in steep mountain areas.	Year-round	Declining plant community	Not present.
Southern coast live oak riparian forest	Steep canyons and drainages in the foothills of local mountain ranges.	Year-round	Declining plant community	Present.
Southern riparian forest	Steep canyons and drainages in the foothills of local mountain ranges.	Year-round	Declining plant community	Not present.
Southern sycamore alder riparian woodland	Steep, narrow and shallow, broad canyons and drainages in the foothills of local mountain ranges.	Year-round	Declining plant community	Not present.
Riversidian alluvial fan sage scrub	Creeks, rivers, canyons and drainages in Peninsular and Transverse Ranges. Riverside, San Bernardino Counties.	Year-round	Declining plant community	Not present.

**LEGEND**

**FESA: Federal Endangered Species Act**

- END            Endangered - May become extinct if trends continue
- THR            Threatened - May become endangered if trends continue
- PE             Proposed for listing as endangered
- PT             Proposed for listing as threatened
- C              Candidate for listing. Refers to taxa for which the USFWS has sufficient information to support a proposal to list as Endangered or Threatened and issuance of the proposal is anticipated but precluded at this time.
  
- ND             Not designated as a sensitive species

**USFWS: U.S. Fish and Wildlife Service**

- BCC            Bird of Conservation Concern

**BLM: Bureau of Land Management**

- S              Sensitive species on BLM lands

**USFS: U.S. Forest Service**

- S              Sensitive species on US Forest lands

**CESA: California Endangered Species Act**

- END            Endangered
- THR            Threatened
- CE             Candidate for endangered listing
- CT             Candidate for threatened listing
- CFP            California Fully Protected. Species legally protected under special legislation enacted prior to the California Endangered Species Act.
- ND             Not designated as a sensitive species

**CDFW: California Department of Fish and Wildlife**

- SSC            Species of Special Concern. Taxa of concern to the California Department of Fish and Wildlife with populations declining seriously or that are otherwise highly vulnerable to human development.
- SA             Special Animal. Taxa of concern to the California Natural Diversity Data Base regardless of their current legal or protected status.
- WL             Watch list. Taxa of concern to the California Natural Diversity Data Base regardless of their current legal or protected status

**CDF: California Department of Forestry & Fire Protection**

- S              Sensitive species on forestry lands

**CNPS: California Native Plant Society Classifications**

- 1A Plants presumed by CNPS to be extinct in California
- 1B Plants considered by CNPS to be rare or endangered in California and elsewhere
- 2B Plants considered by CNPS to be rare, threatened or endangered in California, but which are more common elsewhere.
- 3 Review list of plants suggested by CNPS for consideration as endangered but about which more information is needed.
- 4 Watch list of plants of limited distribution whose status should be monitored

**CNPS: Threat Codes**

- .1 Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- .2 Fairly endangered in California (20-80% occurrences threatened)
- .3 Not very endangered in California (<20% of occurrences threatened, or no current threats known)

**Other Classifications**

**IUCN: International Union for the Conservation of Nature**

- D Conservation Dependent. Discontinued category used prior to 2001, equivalent to Near Threatened.
- CR Critically Endangered. In a particularly and extremely critical state
- DD Data Deficient
- EN Endangered. Very high risk of extinction in the wild,
- EW Extinct in the Wild. Survives only in captivity, cultivation and/or outside native range, as presumed after exhaustive surveys
- EX Extinct. Beyond reasonable doubt that the species is no longer extant.
- LC Least Concern
- NE Not Evaluated
- NT Near Threatened. Close to being endangered in the near future.
- VU Vulnerable. High risk of unnatural (human-caused) extinction without further human intervention.
- RWL Red Watch List. Species with extremely high vulnerability due to small population, small range, high threats, and range-wide declines.
- YWL Yellow Watch List. Species that are either restricted (small range and population) or are more widespread but with troubling declines and high threats.

**NABCI: North American Bird Conservation Initiative**

- RWL Red Watch List. Species with restricted distributions and small, declining populations. Most face elevated threats and also are habitat specialists. Several are threatened by rapidly changing climate.
- YWL Yellow Watch List. Species with restricted ranges, highly vulnerable populations that require protection to prevent declines or reverse declines.

**AFS: American Fisheries Society**

- EN Endangered
- TH Threatened
- VU Vulnerable

**WBWG; Western Bat Working Group**

H	High Priority
MH	Medium-High Priority
M	Medium Priority
LM	Low-Medium Priority

**Seed Banks - SB**

BerrySB	Berry Seed Bank
CRES	San Diego Zoo CRES Native Gene Seed Bank
KewBG	Kew Royal Botanic Gardens
RSABG	Rancho Santa Ana Botanic Garden
SBBG	Santa Barbara Botanic Garden
UCBBG	UC Berkeley Botanical Garden
USDA	US Dept of Agriculture

**Occurrence Probabilities**

Occurs	Species or sign (evidence) of species occurs on site as least during a portion of the year or existing record for the site.
May Occur	Not observed or recorded on site, suitable habitat within known range.
Unlikely	No reported sightings within the vicinity of the project. Available habitat is not present. Not within known elevation range.
None	Focused surveys did not locate the species, or suitable habitat does not exist on site or is outside elevation range.

## **Appendix C**

### Phase I Cultural Resources Assessment

# **CULTURAL RESOURCES STUDY FOR THE RESERVOIR 6 AND ALMOND STREET WATERLINE REPLACEMENT PROJECT**

**CITY OF RANCHO CUCAMONGA,  
SAN BERNARDINO COUNTY, CALIFORNIA**

**APNs 1061-451-04 and 1061-451-05**

**Lead Agency:**

**Cucamonga Valley Water District  
10440 Ashford Street  
Rancho Cucamonga, California 91730**

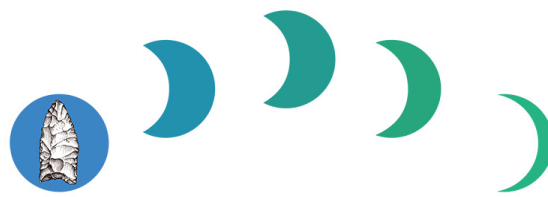
**Preparer:**

**BFSA Environmental Services,  
a Perennial Company  
14010 Poway Road, Suite A  
Poway, California 92064**

**Project Proponent:**

**Lilburn Corporation  
1905 Business Center Drive  
San Bernardino, California 92408**

***December 30, 2024***



---

**BFSA Environmental Services**  
A Perennial Company

## **Archaeological Database Information**

**Author:** Andrew J. Garrison, M.A., RPA

**Consulting Firm:** BFSA Environmental Services, a Perennial Company  
14010 Poway Road, Suite A  
Poway, California 92064  
(858) 484-0915

**Client/Project Proponent:** Lilburn Corporation  
1905 Business Center Drive  
San Bernardino, California 92408

**Lead Agency:** Cucamonga Valley Water District  
10440 Ashford Street  
Rancho Cucamonga, California 91730

**Report Date:** December 30, 2024

**Report Title:** Cultural Resources Study for the Reservoir 6 and Almond Street Waterline Replacement Project, Rancho Cucamonga, San Bernardino County, California

**Type of Study:** Phase I Cultural Resources Survey

**USGS Quadrangle:** Section 22, Township 1 North, Range 7 west of the *Cucamonga Peak, California* (7.5-minute) USGS Quadrangle

**Study Area:** Approximately 1,100 linear feet

**Key Words:** Cultural resources survey; negative results; no further archaeological study recommended.

**Table of Contents**

<b><u>Section</u></b>	<b><u>Description</u></b>	<b><u>Page</u></b>
	MANAGEMENT SUMMARY/ABSTRACT .....	<i>iv</i>
1.0	INTRODUCTION .....	1.0-1
1.1	Project Description.....	1.0-1
1.2	Environmental Setting .....	1.0-1
1.3	Cultural Setting.....	1.0-6
	1.3.1 Prehistoric Period.....	1.0-6
	1.3.2 Historic Period.....	1.0-12
1.4	Results of the Archaeological Records Search .....	1.0-16
	1.4.1 Sacred Lands File Search .....	1.0-19
1.5	Applicable Regulations.....	1.0-19
	1.5.1 California Environmental Quality Act.....	1.0-19
2.0	RESEARCH DESIGN .....	2.0-1
3.0	ANALYSIS OF PROJECT EFFECTS .....	3.0-1
3.1	Survey Methods .....	3.0-1
3.2	Results of the Field Survey .....	3.0-1
4.0	RECOMMENDATIONS.....	4.0-1
5.0	LIST OF PREPARERS AND ORGANIZATIONS CONTACTED .....	5.0-1
6.0	CERTIFICATION .....	6.0-1
7.0	REFERENCES CITED.....	7.0-1

**List of Appendices**

Appendix A – Resumes of Key Personnel

Appendix B – Archaeological Records Search Results\*

Appendix C – NAHC Sacred Lands File Search Results\*

*\*Deleted for public review and bound separately in the Confidential Appendix*

**List of Figures**

<b><u>Figure</u></b>	<b><u>Description</u></b>	<b><u>Page</u></b>
Figure 1.1–1	General Location Map.....	1.0–2
Figure 1.1–2	Project Location Map (USGS) .....	1.0–3
Figure 1.1–3	Project Development Map, Alternative A .....	1.0–4
Figure 1.1–4	Project Development Map, Alternative B .....	1.0–5
Figure 1.3–1	1888 Detailed Irrigation Map .....	1.0–16

**List of Plates**

<b><u>Plate</u></b>	<b><u>Description</u></b>	<b><u>Page</u></b>
Plate 3.2–1	Overview of the eastern connection point and hiking trail, facing west.....	3.0–2
Plate 3.2–2	Overview of the western connection point and easement, facing north .....	3.0–2
Plate 3.2–3	Overview of the drainage and Alternative A drainage crossing from the western connection point facing northwest.....	3.0–3
Plate 3.2–4	Overview of the easement and Alternative B, facing south.....	3.0–3
Plate 3.2–2	Overview of the hiking trail and Alternative B, facing north .....	3.0–4
Plate 3.2–2	Overview of the Alternative B drainage crossing, facing east.....	3.0–4

**List of Tables**

<b><u>Table</u></b>	<b><u>Description</u></b>	<b><u>Page</u></b>
Table 1.4–1	Cultural Resources Located Within One Mile of the Project .....	1.0–18

## **MANAGEMENT SUMMARY/ABSTRACT**

In response to a request from Lilburn Corporation, a cultural resources study was conducted by BFSA Environmental Services, a Perennial Company (BFSA), for the proposed Reservoir 6 and Almond Street Waterline Replacement Project. The proposed project consists of the replacement of a 14-inch waterline across a seasonal drainage within the city of Rancho Cucamonga, San Bernardino County, California. As designed, two alternatives for the replacement waterline are being studied which collectively comprise an approximately 1,100 linear foot study area (Alternative A and Alternative B). Both alternatives include the installation of a new waterline from an eastern connection point located within an easement, situated northeast of the intersection of Almond Street and Lomas Court, to the west, across the drainage, to a western connection point situated along a dirt hiking trail. The proposed project is located within Assessor's Parcel Numbers (APNs) 1061-451-04 and 1061-451-05 and can be found within Section 22, Township 1 North, Range 7 West on the United States Geological Survey (USGS) *Cucamonga Peak, California* Quadrangle.

The purpose of this investigation was to locate and record any cultural resources within the project and subsequently evaluate any resources as part of the Cucamonga Valley Water District (CVWD) environmental review process conducted in compliance with the California Environmental Quality Act (CEQA). The archaeological investigation of the project includes an archaeological records search conducted at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton (CSU Fullerton) in order to assess previous archaeological studies and identify any previously recorded archaeological sites within the project or in the immediate vicinity. The records search identified eight previously recorded resources within a one-mile radius of the project, none of which are located within or adjacent to the subject property. The SCCIC records search also identified 22 previous studies conducted within one mile of the proposed project, one of which included the subject property (Jenkins 1987). A Sacred Lands File (SLF) search was also requested from the Native American Heritage Commission (NAHC) to search for the presence of any recorded Native American sacred sites or locations of religious or ceremonial importance within the project vicinity, which was returned with positive results.

BFSA Field Operations Manager Clarence Hoff conducted the archaeological survey for the project on March 19, 2024. Ground visibility during the survey was characterized as moderate as it fluctuated throughout the alignment alternatives. However, visibility was excellent at both connection points, along the hiking trail, and easement area, as these areas have previously been cleared and graded while also being subjected to regular maintenance. No cultural resources were identified during the survey.

The cultural resources study for the Reservoir 6 and Almond Street Waterline Replacement Project did not identify any archaeological resources within or adjacent to the alignment of either Alternative A or Alternative B. Further, both alignment alternatives have been previously impacted by clearing, grading, and regular maintenance. As such, the potential for any previously unidentified significant cultural resources to be impacted by the project is very low. Based upon

these findings, no further archaeological studies are necessary or recommended as part of the CEQA review process. A copy of this report will be permanently filed with the SCCIC at CSU Fullerton. All notes, photographs, and other materials related to this project will be curated at the archaeological laboratory of BFSA in Poway, California.

## **1.0 INTRODUCTION**

### **1.1 Project Description**

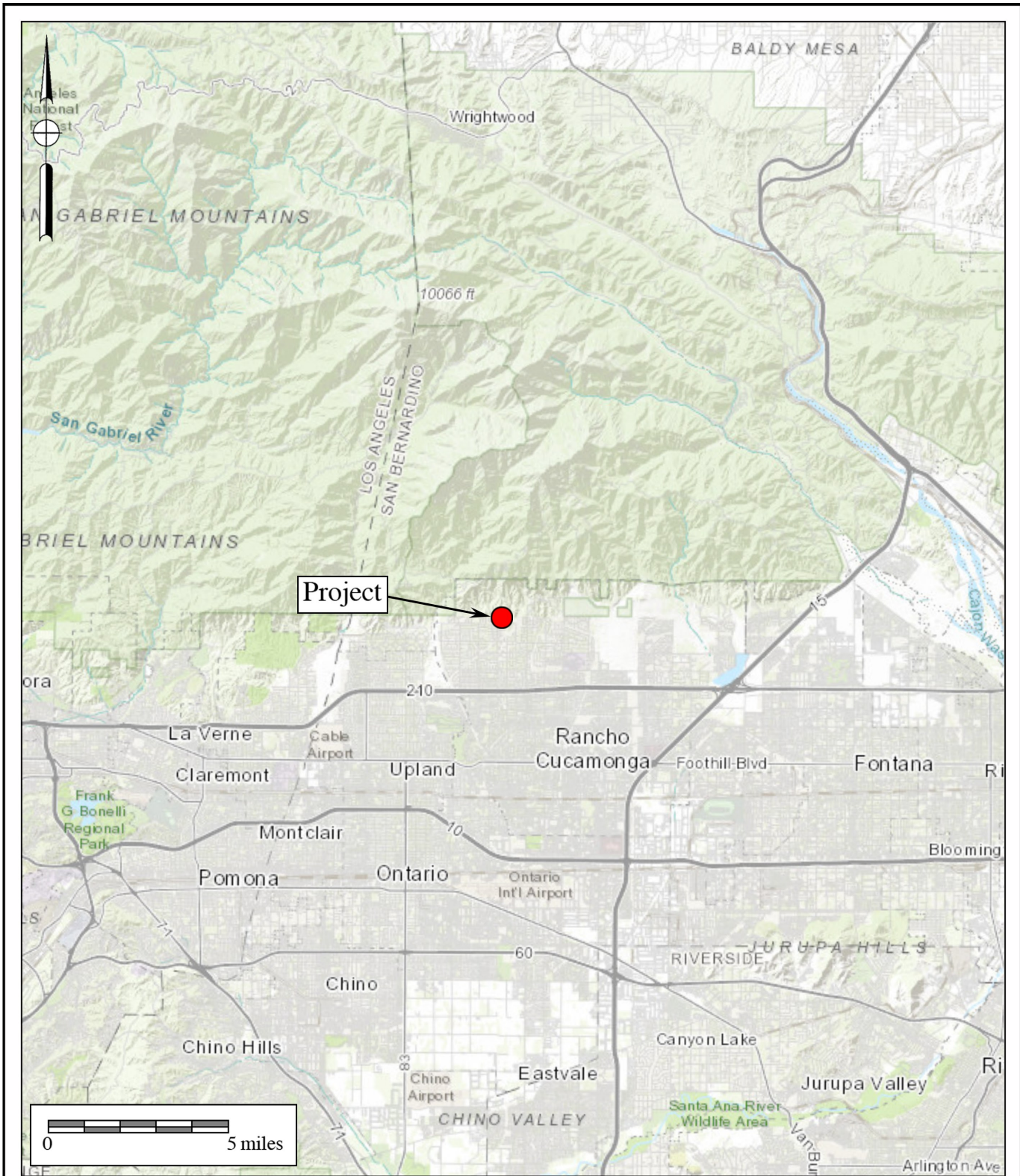
The archaeological survey program for the Reservoir 6 and Almond Street Waterline Replacement Project was conducted in order to comply with CEQA and the CVWD environmental requirements. The project is situated northeast of the intersection of Almond Street and Lomas Court within the city of Rancho Cucamonga, San Bernardino County, California (Figure 1.1–1). The proposed project consists of the replacement of a 14-inch waterline across a seasonal drainage. This drainage originates within Angalls Canyon to the north and drains to the south into a catch basin and the man-made Demens Creek Channel. The proposed project is located within APNs 1061-451-04 and 1061-451-05 and can be found within Section 22, Township 1 North, Range 7 West on the USGS *Cucamonga Peak, California* Quadrangle (Figure 1.1–2). As designed, two alternatives for the replacement waterline are being studied which collectively comprise an approximately 1,100 linear foot study area (Alternative A and Alternative B).

Alternative A, as proposed, follows the existing waterline alignment and is approximately 300 linear feet (Figure 1.1–3). Alternative A connects into the existing waterline at a western connection point situated within an easement between a residential development and the seasonal drainage. Alternative A extends west from this connection point, directly across the drainage, to an eastern connection point situated along a dirt hiking trail. The eastern connection point along the hiking trail is situated approximately 50 feet above the drainage bottom. Alternative B is approximately 800 linear feet and would extend north, within the alignment of the easement, from the initial western connection point, then east across the drainage and, finally, south along the hiking trail to the western connection point (Figure 1.1–4).

The decision to request this investigation was based upon the cultural resource sensitivity of the locality as suggested by known site density and predictive modeling. Sensitivity for cultural resources in a given area is usually indicated by known settlement patterns, which in the southwestern San Bernardino County area are focused around environments with accessible food and water.

### **1.2 Environmental Setting**

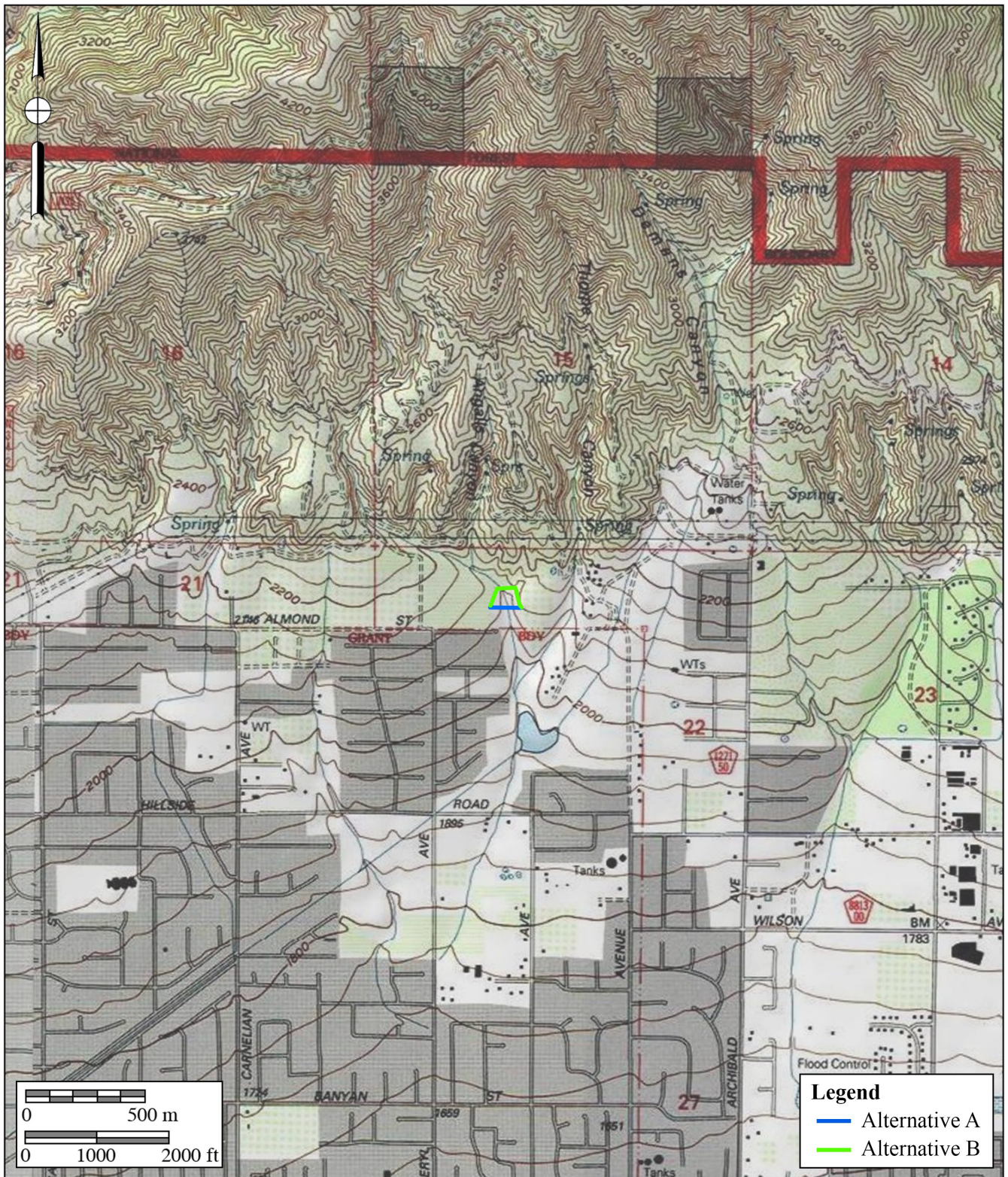
The proposed project is generally located in southwestern San Bernardino County northeast of the intersection of Almond Street and Lomas Court in the city of Rancho Cucamonga. The project is situated within open space situated east of a residential subdivision and west of Thorpe Canyon at the base of the foothills just south of the of San Gabriel Mountains. The San Gabriel Mountains extend from Newall Pass in Los Angeles County to the east to the Cajon Pass in San Bernardino County. These mountains are part of the Transverse Ranges with peaks exceeding 9,000 feet above mean sea level (AMSL). Situated at the base of the foothills associated with the San Gabriel Mountains, Dibblee and Minch map the elevated areas of the project as Holocene age “alluvial gravel and sand of valley areas,” while the seasonal drainage is characterized as “alluvial gravel and sand of stream channels and washes” (Dibblee and Minch 2003).



**Figure 1.1-1**  
**General Location Map**

The Reservoir 6 and Almond Street Waterline Replacement Project  
 ESRI

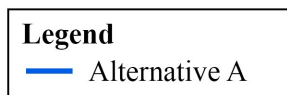
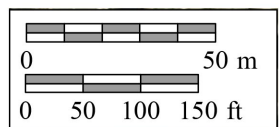
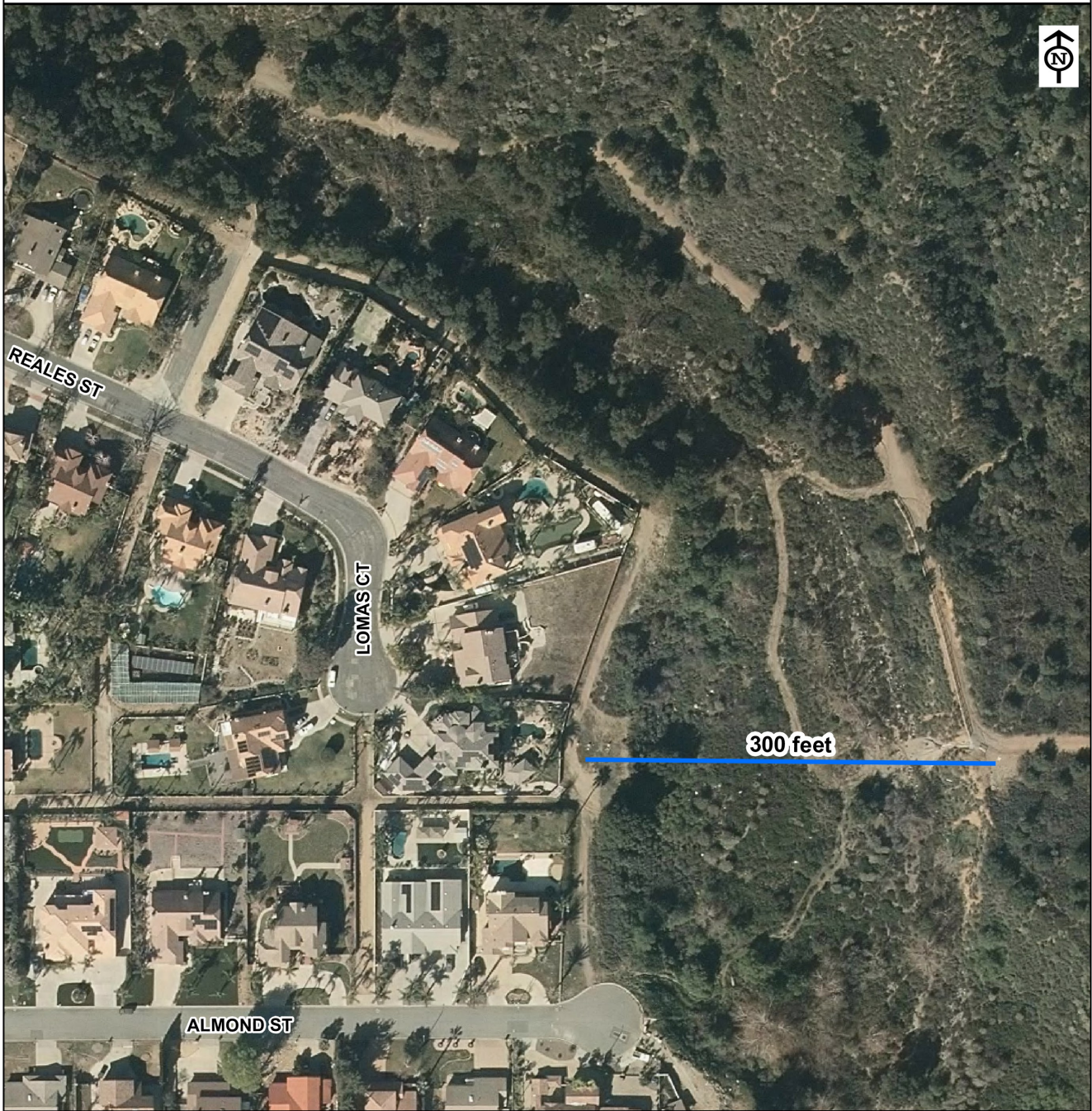




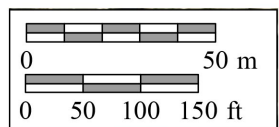
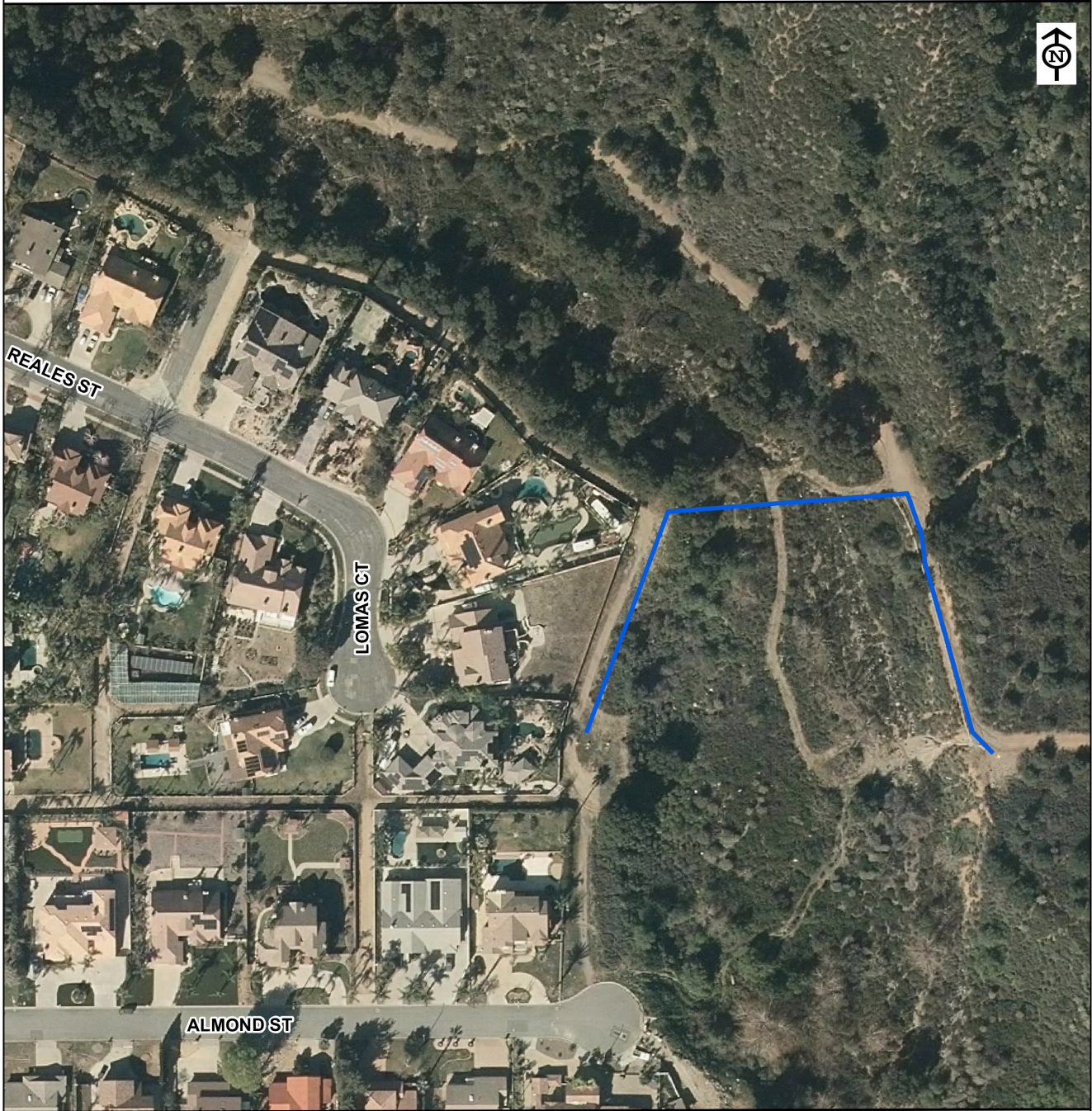
**Figure 1.1–2  
Project Location Map**

The Reservoir 6 and Almond Street Waterline Replacement Project  
USGS Cucamonga Peak and Mount Baldy Quadrangles (7.5-minute series)





**Figure 1.1–3**  
**Project Development Map, Alternative A**  
The Reservoir 6 and Almond Stree Waterline Replacement Project



**Legend**  
 Alternative B



**Figure 1.1–4**  
**Project Development Map, Alternative B**  
 The Reservoir 6 and Almond Stree Waterline Replacement Project

The project is situated east of Cucamonga Creek, west of Demens Creek, and surrounded by various north-to-south-trending seasonal drainages that transport water south from the higher elevated foothills and mountains. The drainage, which will be crossed by the waterline, feeds into Demens and Cucamonga creeks. Elevations within the project range from approximately 2,065 feet AMSL within the seasonal drainage to approximately 2,105 feet AMSL at the eastern extent. Vegetation found within the project vicinity consists primarily of grassland and coastal sage scrub community plants with riparian habitat dominating the drainage alignment.

Within the project alignment, the location of the connection points, the easement, existing waterline alignment, and hiking trail have all been previously impacted by clearing, grading, and maintenance. During the prehistoric period, vegetation near the project provided sufficient food resources to support prehistoric human occupants. Animals that inhabited the project during prehistoric times included mammals such as rabbits, squirrels, gophers, mice, rats, deer, and coyotes, in addition to a variety of reptiles and amphibians. The natural setting of the project during the prehistoric occupation offered a rich nutritional resource base. Fresh water was likely obtainable from seasonal drainages like the one traversed by the project, as well as from the Demens and Cucamonga creeks.

### **1.3 Cultural Setting**

#### *1.3.1 Prehistoric Period*

Paleo Indian, Archaic Period Milling Stone Horizon, and the Late Prehistoric Shoshonean groups are the three general cultural periods represented in San Bernardino County. The following discussion of the cultural history of San Bernardino County references the San Dieguito Complex, the Encinitas Tradition, the Milling Stone Horizon, the La Jolla Complex, the Pauma Complex, and the San Luis Rey Complex, since these culture sequences have been used to describe archaeological manifestations in the region. The Late Prehistoric component in the southwestern area of San Bernardino County was represented by the Gabrielino and Serrano Indians. According to Kroeber (1976), the Serrano probably owned a stretch of the Sierra Madre from Cucamonga east to above Mentone and halfway up to San Timoteo Canyon, including the San Bernardino Valley and just missing Riverside County. However, Kroeber (1976) also states that this area has been assigned to the Gabrielino, “which would be a more natural division of topography, since it would leave the Serrano pure mountaineers.”

Absolute chronological information, where possible, will be incorporated into this discussion to examine the effectiveness of continuing to use these terms interchangeably. Reference will be made to the geologic framework that divides the culture chronology of the area into four segments: late Pleistocene (20,000 to 10,000 years before the present [YBP]), early Holocene (10,000 to 6,650 YBP), middle Holocene (6,650 to 3,350 YBP), and late Holocene (3,350 to 200 YBP).

**Paleo Indian Period (Late Pleistocene: 11,500 to circa 9,000 YBP)**

The Paleo Indian Period is associated with the terminus of the late Pleistocene (12,000 to 10,000 YBP). The environment during the late Pleistocene was cool and moist, which allowed for glaciation in the mountains and the formation of deep, pluvial lakes in the deserts and basin lands (Moratto 1984). However, by the terminus of the late Pleistocene, the climate became warmer, which caused glaciers to melt, sea levels to rise, greater coastal erosion, large lakes to recede and evaporate, extinction of Pleistocene megafauna, and major vegetation changes (Moratto 1984; Martin 1967, 1973; Fagan 1991). The coastal shoreline at 10,000 YBP, depending upon the particular area of the coast, was near the 30-meter isobath, or two to six kilometers further west than its present location (Masters 1983).

Paleo Indians were likely attracted to multiple habitat types, including mountains, marshlands, estuaries, and lakeshores. These people likely subsisted using a more generalized hunting, gathering, and collecting adaptation, utilizing a variety of resources including birds, mollusks, and both large and small mammals (Erlandson and Colten 1991; Moratto 1984; Moss and Erlandson 1995).

**Archaic Period (Early and Middle Holocene: circa 9,000 to 1,300 YBP)**

The Archaic Period of prehistory began with the onset of the Holocene around 9,000 YBP. The transition from the Pleistocene to the Holocene was a period of major environmental change throughout North America (Antevs 1953; Van Devender and Spaulding 1979). The general warming trend caused sea levels to rise, lakes to evaporate, and drainage patterns to change. In southern California, the general climate at the beginning of the early Holocene was marked by cool/moist periods and an increase in warm/dry periods and sea levels. The coastal shoreline at 8,000 YBP, depending upon the particular area of the coast, was near the 20-meter isobath, or one to four kilometers further west than its present location (Masters 1983).

The rising sea level during the early Holocene created rocky shorelines and bays along the coast by flooding valley floors and eroding the coastline (Curry 1965; Inman 1983). Shorelines were primarily rocky with small littoral cells, as sediments were deposited at bay edges but rarely discharged into the ocean (Reddy 2000). These bays eventually evolved into lagoons and estuaries, which provided a rich habitat for mollusks and fish. The warming trend and rising sea levels generally continued until the late Holocene (4,000 to 3,500 YBP).

At the beginning of the late Holocene, sea levels stabilized, rocky shores declined, lagoons filled with sediment, and sandy beaches became established (Gallegos 1985; Inman 1983; Masters 1994; Miller 1966; Warren and Pavesic 1963). Many former lagoons became saltwater marshes surrounded by coastal sage scrub by the late Holocene (Gallegos 2002). The sedimentation of the lagoons was significant in that it had profound effects on the types of resources available to prehistoric peoples. Habitat was lost for certain large mollusks, namely *Chione* and *Argopecten*, but habitat was gained for other small mollusks, particularly *Donax* (Gallegos 1985; Reddy 2000). The changing lagoon habitats resulted in the decline of larger shellfish, the loss of drinking water, and the loss of Torrey Pine nuts, causing a major depopulation of the coast as people shifted inland

to reliable freshwater sources and intensified their exploitation of terrestrial small game and plants, including acorns (originally proposed by Rogers 1929; Gallegos 2002).

The Archaic Period in southern California is associated with a number of different cultures, complexes, traditions, horizons, and periods, including San Dieguito, La Jolla, Encinitas, Milling Stone, Pauma, and Intermediate.

**Late Prehistoric Period (Late Holocene: 1,300 YBP to 1790)**

Approximately 1,350 YBP, a Shoshonean-speaking group from the Great Basin region moved into San Bernardino County, marking the transition to the Late Prehistoric Period. This period has been characterized by higher population densities and elaborations in social, political, and technological systems. Economic systems diversified and intensified during this period, with the continued elaboration of trade networks, the use of shell-bead currency, and the appearance of more labor-intensive, yet effective, technological innovations. Technological developments during this period included the introduction of the bow and arrow between A.D. 400 and 600 and the introduction of ceramics. Atlatl darts were replaced by smaller arrow points, including the Cottonwood series points. Other hallmarks of the Late Prehistoric Period include extensive trade networks as far reaching as the Colorado River Basin and cremation of the dead.

**Protohistoric Period (Late Holocene: 1790 to Present)**

**Gabrielino**

The territory of the Gabrielino at the time of Spanish contact covers much of present-day Los Angeles and Orange counties. The southern extent of this culture area is bounded by Aliso Creek, the eastern extent is located east of present-day San Bernardino along the Santa Ana River, the northern extent includes the San Fernando Valley, and the western extent includes portions of the Santa Monica Mountains. The Gabrielino also occupied several Channel Islands including Santa Barbara Island, Santa Catalina Island, San Nicholas Island, and San Clemente Island. Because of their access to certain resources, including a steatite source from Santa Catalina Island, this group was among the wealthiest and most populous aboriginal groups in all of southern California. Trade of materials and resources controlled by the Gabrielino extended as far north as the San Joaquin Valley, as far east as the Colorado River, and as far south as Baja California (Bean and Smith 1978a; Kroeber 1976).

The Gabrielino lived in permanent villages and smaller resource gathering camps occupied at various times of the year depending upon the seasonality of the resource. Larger villages were comprised of several families or clans, while smaller seasonal camps typically housed smaller family units. The coastal area between San Pedro and Topanga Canyon was the location of primary subsistence villages, while secondary sites were located near inland sage stands, oak groves, and pine forests. Permanent villages were located along rivers and streams, as well as in sheltered areas along the coast. As previously mentioned, the Channel Islands were also the locations of relatively large settlements (Bean and Smith 1978a; Kroeber 1976).

Resources procured along the coast and on the islands were primarily marine in nature and included tuna, swordfish, ray, shark, California sea lion, Stellar sea lion, harbor seal, northern elephant seal, sea otter, dolphin, porpoise, various waterfowl species, numerous fish species, purple sea urchin, and mollusks such as rock scallop, California mussel, and limpet. Inland resources included oak acorn, pine nut, Mohave yucca, cacti, sage, grass nut, deer, rabbit, hare, rodent, quail, duck, and a variety of reptiles such as western pond turtle and snakes (Bean and Smith 1978a; Kroeber 1976).

The social structure of the Gabrielino is little known; however, there appears to have been at least three social classes: 1) the elite, which included the rich, chiefs, and their immediate family; 2) a middle class, which included people of relatively high economic status or long-established lineages; and 3) a class of people that included most other individuals in the society. Villages were politically autonomous units comprised of several lineages. During times of the year when certain seasonal resources were available, the village would divide into lineage groups and move out to exploit them, returning to the village between forays (Bean and Smith 1978a; Kroeber 1976).

Each lineage had its own leader, with the village chief coming from the dominant lineage. Several villages might be allied under a paramount chief. Chiefly positions were of an ascribed status, most often passed to the eldest son. Chiefly duties included providing village cohesion, leading warfare and peace negotiations with other groups, collecting tribute from the village(s) under his jurisdiction, and arbitrating disputes within the village(s). The status of the chief was legitimized by his safekeeping of the sacred bundle, which was a representation of the link between the material and spiritual realms and the embodiment of power (Bean and Smith 1978a; Kroeber 1976).

Shamans were leaders in the spirit realm. The duties of the shaman included conducting healing and curing ceremonies, guarding the sacred bundle, locating lost items, identifying and collecting poisons for arrows, and making rain (Bean and Smith 1978a; Kroeber 1976).

Marriages were made between individuals of equal social status and, in the case of powerful lineages, marriages were arranged to establish political ties between the lineages (Bean and Smith 1978a; Kroeber 1976).

Men conducted the majority of the heavy labor, hunting, fishing, and trading with other groups. Women's duties included gathering and preparing plant and animal resources, and making baskets, pots, and clothing (Bean and Smith 1978a; Kroeber 1976).

Gabrielino houses were domed, circular structures made of thatched vegetation. Houses varied in size and could house from one to several families. Sweathouses (semicircular, earth-covered buildings) were public structures used in male social ceremonies. Other structures included menstrual huts and a ceremonial structure called a *yugar*, an open-air structure built near the chief's house (Bean and Smith 1978a; Kroeber 1976).

Clothing was minimal. Men and children most often went naked, while women wore deerskin or bark aprons. In cold weather, deerskin, rabbit fur, or bird skin (with feathers intact) cloaks were worn. Island and coastal groups used sea otter fur for cloaks. In areas of rough terrain, yucca fiber sandals were worn. Women often used red ochre on their faces and skin for adornment

or protection from the sun. Adornment items included feathers, fur, shells, and beads (Bean and Smith 1978a; Kroeber 1976).

Hunting implements included wood clubs, sinew-backed bows, slings, and throwing clubs. Maritime implements included rafts, harpoons, spears, hook and line, and nets. A variety of other tools included deer scapulae saws, bone and shell needles, bone awls, scrapers, bone or shell flakers, wedges, stone knives and drills, metates, mullers, manos, shell spoons, bark platters, and wood paddles and bowls. Baskets were made from rush, deer grass, and skunkbush. Baskets were fashioned for hoppers, plates, trays, and winnowers for leaching, straining, and gathering. Baskets were also used for storing, preparing, and serving food, and for keeping personal and ceremonial items (Bean and Smith 1978a; Kroeber 1976).

The Gabrielino had exclusive access to soapstone, or steatite, procured from Santa Catalina Island quarries. This highly prized material was used for making pipes, animal carvings, ritual objects, ornaments, and cooking utensils. The Gabrielino profited well from trading steatite since it was valued so much by groups throughout southern California (Bean and Smith 1978a; Kroeber 1976).

### Serrano

Aboriginally, the Serrano occupied an area east of present-day Los Angeles. According to Bean and Smith (1978b), definitive boundaries are difficult to place for the Serrano due to their sociopolitical organization and a lack of reliable data:

The Serrano were organized into autonomous localized lineages occupying definite, favored territories, but rarely claiming any territory far removed from the lineage's home base. Since the entire dialectical group was neither politically united nor amalgamated into supralineage groups, as many of their neighbors were, one must speak in terms of generalized areas of usage rather than pan-tribal holdings. (Strong [1929] in Bean and Smith 1978b)

However, researchers place the Serrano in the San Bernardino Mountains east of Cajon Pass and at the base of and north of the mountains near Victorville, east to Twentynine Palms, and south to the Yucaipa Valley (Bean and Smith 1978b). Serrano has been used broadly for languages in the Takic family including Serrano, Kitanemuk, Vanyume, and Tataviam.

The Serrano were part of "exogamous clans, which in turn were affiliated with one of two exogamous moieties, *tuk<sup>w</sup>utam* (Wildcat) and *wahi?iam* (Coyote)" (Bean and Smith 1978b). According to Strong (1971), details such as number, structure, and function of the clans are unknown. Instead, he states that clans were not political, but were rather structured based upon "economic, marital, or ceremonial reciprocity, a pattern common throughout Southern California" (Bean and Smith 1978b). The Serrano formed alliances amongst their own clans and with Cahuilla, Chemehuevi, Gabrielino, and Cupeño clans (Bean and Smith 1978b). Clans were large, autonomous, political and landholding units formed patrilineally, with all males descending from

a common male ancestor, including all wives and descendants of the males. However, even after marriage, women would still keep their original lineage, and would still participate in those ceremonies (Bean and Smith 1978b).

According to Bean and Smith (1978b), the cosmogony and cosmography of the Serrano are very similar to those of the Cahuilla:

There are twin creator gods, a creation myth told in “epic poem” style, each local group having its own origin story, water babies whose crying foretells death, supernatural beings of various kinds and on various hierarchically arranged power-access levels, an Orpheus-like myth, mythical deer that no one can kill, and tales relating the adventures (and misadventures) of Coyote, a tragicomic trickster-transformer culture hero. (Bean [1962-1972] and Benedict [1924] in Bean and Smith 1978b)

The Serrano had a shaman, a person who acquired their powers through dreams, which were induced through ingestion of the hallucinogen datura. The shaman was mostly a curer/healer, using herbal remedies and “sucking out the disease-causing agents” (Bean and Smith 1978b).

Serrano village locations were typically located near water sources. Individual family dwellings were likely circular, domed structures. Daily household activities would either take place outside of the house out in the open, or under a ramada constructed of a thatched willow pole roof held up by four or more poles inserted into the ground. Families could consist of a husband, wife/wives, unmarried female children, married male children, the husband’s parents, and/or widowed aunts and uncles. Rarely, an individual would occupy his own house, typically in the mountains. Serrano villages also included a large ceremonial house where the lineage leader would live, which served as the religious center for lineages or lineage-sets, granaries, and sweathouses (Bean and Smith 1978b).

The Serrano were primarily hunters and gatherers. Vegetal staples varied with locality. Acorns and piñon nuts were found in the foothills, and mesquite, yucca roots, cacti fruits, and piñon nuts were found in or near the desert regions. Diets were supplemented with other roots, bulbs, shoots, and seeds (Heizer 1978). Deer, mountain sheep, antelopes, rabbits, and other small rodents were among the principal food packages. Various game birds, especially quail, were also hunted. The bow and arrow was used for large game, while smaller game and birds were killed with curved throwing sticks, traps, and snares. Occasionally, game was hunted communally, often during mourning ceremonies (Benedict 1924; Drucker 1937; Heizer 1978). Earth ovens were used to cook meat, bones were boiled to extract marrow, and blood was either drunk cold or cooked to a thicker consistency and then eaten. Some meat and vegetables were sun-dried and stored. Food acquisition and processing required the manufacture of additional items such as knives, stone or bone scrapers, pottery trays and bowls, bone or horn spoons, and stirrers. Mortars, made of either stone or wood, and metates were also manufactured (Strong 1971; Drucker 1937; Benedict 1924).

The Serrano were very similar technologically to the Cahuilla. In general, manufactured goods included baskets, some pottery, rabbit-skin blankets, awls, arrow straighteners, sinew-backed bows, arrows, fire drills, stone pipes, musical instruments (rattles, rasps, whistles, bull-roarers, and flutes), feathered costumes, mats for floor and wall coverings, bags, storage pouches, cordage (usually comprised of yucca fiber), and nets (Heizer 1978).

### *1.3.2 Historic Period*

Traditionally, the history of the state of California has been divided into three general periods: the Spanish Period (1769 to 1821), the Mexican Period (1822 to 1846), and the American Period (1848 to present) (Caughey 1970). The American Period is often further subdivided into additional phases: the nineteenth century (1848 to 1900), the early twentieth century (1900 to 1950), and the Modern Period (1950 to present). From an archaeological standpoint, all of these phases can be referred to together as the Ethnohistoric Period. This provides a valuable tool for archaeologists, as ethnohistory is directly concerned with the study of indigenous or non-Western peoples from a combined historical/anthropological viewpoint, which employs written documents, oral narrative, material culture, and ethnographic data for analysis.

European exploration along the California coast began in 1542 with the landing of Juan Rodríguez Cabrillo and his men at San Diego Bay. Sixty years after the Cabrillo expeditions, an expedition under Sebastián Vizcaíno made an extensive and thorough exploration of the Pacific coast. Although the voyage did not extend beyond the northern limits of the Cabrillo track, Vizcaíno had the most lasting effect upon the nomenclature of the coast. Many of his place names have survived, whereas practically every one of the names created by Cabrillo have faded from use. For instance, Cabrillo named the first (now) United States port he stopped at “San Miguel”; 60 years later, Vizcaíno changed it to “San Diego” (Rolle 1969). The early European voyages observed Native Americans living in villages along the coast but did not make any substantial, long-lasting impact. At the time of contact, the Luiseño population was estimated to have ranged from 4,000 to as many as 10,000 individuals (Bean and Shipek 1978; Kroeber 1976).

The historic background of the project area began with the Spanish colonization of Alta California. The first Spanish colonizing expedition reached southern California in 1769 with the intention of converting and civilizing the indigenous populations, as well as expanding the knowledge of and access to new resources in the region (Brigandi 1998). As a result, by the late eighteenth century, a large portion of southern California was overseen by Mission San Luis Rey (San Diego County), Mission San Juan Capistrano (Orange County), and Mission San Gabriel (Los Angeles County), who began colonizing the region and surrounding areas (Chapman 1921).

Native Californians may have first coalesced with Europeans around 1769 when the first Spanish mission was established in San Diego. In 1771, Father Francisco Garcés first searched the Californian desert for potential mission sites. Interactions between local tribes and Franciscan priests occurred by 1774 when Juan Bautista de Anza made an exploration of Alta California.

Serrano contact with the Europeans may have occurred as early as 1771 or 1772, but it was not until approximately 1819 that the Spanish directly influenced the culture. The Spanish

established *asistencias* in San Bernardino, Pala, and Santa Ysabel. Between the founding of the *asistencia* and secularization in 1834, most of the Serranos in the San Bernardino Mountains were removed to the nearby missions (Beattie and Beattie 1951) while the Cahuilla maintained a high level of autonomy from Spain (Bean 1978).

Each mission gained power through the support of a large, subjugated Native American workforce. As the missions grew, livestock holdings increased and became increasingly vulnerable to theft. In order to protect their interests, the southern California missions began to expand inland to try and provide additional security (Beattie and Beattie 1939; Caughey 1970). In order to meet their needs, the Spaniards embarked upon a formal expedition in 1806 to find potential locations within what is now the San Bernardino Valley. As a result, by 1810, Father Francisco Dumetz of Mission San Gabriel had succeeded in establishing a religious site, or *capilla*, at a Cahuilla *rancheria* called Guachama (Beattie and Beattie 1951). San Bernardino Valley received its name from this site, which was dedicated to San Bernardino de Siena by Father Dumetz. The Guachama *rancheria* was located in present-day Bryn Mawr in San Bernardino County.

These early colonization efforts were followed by the establishment of *estancias* at Puente (circa 1816) and San Bernardino (circa 1819) near Guachama (Beattie and Beattie 1951). These efforts were soon mirrored by the Spaniards from Mission San Luis Rey who, in turn, established a presence in what is now Lake Elsinore, Temecula, and Murrieta (Chapman 1921). The indigenous groups who occupied these lands were recruited by missionaries, converted, and put to work in the missions (Pourade 1961). Throughout this period, the Native American populations were decimated by introduced diseases, a drastic shift in diet resulting in poor nutrition, and social conflicts due to the introduction of an entirely new social order (Cook 1976).

Mexico achieved independence from Spain in 1822 and became a federal republic in 1824. As a result, both Baja and Alta California became classified as territories (Rolle 1969). Shortly thereafter, the Mexican Republic sought to grant large tracts of private land to its citizens to begin to encourage immigration to California and to establish its presence in the region. Part of the establishment of power and control included the desecularization of the missions circa 1832. These same missions were also located on some of the most fertile land in California and, as a result, were considered highly valuable. The resulting land grants, known as “*ranchos*,” covered expansive portions of California and, by 1846, more than 600 land grants had been issued by the Mexican government. Rancho Jurupa was the first rancho to be established and was issued to Juan Bandini in 1838. Although Bandini primarily resided in San Diego, Rancho Jurupa was located in what is now Riverside County (Pourade 1963). A review of Riverside County place names quickly illustrates that many of the *ranchos* in Riverside County lent their names to present-day locations, including Jurupa, El Rincon, La Sierra, El Sobrante de San Jacinto, La Laguna (Lake Elsinore), Santa Rosa, Temecula, Pauba, San Jacinto Nuevo y Potrero, and San Jacinto Viejo (Gunther 1984). As was typical of many *ranchos*, these were all located in the valley environments within western Riverside County.

The treatment of Native Americans grew worse during the Rancho Period. Most of the Native Americans were forced off of their land or put to work on the now privately-owned ranchos, most often as slave labor. In light of the brutal ranchos, the degree to which Native Americans had become dependent upon the mission system is evident when, in 1838, a group of Native Americans from Mission San Luis Rey petitioned government officials in San Diego to relieve suffering at the hands of the rancheros:

We have suffered incalculable losses, for some of which we are in part to be blamed for because many of us have abandoned the Mission ... We plead and beseech you ... to grant us a Rev. Father for this place. We have been accustomed to the Rev. Fathers and to their manner of managing the duties. We labored under their intelligent directions, and we were obedient to the Fathers according to the regulations, because we considered it as good for us. (Brigandi 1998:21)

Native American culture had been disrupted to the point where they could no longer rely upon prehistoric subsistence and social patterns. Not only does this illustrate how dependent the Native Americans had become upon the missionaries, but it also indicates a marked contrast in the way the Spanish treated the Native Americans as compared to the Mexican and United States ranchers. Spanish colonialism (missions) is based upon utilizing human resources while integrating them into their society. The ranchers, both Mexican and American, did not accept Native Americans into their social order and used them specifically for the extraction of labor, resources, and profit. Rather than being incorporated, they were either subjugated or exterminated (Cook 1976).

By 1846, tensions between the United States and Mexico had escalated to the point of war (Rolle 1969). In order to reach a peaceful agreement, the Treaty of Guadalupe Hidalgo was put into effect in 1848, which resulted in the annexation of California to the United States. Once California opened to the United States, waves of settlers moved in searching for gold mines, business opportunities, political opportunities, religious freedom, and adventure (Rolle 1969; Caughey 1970). By 1850, California had become a state and was eventually divided into 27 separate counties. While a much larger population was now settling in California, this was primarily in the central valley, San Francisco, and the Gold Rush region of the Sierra Nevada mountain range (Rolle 1969; Caughey 1970). During this time, southern California grew at a much slower pace than northern California and was still dominated by the cattle industry that was established during the earlier rancho period.

By the late 1880s and early 1890s, there was growing discontent between San Bernardino and Riverside, its neighbor 10 miles to the south, due to differences in opinion concerning religion, morality, the Civil War, politics, and fierce competition to attract settlers. After a series of instances in which charges were claimed about unfair use of tax monies to the benefit of only the city of San Bernardino, several people from Riverside decided to investigate the possibility of a new county. In May of 1893, voters living within portions of San Bernardino County (to the north)

and San Diego County (to the south) approved the formation of Riverside County. Early business opportunities were linked to the agriculture industry, but commerce, construction, manufacturing, transportation, and tourism also provided a healthy local economy.

### General History of Rancho Cucamonga

The word “Cucamonga” is Shoshone in origin, meaning “sandy place,” and was first documented in 1811 in records of Mission San Gabriel. The 13,000-acre Rancho Cucamonga was granted to Tiburcio Tapia, the president of the Los Angeles City Council, in 1839 (City of Rancho Cucamonga 2010). Tapia lived on the land granted to him, on top of Red Hill, and planted vineyards and built a small winery (enlarged and called Thomas Winery in 1933 and Filippi Vineyards in 1967). These historic winery buildings are located at the northeast corner of Foothill Boulevard and Vineyard Avenue and are currently used for commercial purposes (City of Rancho Cucamonga 2010).

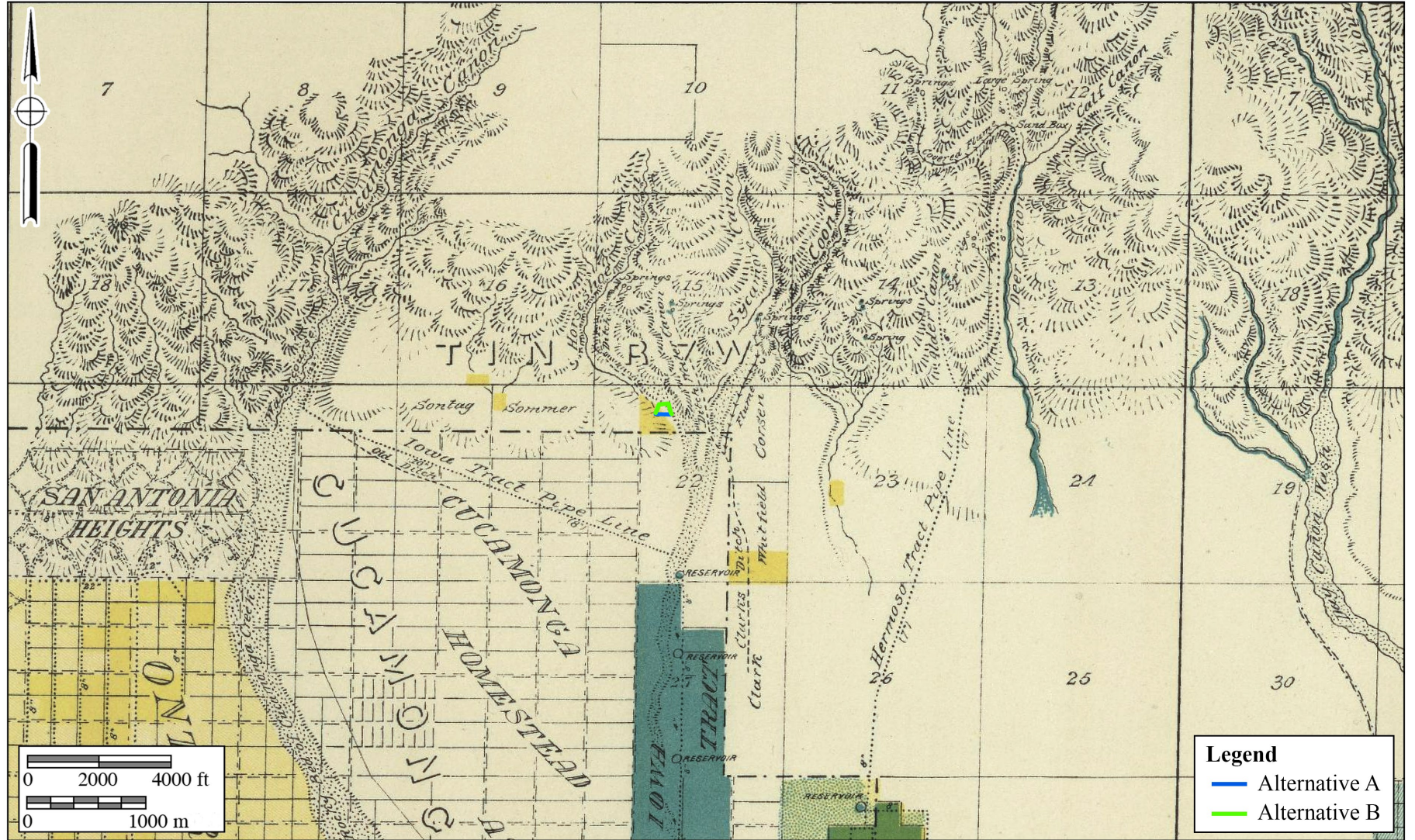
Tapia’s daughter, María Merced Tapia de Prudhomme, inherited Rancho Cucamonga after Tapia died in 1845, and her husband, Leon Victor Prudhomme, took control until he sold it to John Rains in 1858 (City of Rancho Cucamonga 2010). Rains expanded the vineyards on the rancho with the addition of roughly 125,000 to 150,000 new vines (City of Rancho Cucamonga 2010). When Rains was found murdered in 1862, his widow Doña María Merced Williams de Rains inherited the rancho but encountered financial problems and lost it, effectively ending the rancho era in the Cucamonga area (City of Rancho Cucamonga 2010).

The city of Rancho Cucamonga was incorporated in 1977 and included three towns: Cucamonga, Alta Loma, and Etiwanda. The subject property is situated within an area identified by the City of Rancho Cucamonga as originally being part of the community of Alta Loma (City of Rancho Cucamonga 2020).

Alta Loma was created from lands originally part of the Rancho holdings. Isaias W. Hellman purchased portions of the rancho after the death of John Rains and formed the Cucamonga Homestead Association. However, Hellman had trouble obtaining water for his subdivision. In 1881, Adolph Petsch, along with other investors, opened the Hermosa Tract just outside of the former rancho lands. This competition encouraged Hellman to establish the Iowa Tract in 1882 (City of Rancho Cucamonga History 2023). Hellman solved the water issue by having Chinese laborers dig water canals from the tract via the Cucamonga Canyon. In 1887, the two tracts merged and were known as Ioamosa (City of Rancho Cucamonga History 2023). Based upon irrigation maps from 1888, the current project was located outside of the Hermosa and the Iowa tracts (Figure 1.3–1).

In the late nineteenth century, agriculture became the main industry in the area, including citrus fruits and wine-making grapes and, as shown on Figure 1.3–1, the Hermosa Tract included the Cucamonga Fruit Land Company (City of Rancho Cucamonga 2010). In 1913, when the Pacific Electric Railway came to the area, the community became known as Alta Loma (City of Rancho Cucamonga History 2023).

91-01



**Legend**

- Alternative A
- Alternative B

**Figure 1.3-1**

**1888 Detailed Irrigation Map**

The Reservoir 6 and Almond Street Waterline Replacement Project



**BFS Environmental Services**  
A Perennial Company

The rebranding of the area as Alta Loma corresponded with the founding of the Alta Loma Mutual Water Company in 1913 (Clucas 2005). The Alta Loma Mutual Water Company was established to serve the agricultural community in the area from a well on the south side of 19<sup>th</sup> Street, west of Hellman Avenue. Other similar water companies were formed shortly after, in 1914, including the Foothill Irrigation Company, Citrus Water Company, and the Joya Water Company. Throughout the early twentieth century, other water companies were formed, including the Schowalter Mutual Water Company. The Schowalter Mutual Water Company was located within the proximity of the current project “on the north side of Almond Street and the north side of Hillside Road east of Hermosa Avenue” (Clucas 2005). The records search data presented in Section 1.4 shows that Schowalter owned large swaths of agricultural land to the south of the project. He cleared the stones from his property, stacking them by hand to create a five- to 15-foot-high, 2,500-foot-long rock pile that became known as the Schowalter Rock Pile, which is a City of Rancho Cucamonga Historical Point of Interest (The Historical Marker Database 2020).

During the 1950s, many of the water companies were consolidated into the Cucamonga County Water District which, in 2004, became the CVWD (Clucas 2005). Although the early half of the twentieth century within the Rancho Cucamonga area focused on agriculture and access to water, the second half was one of “uncontrolled growth due to Los Angeles and Orange County families seeking affordable housing” (City of Rancho Cucamonga History 2023). This led to the development of a committee to incorporate the communities of Cucamonga, Alta Loma, and Etiwanda. In 1977, the three communities were incorporated and became the city of Rancho Cucamonga.

The population at incorporation was 44,600 and in fewer than ten years it increased to 73,842, an average annual increase of 9.5 percent compared to the State average of 2.8 percent. Upon incorporation, Rancho Cucamonga was now the third-largest city in San Bernardino County. The average household income in 1986 was 55 percent higher than in 1980. (City of Rancho Cucamonga History 2023)

Although the agricultural industry in Rancho Cucamonga has changed over time, it remains a recognizable feature of the city’s landscape (City of Rancho Cucamonga 2010).

#### **1.4 Results of the Archaeological Records Search**

The results of the SCCIC records search (Appendix B) did not identify any recorded resources within or adjacent to the proposed project alignments. However, eight resources (one prehistoric and seven historic) are recorded within one mile of the subject property. The prehistoric site is an artifact scatter, while the historic resources are associated with the historic settlement and agricultural development of the vicinity (Table 1.4–1).

**Table 1.4-1**  
Archaeological Sites Located Within One Mile of the Project

Site(s)	Description
P-36-001593	Prehistoric artifact scatter
P-36-007694	Historic transmission line
P-36-009000	Historic orchard and water control features
P-36-016476 and P-36-016477	Historic single-family residence
P-36-020134	Historic carriage house
P-36-020145	Historic barn
P-36-033150	Historic ranch property

The SCCIC records search results also identified 22 previous studies conducted within one mile of the proposed project, one of which included the subject property (Jenkins 1987). However, the Jenkins (1987) study is limited and consisted primarily of a records search and site inventory conducted prior to a control burn in the area. The study did not include a systematic survey of the current project location.

To help facilitate a better understanding of the historic use of the property, BFSA also reviewed the following sources:

- The National Register of Historic Places (NRHP) Index
- The Office of Historic Preservation (OHP), Archaeological Determinations of Eligibility
- The OHP, Directory of Properties in the Historic Property Data File
- Historic USGS maps including the 1897 and 1944 15' *Cucamonga* and 1955, 1968, and 1984 7.5' *Cucamonga Peak* quadrangle maps.
- Aerial photographs (1930, 1938, 1959, 1966, 1980, 1985, 1995, 2002, 2010, and 2021) available from the University of California Santa Barbara, [Historicaerials.com](http://Historicaerials.com), and Google.

These sources did not indicate the presence of any archaeological resources within the project. Based on the consulted maps and aerial photographs, the property historically was bordered by agricultural land to the east and west until the residential development just west of the proposed project is visible on the 1995 aerial photograph. The aerial photographs illustrate that the hiking trail and easement between the residential development and seasonal drainage have been cleared, graded, and subjected to regular maintenance.

#### *1.4.1 Sacred Lands File Search*

BFSA also requested a SLF search from the NAHC for the presence of any recorded Native American sacred sites or locations of religious or ceremonial importance within the project vicinity. This request is not part of any Assembly Bill 52 Native American consultation. The NAHC indicates the results of the search are positive within the search radius and recommended contacting the Gabrieleño Band of Mission Indians – Kizh Nation for further information. All correspondence is provided in Appendix C.

### **1.5 Applicable Regulations**

Resource importance is assigned to districts, sites, buildings, structures, and objects that possess exceptional value or quality illustrating or interpreting the heritage of San Bernardino County in history, architecture, archaeology, engineering, and culture. A number of criteria are used in demonstrating resource importance. Specifically, the criteria outlined in CEQA provide the guidance for making such a determination. The following sections detail the criteria that a resource must meet in order to be determined important.

#### *1.5.1 California Environmental Quality Act*

According to CEQA (§ 15064.5a), the term “historical resource” includes the following:

- 1) A resource listed in or determined to be eligible by the State Historical Resources Commission for listing in the California Register of Historical Resources (CRHR) (Public Resources Code SS5024.1, Title 14 CCR [California Code of Regulations]. Section 4850 et seq.).
- 2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that 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 on the CRHR (Public Resources Code SS5024.1, Title 14, Section 4852) including the following:
  - a) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;

- b) Is associated with the lives of persons important in our past;
  - c) 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; or
  - d) Has yielded, or may be likely to yield, information important in prehistory or history.
- 4) The fact that a resource is not listed in, or determined eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to Section 5020.1[k] of the Public Resources Code), or identified in an historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code Section 5020.1(j) or 5024.1.

According to CEQA (§ 15064.5b), a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. CEQA defines a substantial adverse change as:

- 1) Substantial adverse change in the significance of an historical resource means 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.
- 2) The significance of an historical resource is materially impaired when a project:
  - a) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in the CRHR; or
  - b) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or,
  - c) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA.

Section 15064.5(c) of CEQA applies to effects on archaeological sites and contains the following additional provisions regarding archaeological sites:

- 1) When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource, as defined in subsection (a).
- 2) If a lead agency determines that the archaeological site is an historical resource, it shall refer to the provisions of Section 21084.1 of the Public Resources Code, Section 15126.4 of the guidelines, and the limits contained in Section 21083.2 of the Public Resources Code do not apply.
- 3) If an archaeological site does not meet the criteria defined in subsection (a), but does meet the definition of a unique archaeological resource in Section 21083.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of Section 21083.2. The time and cost limitations described in Public Resources Code Section 21083.2 (c-f) do not apply to surveys and site evaluation activities intended to determine whether the project location contains unique archaeological resources.
- 4) If an archaeological resource is neither a unique archaeological nor historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the Initial Study or Environmental Impact Report, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

Section 15064.5(d) and (e) contain additional provisions regarding human remains. Regarding Native American human remains, paragraph (d) states:

- (d) When an Initial Study identifies the existence of, or the probable likelihood of, Native American human remains within the project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code SS5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans as identified by the NAHC. Action implementing such an agreement is exempt from:
  - 1) The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5).
  - 2) The requirements of CEQA and the Coastal Act.

## **2.0 RESEARCH DESIGN**

The primary goal of the research design is to attempt to understand the way in which humans have used the land and resources within the project through time, as well as to aid in the determination of resource significance. For the current project, the study area under investigation is the Rancho Cucamonga area of San Bernardino County. The scope of work for the cultural resources study conducted for the Reservoir 6 and Almond Street Waterline Replacement Project included the survey of the approximately 1,100-linear-foot study area. Given the area involved and the presence of archaeological sites within the project vicinity, the research design for this project was focused upon realistic study options. Since the main objective of the investigation was to identify the presence of and potential impacts to cultural resources, the goal here is not necessarily to answer wide-reaching theories regarding the development of early southern California, but to investigate the role and importance of identified resources. Nevertheless, the assessment of the significance of a resource must take into consideration a variety of factors, as well as the ability of a resource to address regional research topics and issues.

Although elementary resource evaluation programs are limited in terms of the amount of information available, several specific research questions were developed that could be used to guide the initial investigations of any observed cultural resources. The following research questions consider the small size and location of the project discussed above.

### ***Research Questions:***

- Can located cultural resources be associated with a specific time period, population, or individual?
- Do the types of any located cultural resources allow a site activity/function to be determined from a preliminary investigation? What are the site activities? What is the site function? What resources were exploited?
- How do located sites compare to others reported from different surveys conducted in the area?
- How do located sites fit existing models of settlement and subsistence for mountainous environments of the region?

### ***Data Needs***

At the survey level, the principal research objective is a generalized investigation of changing settlement patterns in both the prehistoric and historic periods within the study area. The overall goal is to understand settlement and resource procurement patterns of the project occupants. Therefore, adequate information on site function, context, and chronology from an archaeological perspective is essential for the investigation. The fieldwork and archival research were undertaken with the following primary research goals in mind:

- 1) To identify cultural resources occurring within the project;
- 2) To determine, if possible, site type and function, context of the resource(s), and chronological placement of each cultural resource identified;
- 3) To place each cultural resource identified within a regional perspective; and
- 4) To provide recommendations for the treatment of each cultural resource identified.

### **3.0 ANALYSIS OF PROJECT EFFECTS**

The cultural resources study of the project site consisted of an institutional records search, archival research, an intensive cultural resource survey of the entire approximately 1,100-linear-foot study area, and the preparation of this technical report. This study was conducted in conformance with Section 21083.2 of the California Public Resources Code and CEQA. Statutory requirements of CEQA (Section 15064.5) were followed for the identification and evaluation of resources. Specific definitions for archaeological resource type(s) used in this report are those established by the State Historic Preservation Office (SHPO 1995).

#### **3.1 Survey Methods**

The survey methodology employed during the current investigation followed standard archaeological field procedures and was sufficient to accomplish a thorough assessment of the project. The field methodology employed for the project included walking the linear alignments of both proposed project alternatives while visually inspecting the ground surface within and adjacent to the project location. All potentially sensitive areas where cultural resources might be located were closely inspected. Photographs documenting survey areas and overall survey conditions were taken frequently.

#### **3.2 Results of the Field Survey**

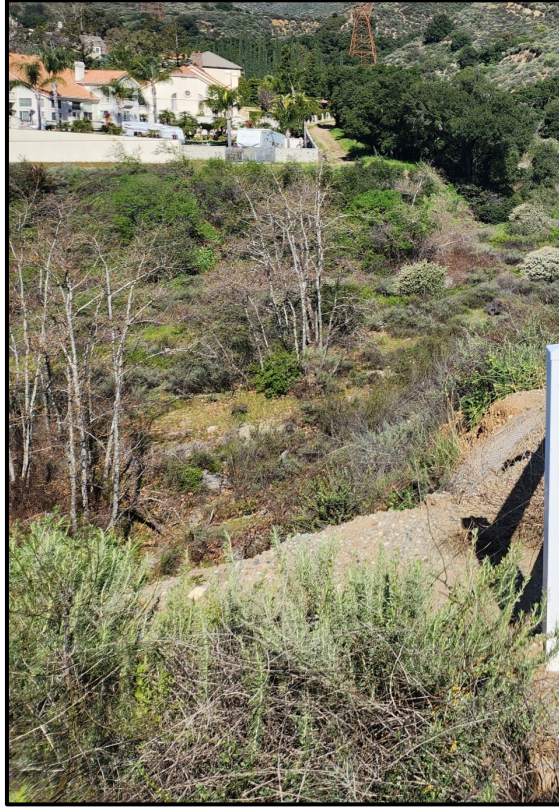
BFSA Field Operations Manager Clarence L. Hoff conducted the archaeological survey for the project on March 19, 2024. The archaeological study was an intensive reconnaissance survey along the proposed project alignment. Ground visibility during the survey was characterized as moderate as it fluctuated throughout the alignment alternatives. Ground visibility was hindered at times within the seasonal drainage by areas of dense riparian vegetation. However, visibility was excellent at both connection points, along the hiking trail, and at the easement area east of the residential development as these areas have previously been cleared and graded (Plates 3.2-1 through 3.2-6). No cultural resources were identified during the survey.



**Plate 3.2-1: Overview of the eastern connection point and hiking trail, facing west.**



**Plate 3.2-2: Overview of the western connection point and easement, facing north.**



**Plate 3.2–3: Overview of the drainage and Alternative A drainage crossing from the western connection point, facing northwest.**



**Plate 3.2–4: Overview of the easement and Alternative B, facing south.**



**Plate 3.2–5: Overview of the hiking trail and Alternative B, facing north.**



**Plate 3.2–1: Overview of the Alternative B drainage crossing, facing east.**

## **4.0 RECOMMENDATIONS**

The cultural resources study for the Reservoir 6 and Almond Street Waterline Replacement Project did not identify any archaeological resources within or adjacent to the alignment of either Alternative A or Alternative B. Aerial photographs and historic maps illustrate that the property did not historically contain any structures. Further, both alignment alternatives have been previously impacted by clearing, grading, and maintenance. As such, the potential for any previously unidentified significant cultural resources to be impacted by the project is very low. Based upon these findings, no further archaeological studies are necessary or recommended as part of the CEQA review process.

## **5.0 LIST OF PREPARERS AND ORGANIZATIONS CONTACTED**

The archaeological survey program for the Reservoir 6 and Almond Street Waterline Replacement Project was directed by Principal Investigator Tracy A. Stropes, M.A., RPA. The archaeological fieldwork was conducted by BFSA Senior Field Archaeologist Clarence L. Hoff. The report text was prepared by Andrew J. Garrison, M.A., RPA. Technical editing and report production was conducted by Shawna M. Krystek. The archaeological records search was conducted at the SCCIC at CSU Fullerton by Emily T. Soong who also prepared the report graphics.

## 6.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this archaeological report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief, and have been compiled in accordance with CEQA and CVWD criteria.



December 30, 2024

---

Andrew J. Garrison, M.A., RPA  
Project Archaeologist

Date

## 7.0 REFERENCES CITED

Antevs, Ernst

- 1953 The Postpluvial or Neothermal. *University of California Archaeological Survey Reports*, No. 22, Berkley, (1953). pp. 9-23.

Bean, Lowell John

- 1978 Cahuilla. In *California*, edited by R.F. Heizer, pp. 575–587. Handbook of North American Indians, Vol. 8. William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Bean, Lowell John and Charles R. Smith

- 1978a Gabrielino. In *California*, edited by R.F. Heizer. Handbook of North American Indians, Vol. 8. William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

- 1978b Serrano. In *California*, edited by R.F. Heizer. Handbook of North American Indians, Vol. 8. William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Bean, Lowell John and Florence C. Shipek

- 1978 Luiseño. In *California*, edited by Robert F. Heizer, pp. 550–563. Handbook of North American Indians, Vol. 8. William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

Beattie, George W. and Helen P. Beattie

- 1951 *Heritage of the Valley: San Bernardino's First Century*. Biobooks, Oakland, California.

Benedict, Ruth Fulton

- 1924 A Brief Sketch of Serrano Culture. *American Anthropologist* 26(3).

Brigandi, Phil

- 1998 *Temecula: At the Crossroads of History*. Heritage Media Corporation, Encinitas, California.

Caughey, John W.

- 1970 *California: A Remarkable State's Life History*. 3<sup>rd</sup> ed. Prentice-Hall, Englewood Cliffs, New Jersey.

Chapman, Charles E.

- 1921 *A History of California: The Spanish Period*. The Macmillan Company, New York.

City of Rancho Cucamonga

- 2010 General Plan Update, Draft Program Environmental Impact Report. Electronic document, <https://www.cityofrc.us/civicax/filebank/blobdload.aspx?BlobID=7599/>, accessed November 23, 2015.

City of Rancho Cucamonga

- 2020 Cultural Resources Existing Conditions Report. Electronic document, [https://www.cityofrc.us/sites/default/files/2020-07/PlanRC\\_ExistingConditions\\_Report\\_CulturalResources\\_June2020.pdf](https://www.cityofrc.us/sites/default/files/2020-07/PlanRC_ExistingConditions_Report_CulturalResources_June2020.pdf), accessed March 2024.

City of Rancho Cucamonga History

- 2023 City of Rancho Cucamonga History Portal to the Past: Tracing Our Roots. Electronic document, <https://storymaps.arcgis.com/stories/8446a917d02145f48ed8c9eca30c7d5d>, accessed March 2024.

Clucas, Donald L.

- 2005 *Proud Past Bright Future, A History of the Cucamonga Valley Water District*. Dragonflyer Press, Upland, California.

Cook, Sherburne F.

- 1976 *The Conflict Between the California Indian and White Civilization*. University of California Press, Berkeley and Los Angeles, California.

Curry, J.R.

- 1965 Late Quaternary History: Continental Shelves of the United States. In *Quaternary of the United States*, edited by H.E. Wright Jr. and D.G. Frey, pp. 723-735. Princeton University Press.

Dibblee, T.W. and J.A. Minch

- 2003 Geologic Map of the *Cucamonga Peak* Quadrangle, San Bernardino, California. Dibblee Foundation Map DF-106, 1:24,000 scale. U.S. Department of the Interior, U.S. Geological Survey, National Cooperative Geologic Mapping Program.

Drucker, Philip

- 1937 Culture Element Distributions: V. Southern California. *Anthropological Records* 1(1):1-52. University of California, Berkeley.

Erlandson, John M. and Roger H. Colten (editors)

- 1991 An Archaeological Context for Archaeological Sites on the California Coast. In *Hunter-Gatherers of Early Holocene Coastal California*, edited by J.M. Erlandson and R.H. Colten. Perspectives in California Archaeology, Volume 1, Institute of Archaeology, University of California, Los Angeles.

Fagan, Brian M.

- 1991 *Ancient North America: The Archaeology of a Continent*. Thames and Hudson, London.

Gallegos, Dennis

- 1985 A Review and Synthesis of Environmental and Cultural Material for the Batiquitos Lagoon Region. *Casual Papers*, San Diego State University.
- 2002 Southern California in Transition: Late Holocene Occupation of Southern San Diego County. In *Catalysts to Complexity: Late Holocene Societies of the California Coast*, edited by J. Erlandson and T. Jones.

Gunther, Jane Davies

- 1984 *Riverside County, California, Place Names: Their Origins and Their Stories*. Rubidoux Printing, Riverside, California.

Heizer, Robert F. (editor)

- 1978 Trade and Trails. In *California*, pp. 690-693. Handbook of North American Indians, Vol. 8. William C. Sturtevant, general editor, Smithsonian Institution, Washington, D.C.

The Historical Marker Database

- 2020 Schowalter Rock Pile, City of Rancho Cucamonga Historical Point of Interest. Electronic document, <https://www.hmdb.org/m.asp?m=149819>, accessed March 2024.

Inman, Douglas L.

- 1983 Application of Coastal Dynamics to the Reconstruction of Paleocoastlines in the Vicinity of La Jolla, California. In *Quaternary Coastlines and Marine Archaeology*, edited by P.M. Masters and N.C. Flemming. Academic Press, Inc., Orlando, Florida.

Jenkins, Richard C.

- 1987 Vegetation and Watershed Management Archaeological Review, Alta Loma VMP Project. Unpublished report on file with the South Central Coastal Information Center at California State University, Fullerton.

Kroeber, Alfred L.

- 1976 *Handbook of the Indians of California*. Reprinted. Dover Editions, Dover Publications, Inc., New York. Originally published 1925, Bulletin No. 78, U.S. Government Printing Office, Washington, D.C.

Martin, Paul S.

- 1967 Prehistoric Overkill. In *Pleistocene Extinctions: The Search for a Cause*, edited by P. Martin and H.E. Wright. Yale University Press, New Haven.
- 1973 The Discovery of America. *Science* 179(4077):969-974.

Masters, Patricia M.

- 1983 Detection and Assessment of Prehistoric Artifact Sites off the Coast of Southern California. In *Quaternary Coastlines and Marine Archaeology: Toward the Prehistory of Land Bridges and Continental Shelves*, edited by P.M. Masters and N.C. Flemming, pp. 189-213. Academic Press, London.
- 1994 Archaeological Investigations at Five Sites on the Lower San Luis Rey River, San Diego County, California, edited by Michael Moratto, pp. A1-A19. Infotec Research, Fresno, California and Gallegos and Associates, Pacific Palisades California.

Miller, J.

- 1966 *The Present and Past Molluscan Faunas and Environments of Four Southern California Coastal Lagoons*. Master's thesis. University of California, San Diego.

Moratto, Michael J.

- 1984 *California Archaeology*. Academic Press, New York.

Moss, M.L. and J. Erlandson

- 1995 Reflections on North American Coast Prehistory. *Journal of World Prehistory* 9(1):1-46.

Pourade, Richard F.

- 1961 *Time of the Bells*. The History of San Diego Volume 2. Union-Tribune Publishing Company, San Diego, California.
- 1963 The Silver Dons. In *The History of San Diego* (Volume 3). Union-Tribune Publishing Company, San Diego, California.

Reddy, S.

- 2000 Settling the Highlands: Late Holocene Highland Adaptations on Camp Pendleton, San Diego County California. Prepared for the Army Corps of Engineers by ASM Affiliates. Manuscript on file at South Coastal Information Center at San Diego State University, San Diego, California.

Rogers, Malcolm J.

- 1929 Field Notes, 1929 San Diego-Smithsonian Expedition. Manuscript on file at San Diego Museum of Man.

Rolle, Andrew F.

- 1969 *California: A History*. 2<sup>nd</sup> ed. Thomas Y. Crowell Company, New York.

State Historic Preservation Office (SHPO)

- 1995 *Instructions for Recording Historical Resources*. Office of Historic Preservation, Sacramento, California.

Strong, William Duncan

1971 Aboriginal Society in Southern California. Reprint of 1929 *Publications in American Archaeology and Ethnology* No. 26, University of California, Berkeley.

Van Devender, T.R. and W.G. Spaulding

1979 Development of Vegetation and Climate in the Southwestern United States. *Science* 204:701-710.

Warren, Claude N., and M.G. Pavesic

1963 Shell Midden Analysis of Site SDI-603 and Ecological Implications for Cultural Development of Batiquitos Lagoon, San Diego County, Los Angeles. University of California, Los Angeles, *Archaeological Survey Annual Report*, 1960-1961:246-338.

**APPENDIX A**

**Qualifications of Key Personnel**

# Andrew J. Garrison, M.A., RPA

## Project Archaeologist

BFSAE nvironmental Services, a Perennial Company

14010 Poway Road • Suite A •

Phone: (858) 679-8218 • Fax: (858) 679-9896 • E-Mail: agarrison@bfsa.perennialenv.com



## E ducation

---

<b>Master of Arts, Public History, University of California, Riverside</b>	<b>2009</b>
<b>Bachelor of Science, Anthropology, University of California, Riverside</b>	<b>2005</b>
<b>Bachelor of Arts, History, University of California, Riverside</b>	<b>2005</b>

## P rofessional Memberships

---

Register of Professional Archaeologists	Society of Primitive Technology
Society for California Archaeology	Lithic Studies Society
Society for American Archaeology	California Preservation Foundation
California Council for the Promotion of History	Pacific Coast Archaeological Society

## E xperience

---

**Project Archaeologist** **June 2017–Present**  
**BFSAE nvironmental Services, A Perennial Company** **Poway, California**

Project management of all phases of archaeological investigations for local, state, and federal agencies including National Register of Historic Places (NRHP) and California Environmental Quality Act (CEQA) level projects interacting with clients, sub-consultants, and lead agencies. Supervise and perform fieldwork including archaeological survey, monitoring, site testing, comprehensive site records checks, and historic building assessments. Perform and oversee technological analysis of prehistoric lithic assemblages. Author or co-author cultural resource management reports submitted to private clients and lead agencies.

**Senior Archaeologist and GIS Specialist** **2009–2017**  
**Scientific Resource Surveys, Inc.** **Orange, California**

Served as Project Archaeologist or Principal Investigator on multiple projects, including archaeological monitoring, cultural resource surveys, test excavations, and historic building assessments. Directed projects from start to finish, including budget and personnel hours proposals, field and laboratory direction, report writing, technical editing, Native American consultation, and final report submittal. Oversaw all GIS projects including data collection, spatial analysis, and map creation.

**Preservation Researcher** **2009**  
**City of Riverside Modernism Survey** **Riverside, California**

Completed DPR Primary, District, and Building, Structure and Object Forms for five sites for a grant-funded project to survey designated modern architectural resources within the City of Riverside.

**Information Officer**  
**Eastern Information Center (EIC), University of California, Riverside**

**2005, 2008–2009**  
**Riverside, California**

Processed and catalogued restricted and unrestricted archaeological and historical site record forms. Conducted research projects and records searches for government agencies and private cultural resource firms.

## Reports/Papers

---

- 2019 A Class III Archaeological Study for the Tuscany Valley (TM 33725) Project National Historic Preservation Act Section 106 Compliance, Lake Elsinore, Riverside County, California. Contributing author. Brian F. Smith and Associates, Inc.
- 2019 A Phase I and II Cultural Resources Assessment for the Jack Rabbit Trail Logistics Center Project, City of Beaumont, Riverside County, California. Brian F. Smith and Associates, Inc.
- 2019 A Phase I Cultural Resources Assessment for the 10575 Foothill Boulevard Project, Rancho Cucamonga, California. Brian F. Smith and Associates, Inc.
- 2019 Cultural Resources Study for the County Road and East End Avenue Project, City of Chino, San Bernardino County, California. Brian F. Smith and Associates, Inc.
- 2019 Phase II Cultural Resource Study for the McElwain Project, City of Murrieta, California. Contributing author. Brian F. Smith and Associates, Inc.
- 2019 A Section 106 (NHPA) Historic Resources Study for the McElwain Project, City of Murrieta, Riverside County, California. Brian F. Smith and Associates, Inc.
- 2018 Cultural Resource Monitoring Report for the Sewer Group 818 Project, City of San Diego. Brian F. Smith and Associates, Inc.
- 2018 Phase I Cultural Resource Survey for the Stone Residence Project, 1525 Buckingham Drive, La Jolla, California 92037. Brian F. Smith and Associates, Inc.
- 2018 A Phase I Cultural Resources Assessment for the Seaton Commerce Center Project, Riverside County, California. Brian F. Smith and Associates, Inc.
- 2017 A Phase I Cultural Resources Assessment for the Marbella Villa Project, City of Desert Hot Springs, Riverside County, California. Brian F. Smith and Associates, Inc.
- 2017 Phase I Cultural Resources Survey for TTM 37109, City of Jurupa Valley, County of Riverside. Brian F. Smith and Associates, Inc.
- 2017 A Phase I Cultural Resources Assessment for the Winchester Dollar General Store Project, Riverside County, California. Brian F. Smith and Associates, Inc.
- 2016 John Wayne Airport Jet Fuel Pipeline and Tank Farm Archaeological Monitoring Plan. Scientific Resource Surveys, Inc. On file at the County of Orange, California.
- 2016 Historic Resource Assessment for 220 South Batavia Street, Orange, CA 92868 Assessor's Parcel Number 041-064-4. Scientific Resource Surveys, Inc. Submitted to the City of Orange as part of Mills Act application.

- 2015 Historic Resource Report: 807-813 Harvard Boulevard, Los Angeles. Scientific Resource Surveys, Inc. On file at the South Central Coastal Information Center, California State University, Fullerton.
- 2015 Exploring a Traditional Rock Cairn: Test Excavation at CA-SDI-13/RBLI-26: The Rincon Indian Reservation, San Diego County, California. Scientific Resource Surveys, Inc.
- 2014 Archaeological Monitoring Results: The New Los Angeles Federal Courthouse. Scientific Resource Surveys, Inc. On file at the South Central Coastal Information Center, California State University, Fullerton.
- 2012 Bolsa Chica Archaeological Project Volume 7, Technological Analysis of Stone Tools, Lithic Technology at Bolsa Chica: Reduction Maintenance and Experimentation. Scientific Resource Surveys, Inc.

## Presentations

---

- 2017 "Repair and Replace: Lithic Production Behavior as Indicated by the Debitage Assemblage from CA-MRP-283 the Hackney Site." Presented at the Society for California Archaeology Annual Meeting, Fish Camp, California.
- 2016 "Bones, Stones, and Shell at Bolsa Chica: A Ceremonial Relationship?" Presented at the Society for California Archaeology Annual Meeting, Ontario, California.
- 2016 "Markers of Time: Exploring Transitions in the Bolsa Chica Assemblage." Presented at the Society for California Archaeology Annual Meeting, Ontario, California.
- 2016 "Dating Duress: Understanding Prehistoric Climate Change at Bolsa Chica." Presented at the Society for California Archaeology Annual Meeting, Ontario, California.
- 2014 "New Discoveries from an Old Collection: Comparing Recently Identified OGR Beads to Those Previously Analyzed from the Encino Village Site." Presented at the Society for California Archaeology Annual Meeting, Visalia, California.
- 2012 Bolsa Chica Archaeology: Part Seven: Culture and Chronology. Lithic demonstration of experimental manufacturing techniques at the April meeting of The Pacific Coast Archaeological Society, Irvine, California.

**APPENDIX B**

**Archaeological Records Search Results**

*(Deleted for Public Review; Bound Separately)*

**APPENDIX C**

**NAHC Sacred Lands File Search Results**

*(Deleted for Public Review; Bound Separately)*

## **Appendix D**

### Paleontological Assessment

# **PALEONTOLOGICAL ASSESSMENT FOR THE RESERVOIR 6 AND ALMOND STREET WATERLINE REPLACEMENT PROJECT**

**CITY OF RANCHO CUCAMONGA,  
SAN BERNARDINO COUNTY, CALIFORNIA**

**APNs 1061-451-04 and 1061-451-05**

**Lead Agency:**

**Cucamonga Valley Water District  
10440 Ashford Street  
Rancho Cucamonga, California 91730**

**Preparer:**

**BFSA Environmental Services,  
a Perennial Company  
14010 Poway Road, Suite A  
Poway, California 92064**

**Project Proponent:**

**Lilburn Corporation  
1905 Business Center Drive  
San Bernardino, California 92408**

***December 30, 2024***



---

**BFSA Environmental Services**  
A Perennial Company

## **Paleontological Database Information**

***Author:*** Todd A. Wirths, M.S., Senior Paleontologist, California  
Professional Geologist No. 7588

***Consulting Firm:*** BFSA Environmental Services, a Perennial Company  
14010 Poway Road, Suite A  
Poway, California 92064  
(858) 484-0915

***Report Date:*** December 30, 2024

***Report Title:*** Paleontological Assessment for the Reservoir 6 and Almond  
Street Waterline Replacement Project, City of Rancho  
Cucamonga, San Bernardino County, California

***Prepared for:*** Lilburn Corporation  
1905 Business Center Drive  
San Bernardino, California 92408

***Submitted to:*** Cucamonga Valley Water District  
10440 Ashford Street  
Rancho Cucamonga, California 91730

***USGS Quadrangle:*** Section 22, Township 1 North, Range 7 West of the *Cucamonga  
Peak, California* (7.5-minute) USGS Quadrangle

***Assessor's Parcel Numbers:*** 1061-451-04 and 1061-451-05

***Study Area:*** Approximately 1,100 linear feet

***Key Words:*** Paleontological assessment; Holocene alluvial fan deposits; no  
monitoring recommended.

## **Table of Contents**

<b><u>Section</u></b>	<b><u>Page</u></b>
I. INTRODUCTION AND LOCATION.....	1
II. REGULATORY SETTING .....	1
III. GEOLOGY .....	4
IV. PALEONTOLOGICAL RESOURCES.....	4
<i>Definition</i> .....	4
<i>Fossil Locality Search</i> .....	6
<i>Project Survey</i> .....	6
V. PALEONTOLOGICAL SENSITIVITY .....	6
<i>Overview</i> .....	6
<i>Professional Standards</i> .....	7
VI. CONCLUSION AND RECOMMENDATIONS .....	7
VII. CERTIFICATION.....	7
VIII. REFERENCES.....	8

## **Appendices**

Appendix A – Qualifications of Key Personnel

Appendix B – Paleontological Locality Records Search Letter

## **List of Figures**

<b><u>Figure</u></b>	<b><u>Page</u></b>
Figure 1      General Location Map .....	2
Figure 2      Project Location Map.....	3
Figure 3      Geologic Map.....	5

## **I. INTRODUCTION AND LOCATION**

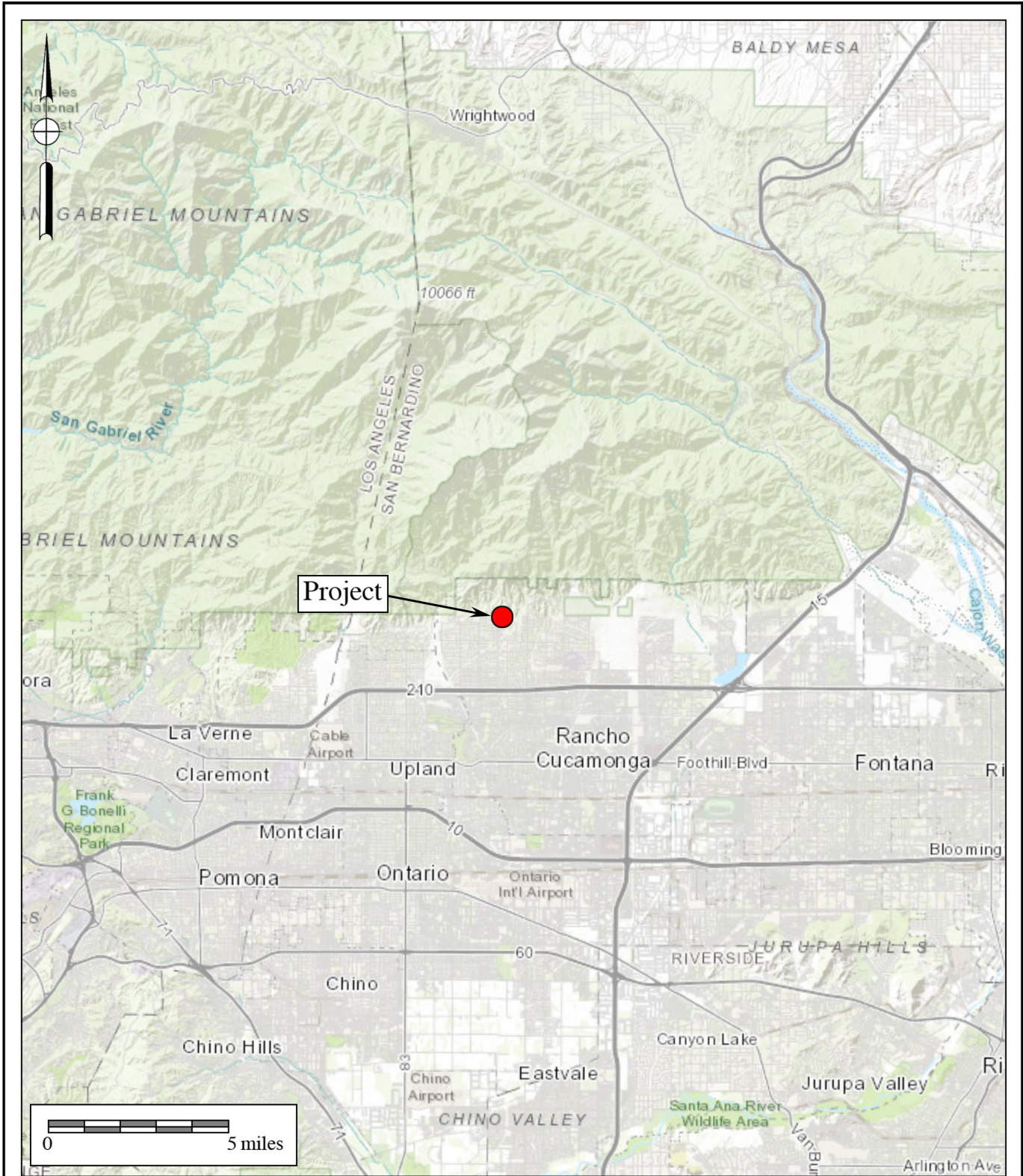
A paleontological resource assessment has been completed for the Reservoir 6 and Almond Street Waterline Replacement Project. The proposed project consists of the replacement of a 14-inch waterline across a seasonal drainage within the city of Rancho Cucamonga, San Bernardino County, California. As designed, two alternatives for the replacement waterline are being studied which collectively comprise an approximately 1,100 linear foot study area (Alternative A and Alternative B). Both alternatives include the installation of a new waterline from an eastern connection point located within an easement, situated northeast of the intersection of Almond Street and Lomas Court, to the west, across the drainage, to a western connection point situated along a dirt hiking trail. The proposed project is located within Assessor's Parcel Numbers (APNs) 1061-451-04 and 1061-451-05 and can be found within Section 22, Township 1 North, Range 7 West on the United States Geological Survey (USGS) *Cucamonga Peak, California* Quadrangle. Both alignment alternatives have been previously impacted by clearing, grading, and regular maintenance.

As the lead agency, the Cucamonga Valley Water District (CVWD) has requested the preparation of a paleontological assessment to evaluate the project's potential to yield paleontological resources in compliance with the California Environmental Quality Act (CEQA). The paleontological assessment of the project included a review of paleontological literature and fossil locality records for a previous project in the area, a review of the underlying geology, and recommendations to mitigate impacts to potential paleontological resources.

## **II. REGULATORY SETTING**

CEQA, which is patterned after the National Environmental Policy Act, is the overriding environmental regulation that sets the requirement for protecting California's paleontological resources. CEQA mandates that governing permitting agencies (lead agencies) set their own guidelines for the protection of nonrenewable paleontological resources under their jurisdiction.

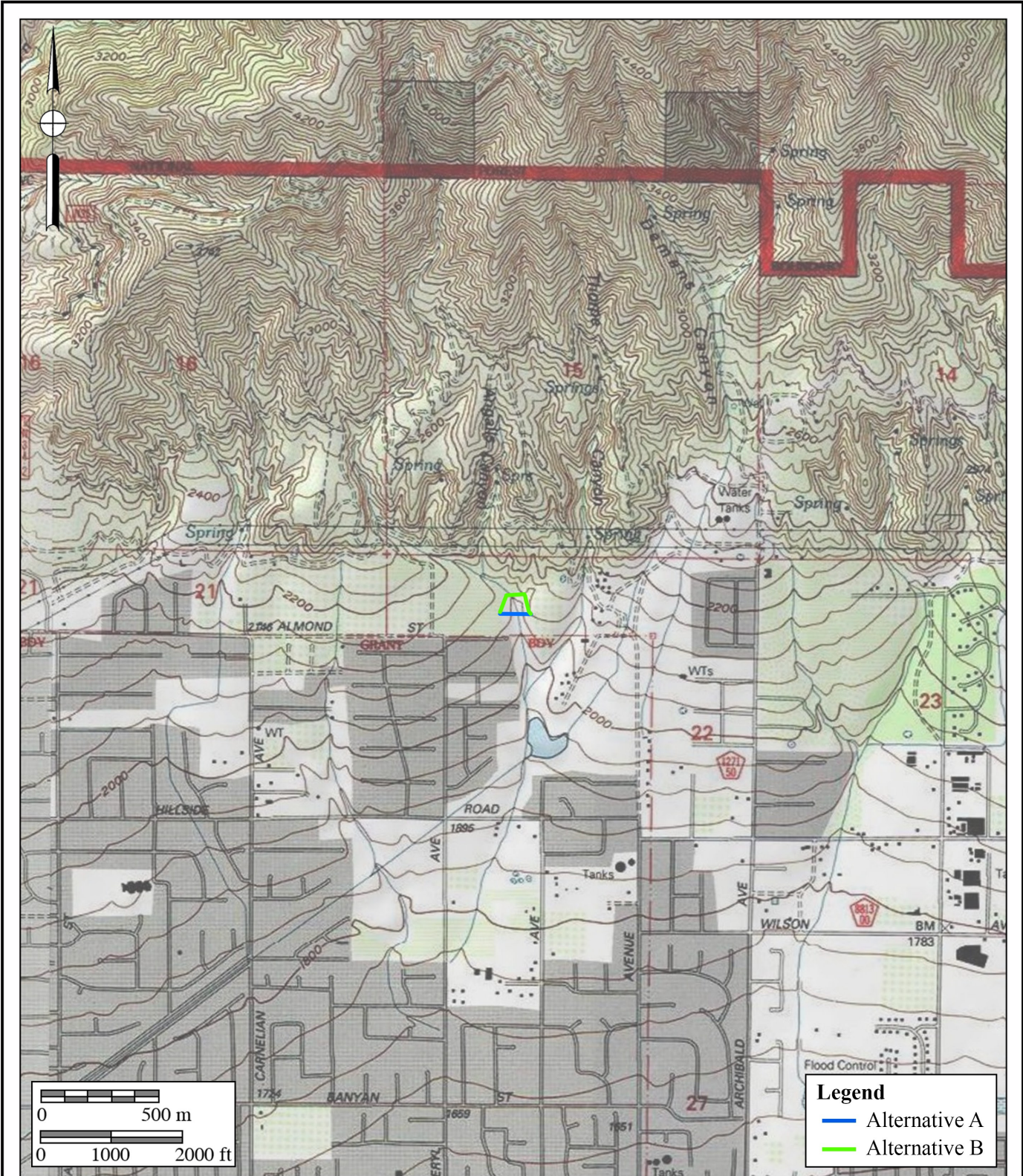
Under "Guidelines for Implementation of the California Environmental Quality Act," as amended in December 2018 (California Code of Regulations [CCR] Title 14, Division 6, Chapter 3, Sections 15000 et seq.), procedures define the types of activities, persons, and public agencies required to comply with CEQA. Section 15063 of the CCR provides a process by which a lead agency may review a project's potential impact to the environment, whether the impacts are significant, and provide recommendations, if necessary.



**Figure 1**  
**General Location Map**

The Reservoir 6 and Almond Street Waterline Replacement Project  
 ESRI





**Figure 2**  
**Project Location Map**

The Reservoir 6 and Almond Street Waterline Replacement Project  
 USGS Cucamonga Peak and Mount Baldy Quadrangles (7.5-minute series)



In CEQA’s Environmental Checklist Form, one of the questions to answer is, “Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?” (Appendix G, Section VII, Part f). This is to ensure compliance with California Public Resources Code Section 5097.5, the law that protects nonrenewable resources, including fossils, which is paraphrased below:

- a) A person shall not knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands.
- b) As used in this section, “public lands” means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.
- c) A violation of this section is a misdemeanor.

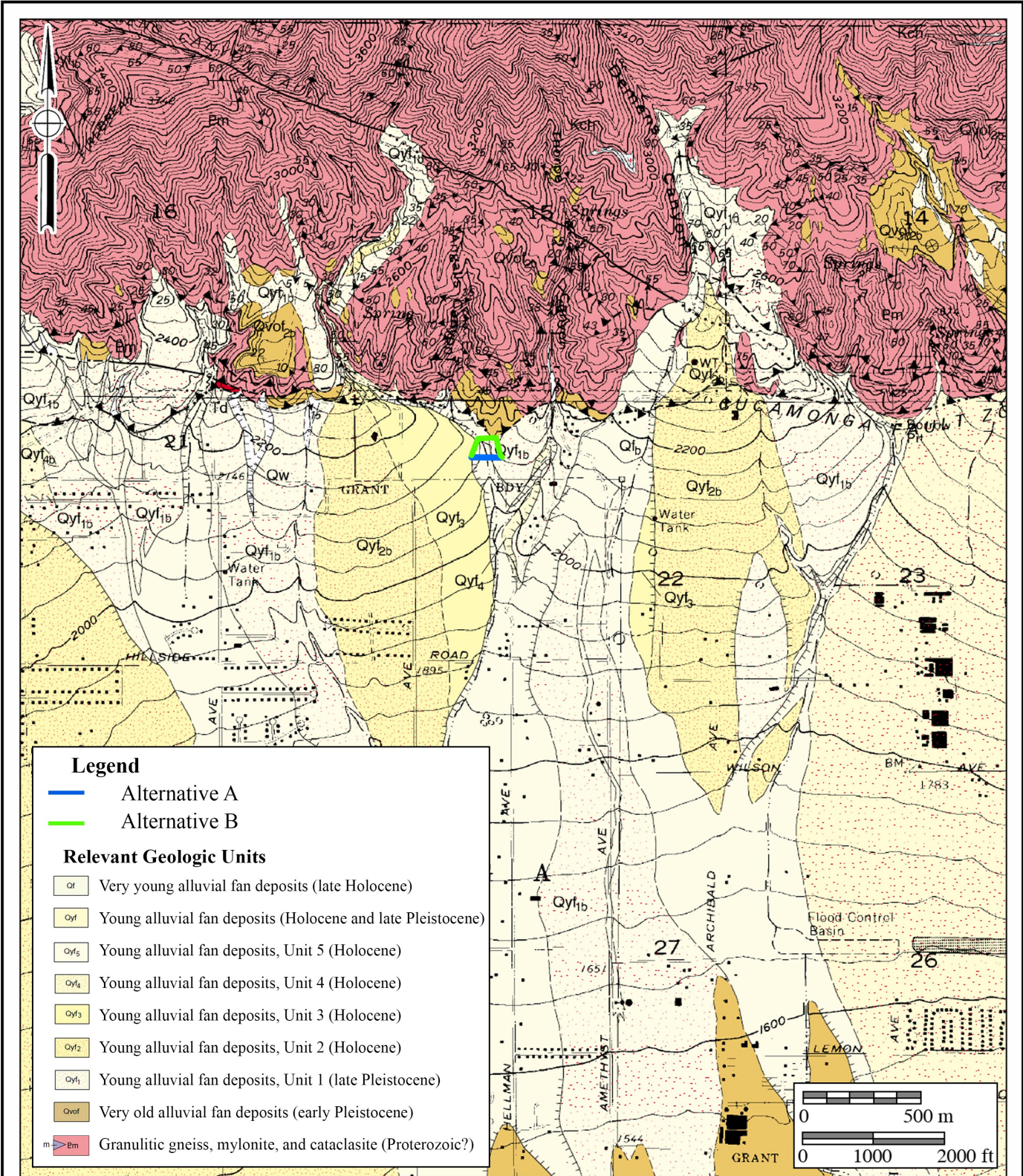
### **III. GEOLOGY**

The project lies at the foot of the San Gabriel Mountains in a small drainage lined with Holocene-aged very young alluvial fan sediments, composed of unconsolidated deposits of coarse-grained sand to bouldery alluvium of modern fans having undissected surfaces (Morton and Matti 2001). As shown on Figure 3, after Morton and Matti (2001), both alignment alternatives are mapped within these deposits (pale yellow areas labeled “Qy<sub>f1b</sub>” and Q<sub>f<sub>b</sub></sub>”).

### **IV. PALEONTOLOGICAL RESOURCES**

#### *Definition*

Paleontological resources are the remains of prehistoric life that have been preserved in geologic strata. These remains are called fossils and include bones, shells, teeth, and plant remains (including their impressions, casts, and molds) in the sedimentary matrix, as well as trace fossils such as footprints and burrows. Fossils are considered older than 5,000 years of age (Society of Vertebrate Paleontology 2010) but may include younger remains (subfossils) when viewed in the context of local extinction of the organism or habitat, for example. Fossils are considered a nonrenewable resource under state and local guidelines (see Section II of this report).



**Figure 3**  
**Geologic Map**

The Reservoir 6 and Almond Street Waterline Replacement Project

Geology after Morton and Matti (2001)



### Fossil Locality Search

A paleontological literature review and collections and records search was performed for the project by the Los Angeles County Museum of Natural History (LACM) (Bell 2024, Appendix B). The records search indicates that the closest localities held by the LACM in similar sediments as the project are located south of the project several miles away in Jurupa Valley (“Wineville”), Chino, and Chino Valley in Pleistocene alluvial deposits.

### Project Survey

On March 19, 2024, BFSA staff, under the supervision of Principal Investigator Todd A. Wirths, conducted an intuitive review of the property to determine if any paleontological resources were visible. The field methodology employed for the project included walking along the proposed project alignment alternatives. All potentially sensitive areas where paleontological resources might be located were closely inspected. Ground visibility during the survey was characterized as moderate as it fluctuated throughout the alignment alternatives. Ground visibility was hindered at times within the seasonal drainage by areas of dense riparian vegetation. However, visibility was excellent at both connection points, along the hiking trail, and at the easement area east of the residential development as these areas have previously been cleared and graded. At these areas, the geology could be plainly seen, indicating poorly stratified deposits of coarse-grained, poorly sorted sands with non-rounded gravel and cobbles. No paleontological resources, or evidence of paleontological resources, were observed during the survey.

## **V. PALEONTOLOGICAL SENSITIVITY**

### Overview

The degree of paleontological sensitivity of any particular area is based on a number of factors, including the documented presence of fossiliferous resources on a site or in nearby areas, the presence of documented fossils within a particular geologic formation or lithostratigraphic unit, and whether or not the original depositional environment of the sediments is one that might have been conducive to the accumulation of organic remains that may have become fossilized over time. Holocene alluvium is generally considered to be geologically too young to contain significant nonrenewable paleontological resources (*i.e.*, fossils) and thus is typically assigned a low paleontological sensitivity. Pleistocene (over 11,700 years old) alluvial and alluvial fan deposits in the Inland Empire and Los Angeles Basin, however, often yield important terrestrial vertebrate fossils, such as extinct mammoths, mastodons, giant ground sloths, extinct species of horse, bison, camel, saber-toothed cats, and others (Jefferson 1991). These Pleistocene sediments are thus accorded a high paleontological resource sensitivity.

Professional Standards

The Society of Vertebrate Paleontology (2010) has drafted guidelines that include four categories of paleontological sensitivity for geologic units (formations) that might be impacted by a proposed project, as listed below:

- High Potential: Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered.
- Undetermined Potential: Rock units for which little information is available concerning their paleontological content, geologic age, and depositional environment, and further study is needed to determine the potential of the rock unit.
- Low Potential: Rock units that are poorly represented by fossil specimens in institutional collections or based on a general scientific consensus that only preserve fossils in rare circumstances.
- No Potential: Rock units that have no potential to contain significant paleontological resources, such as high-grade metamorphic rocks and plutonic igneous rocks.

Using these criteria, based on the regional geology and the location of the nearest-known Pleistocene fossils, the Holocene alluvial cover at the project, as mapped, has a low paleontological potential, since these sedimentary strata are too young to yield significant fossils.

**VI. CONCLUSIONS AND RECOMMENDATIONS**

The presence of modern and Holocene-aged alluvial deposits at the project, their coarse consistency, and the lack of any known fossil specimens or fossil localities within a several-mile radius encompassing the project supports the conclusion that paleontological monitoring is *not* recommended during earth disturbance activities at the Reservoir 6 and Almond Street Waterline Replacement Project. A Paleontological Resource Impact Mitigation Program is not warranted.

**VII. CERTIFICATION**

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this paleontological report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief and have been compiled in accordance with CEQA criteria.



---

Todd A. Wirths  
Senior Paleontologist  
California Professional Geologist No. 7588

December 30, 2024

Date

## **VIII. REFERENCES**

- Bell, A. 2024. Paleontological resources for the Reservoir 6 and Almond Street Waterline Replacement Project. Letter drafted for BFSA Environmental Services, a Perennial Company, Poway, California, by the Natural History Museum of Los Angeles County, Los Angeles, California (Appendix B).
- 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: i-v + 1-129.
- Morton, D.M., and Matti, J.C. 2001. Geologic map of the Cucamonga Peak 7.5' quadrangle, San Bernardino County, California: USGS open-file report 01-311, v. 1.0.
- Society of Vertebrate Paleontology. 2010. Standard procedures for the assessment and mitigation of adverse impacts to paleontological resources; by the SVP Impact Mitigation Guidelines Revision Committee. Electronic document, [https://vertpaleo.org/wp-content/uploads/2021/01/SVP\\_Impact\\_Mitigation\\_Guidelines-1.pdf](https://vertpaleo.org/wp-content/uploads/2021/01/SVP_Impact_Mitigation_Guidelines-1.pdf).

**APPENDIX A**

**Qualifications of Key Personnel**

# Todd A. Wirths, MS, PG No. 7588

## Senior Paleontologist

BFSAE nvironmental Services, A Perennial Company

14010 Poway Road • Suite A •

Phone: (858) 679-8218 • Fax: (858) 679-9896 • E-Mail: twirths@bfsa.perennialenv.com



## Education

---

**Master of Science, Geological Sciences, San Diego State University, California** **1995**

**Bachelor of Arts, Earth Sciences, University of California, Santa Cruz** **1992**

## Professional Certifications

---

California Professional Geologist #7588, 2003

Riverside County Approved Paleontologist

San Diego County Qualified Paleontologist

Orange County Certified Paleontologist

OSHA HAZWOPER 40-hour trained; current 8-hour annual refresher

## Professional Memberships

---

Board member, San Diego Geological Society

San Diego Association of Geologists; past President (2012) and Vice President (2011)

South Coast Geological Society

Southern California Paleontological Society

## Experience

---

Mr. Wirths has more than a dozen years of professional experience as a senior-level paleontologist throughout southern California. He is also a certified California Professional Geologist. At BFSAE nvironmental Services, Mr. Wirths conducts on-site paleontological monitoring, trains and supervises junior staff, and performs all research and reporting duties for locations throughout Los Angeles, Ventura, San Bernardino, Riverside, Orange, San Diego, and Imperial Counties. Mr. Wirths was formerly a senior project manager conducting environmental investigations and remediation projects for petroleum hydrocarbon-impacted sites across southern California.

## Selected Recent Reports

---

2019 *Paleontological Assessment for the 10575 Foothill Boulevard Project, City of Rancho Cucamonga, San Bernardino County, California.* Prepared for T&B Planning, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Assessment for the MorningStar Marguerite Project, Mission Viejo, Orange County, California.* Prepared for T&B Planning. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

- 2019 *Paleontological Monitoring Report for the Nimitz Crossing Project, City of San Diego.* Prepared for Voltaire 24, LP. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2019 *Paleontological Resource Impact Mitigation Program (PRIMP) for the Jack Rabbit Trail Logistics Center Project, City of Beaumont, Riverside County, California.* Prepared for JRT BP 1, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2020 *Paleontological Monitoring Report for the Oceanside Beachfront Resort Project, Oceanside, San California.* Prepared for S.D. Malkin Properties. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2020 *Paleontological Resource Impact Mitigation Program for the Nakase Project, Lake Forest, Orange County, San California.* Prepared for Glenn Lukos Associates, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2020 *Paleontological Resource Impact Mitigation Program for the Sunset Crossroads Project, Banning, Riverside County.* Prepared for NP Banning Industrial, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2020 *Paleontological Assessment for the Ortega Plaza Project, Lake Elsinore, Riverside County.* Prepared for Empire Design Group. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2020 *Paleontological Resource Record Search Update for the Green River Ranch III Project, Green River Ranch Specific Plan SP00-001, City of Corona, California.* Prepared for Western Realco. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2020 *Paleontological Assessment for the Cypress/Slover Industrial Center Project, City of Fontana, San Bernardino County, California.* Prepared for T&B Planning, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2020 *Paleontological Monitoring Report for the Imperial Landfill Expansion Project (Phase VI, Segment C-2), Imperial County, California.* Prepared for Republic Services, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2021 *Paleontological Assessment for the Manitou Court Logistics Center Project, City of Jurupa Valley, Riverside County, California.* Prepared for Link Industrial. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2021 *Paleontological Resource Impact Mitigation Program for the Del Oro (Tract 36852) Project, Menifee, Riverside County.* Prepared for D.R. Horton. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2021 *Paleontological Assessment for the Alessandro Corporate Center Project (Planning Case PR-2020-000519), City of Riverside, Riverside County, California.* Prepared for OZI Alessandro, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.
- 2021 *Paleontological Monitoring Report for the Boardwalk Project, La Jolla, City of San Diego.* Prepared for Project Management Advisors, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

**APPENDIX B**

**Paleontological Locality Records Search Letter**

Natural History Museum  
of Los Angeles County  
900 Exposition Boulevard  
Los Angeles, CA 90007

tel 213.763.DINO  
www.nhm.org

Research & Collections

e-mail: [paleorecords@nhm.org](mailto:paleorecords@nhm.org)

March 31, 2024

BFSA Environmental Services  
Attn: Todd Wirths

re: Paleontological resources for the Reservoir 6 and Almond Street Waterline Replacement Project  
(No. 24-062)

Dear Todd:

I have conducted a thorough search of our paleontology collection records for the locality and specimen data for proposed development at the Reservoir 6 and Almond Street Waterline Replacement project area as outlined on the portion of the Cucamonga Peak USGS topographic quadrangle map that you sent to me via e-mail on March 12, 2024. We do not have any fossil localities that lie directly within the proposed project area, but we do have fossil localities nearby from the same sedimentary deposits that may occur in the proposed project area, either at the surface or at depth.

The following table shows the closest known localities in the collection of the Natural History Museum of Los Angeles County (NHMLA).

Locality Number	Location	Formation	Taxa	Depth
LACM VP 4619	Wineville, California	Unknown formation (Pleistocene)	Mammoth ( <i>Mammuthus</i> )	100 feet bgs
LACM VP 7811	T-Mobile Orchard Park, Chino Valley	Unnamed (Pleistocene; silt with some clay & fine-grained sand)	Colubrid snake ( <i>Masticophis</i> )	9-11 ft bgs
LACM VP 7268, 7271	Sundance Condominiums development project; Chino Hill	Unnamed (Pleistocene; Unnamed (late Pleistocene, light brown shale which has interbeds & pockets of very coarse brown sand)	Vertebrates	Unknown (discovered during grading for the housing development)
LACM VP 1728	W of intersection of English Rd & Peyton Dr; Chino	Unnamed (late Pleistocene, light brown shale which has interbeds & pockets of very coarse brown sand)	Horse ( <i>Equus</i> cf.); Camel ( <i>Camelops</i> cf.)	15-20 ft bgs

*VP, Vertebrate Paleontology; IP, Invertebrate Paleontology; bgs, below ground surface*

This records search covers only the records of the NHMLA. It is not intended as a paleontological assessment of the project area for the purposes of CEQA or NEPA. Potentially

fossil-bearing units are present in the project area, either at the surface or in the subsurface. As such, NHMLA recommends that a full paleontological assessment of the project area be conducted by a paleontologist meeting Federal (43 Code of Federal Regulations Part 49.110) or Society of Vertebrate Paleontology standards.

Sincerely,

A handwritten signature in black ink that reads "Alyssa Bell". The signature is written in a cursive style and is placed on a light yellow rectangular background.

Alyssa Bell, Ph.D.  
Natural History Museum of Los Angeles County

enclosure: invoice

## **Appendix E**

### Noise Study

# **CUCAMONGA VALLEY WATER DISTRICT RESERVOIR 6 AND ALMOND STREET WATER REPLACEMENT PROJECT**

City of Rancho Cucamonga

June 11, 2025



Traffic Engineering • Transportation Planning • Parking • Noise & Vibration  
Air Quality • Global Climate Change • Health Risk Assessment

# CUCAMONGA VALLEY WATER DISTRICT RESERVOIR 6 AND ALMOND STREET WATER REPLACEMENT PROJECT

City of Rancho Cucamonga

June 27, 2025

*prepared by*  
Roma Stromberg, INCE, MS  
Catherine Howe, MS



**GANDDINI GROUP INC.**  
555 Park Center Drive, Suite 225  
Santa Ana, California 92705  
(714) 795-3100 | [ganddini.com](http://ganddini.com)

Project No. 19823

# TABLE OF CONTENTS

---

<b>EXECUTIVE SUMMARY .....</b>	<b>III</b>
<b>1. INTRODUCTION.....</b>	<b>1</b>
Purpose and Objectives .....	1
Project Location .....	1
Project Description.....	1
Best Management Practices .....	1
<b>2. NOISE AND VIBRATION FUNDAMENTALS .....</b>	<b>5</b>
Noise Fundamentals .....	5
Vibration Fundamentals.....	5
<b>3. EXISTING NOISE ENVIRONMENT.....</b>	<b>9</b>
Existing Land Uses and Sensitive Receptors .....	9
Ambient Noise Measurements.....	9
<b>4. REGULATORY SETTING .....</b>	<b>12</b>
City of Rancho Cucamonga General Plan .....	12
City of Rancho Cucamonga Municipal Ordinance.....	12
Federal Transit Administration.....	12
<b>5. ANALYTICAL METHODOLOGY AND MODEL PARAMETERS.....</b>	<b>16</b>
Construction Noise Modeling .....	16
Groundborne Vibration Modeling.....	16
<b>6. CONSTRUCTION NOISE AND VIBRATION IMPACTS .....</b>	<b>19</b>
Noise Impacts .....	19
Groundborne Vibration Impacts .....	19
Construction-Related Vibration Impacts.....	20
Operation-Related Vibration Impacts .....	20
Air Traffic Impacts .....	20
<b>7. REFERENCES.....</b>	<b>25</b>

## APPENDICES

- Appendix A List of Acronyms
- Appendix B Glossary
- Appendix C Noise Measurement Field Worksheets
- Appendix D Soundplan Construction Noise Modeling

## LIST OF TABLES

Table 1.	Short-Term Noise Measurement Summary (dBA).....	10
Table 2.	FTA Construction Noise Criteria .....	14
Table 3.	FTA Construction Vibration Damage Criteria .....	15
Table 4.	CA/T Equipment Noise Emissions and Acoustical Usage Factor Database.....	17
Table 5.	Construction Equipment Vibration Source Levels .....	18

**LIST OF FIGURES**

Figure 1. Project Location Map..... 3  
Figure 2. Site Plan ..... 4  
Figure 3. A-Weighted Comparative Sound Levels..... 7  
Figure 4. Typical Levels of Groundborne Vibration..... 8  
Figure 5. Noise Measurement Location Map..... 11  
Figure 6. Construction Noise Levels – West End of Proposed Alignment ..... 21  
Figure 7. Construction Noise Level Contours – West End of Proposed Alignment ..... 22  
Figure 8. Construction Noise Levels – East End of Proposed Alignment ..... 23  
Figure 9. Construction Noise Level Contours – East End of Proposed Alignment ..... 24

## EXECUTIVE SUMMARY

---

The Cucamonga Valley Water District (CVWD) proposes to construct and install the proposed project will install two (2) new parallel 16-inch waterlines to replace existing 14-inch and 16-inch waterlines that currently cross a seasonal drainage within the City of Rancho Cucamonga, San Bernardino County, California. The new waterlines will connect into the existing waterlines at a western connection point located between a residential development and the seasonal drainage. The eastern connection point along the hiking trail is situated approximately 50 feet above the drainage bottom.

The proposed alignment is located in the northern region of the City of Rancho Cucamonga, occurring northeast of Almond Street and south of Angalls Canyon. More specifically, the proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point. The proposed project includes abandonment of approximately 300 linear feet of 14-inch and 16-inch waterlines, which extend from the western connection point to the eastern connection point, directly across the drainage. This analysis assumes that the Proposed Project would be constructed during daylight hours and the time period allowed by the City of Rancho Cucamonga Noise Ordinance (construction from 7 am to 8 pm Monday through Saturday). It is anticipated that no nighttime or weekend construction would occur.

### **Existing Noise Environment**

Sensitive receptors that may be affected by project generated noise include the existing single-family residential properties in the project vicinity. Measured short-term ambient noise levels ranged between 43.0 and 48.0 dBA  $L_{eq}$ . The dominant noise source in the project vicinity was residential ambiance and occasional aircraft overflight.

### **Project Impacts in Light of CEQA Thresholds**

- a) *Would the project result in the generation of 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?*

Noise associated with construction will vary depending on the construction process, type of equipment involved, location of the construction activity with respect to sensitive receptors, the schedule proposed to carry out each task (e.g., hours and days of the week) and the duration of each activity. Assumptions for the phasing, duration, and required equipment for the construction of the proposed project were obtained from the project applicant. Project construction noise levels were modeled in at the surrounding land uses using FTA methodology (2018) in the SoundPLAN noise model which takes into consideration the topography of the site as well as that of the surrounding area. SoundPLAN modeling input and output is provided in Appendix D.

Construction noise levels will reach up to 78 dBA  $L_{eq}$  at the nearest sensitive receptor on the west side of the proposed alignment and up to 46 dBA at the nearest sensitive receptor on east of the proposed alignment, and therefore, will not exceed the FTA daytime construction noise thresholds for impacts residential land uses (80 dBA  $L_{eq}$  (8-hr)). Further, project construction will adhere to the hours identified as exempt in Section 17.66.050 of the Municipal Code. Project construction will result in less than significant impacts; no mitigation is required.

Notwithstanding the above, BMPs that can be implemented to further minimize construction noise at adjacent properties are provided in the Project Description.

b) *Will the project generate excessive groundborne vibration or groundborne noise levels?*

The most vibratory equipment to be used within the proposed alignment are loaders, backhoes, and excavators which would result in groundborne vibration similar to that associated with a small bulldozer (0.003 PPV inches per second or 57.5 VdB at a distance of 25 feet). Therefore, project construction would not generate groundborne vibration strong enough to result in structural damage to nearby structures (0.02 PPV inches per second). This impact is less than significant and no mitigation is required.

The most substantial sources of groundborne vibration during post-construction project operations will include the movement of passenger vehicles and trucks on paved and generally smooth surfaces. The nearest structure is 50 feet from the proposed alignment. Therefore, groundborne vibration levels generated by project operation would not exceed the City groundborne vibration standard for land uses of 85 VdB at a sensitive receptor. This impact would not be significant. No mitigation is required.

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 area to excessive noise levels?*

As the proposed pipeline alignment is located approximately 5.3 miles northeast of the nearest airport (Ontario International Airport) and would not expose people residing or working in the project area to excessive noise levels associated with airports; impacts are less than significant and no mitigation is required.

# 1. INTRODUCTION

---

This section describes the purpose of this study and the proposed project.

## PURPOSE AND OBJECTIVES

The purpose of this report is to provide an assessment of potential noise impacts associated with development and operation of the proposed project and to identify mitigation measures that may be necessary to reduce those impacts. The noise issues related to the proposed land use and development have been evaluated considering applicable Federal, State, and local policies, including those of the City of Rancho Cucamonga.

Although this is a technical report, effort has been made to write the report clearly and concisely. A list of acronyms and a glossary are provided in Appendix A and Appendix B of this report to assist the reader with technical terms related to noise analysis.

## PROJECT LOCATION

The proposed alignment is located in the northern region of the City of Rancho Cucamonga, occurring northeast of Almond Street and south of Angalls Canyon. The Proposed Project is situated on Assessor's Parcel Numbers (APN) 1061-451-04. The project alignment starts from the western bank of Angalls Canyon to the former fire road on the west bank. It then follows the fire road south to the connection on the west bank. A vicinity map showing the project location is provided on Figure 1.

## PROJECT DESCRIPTION

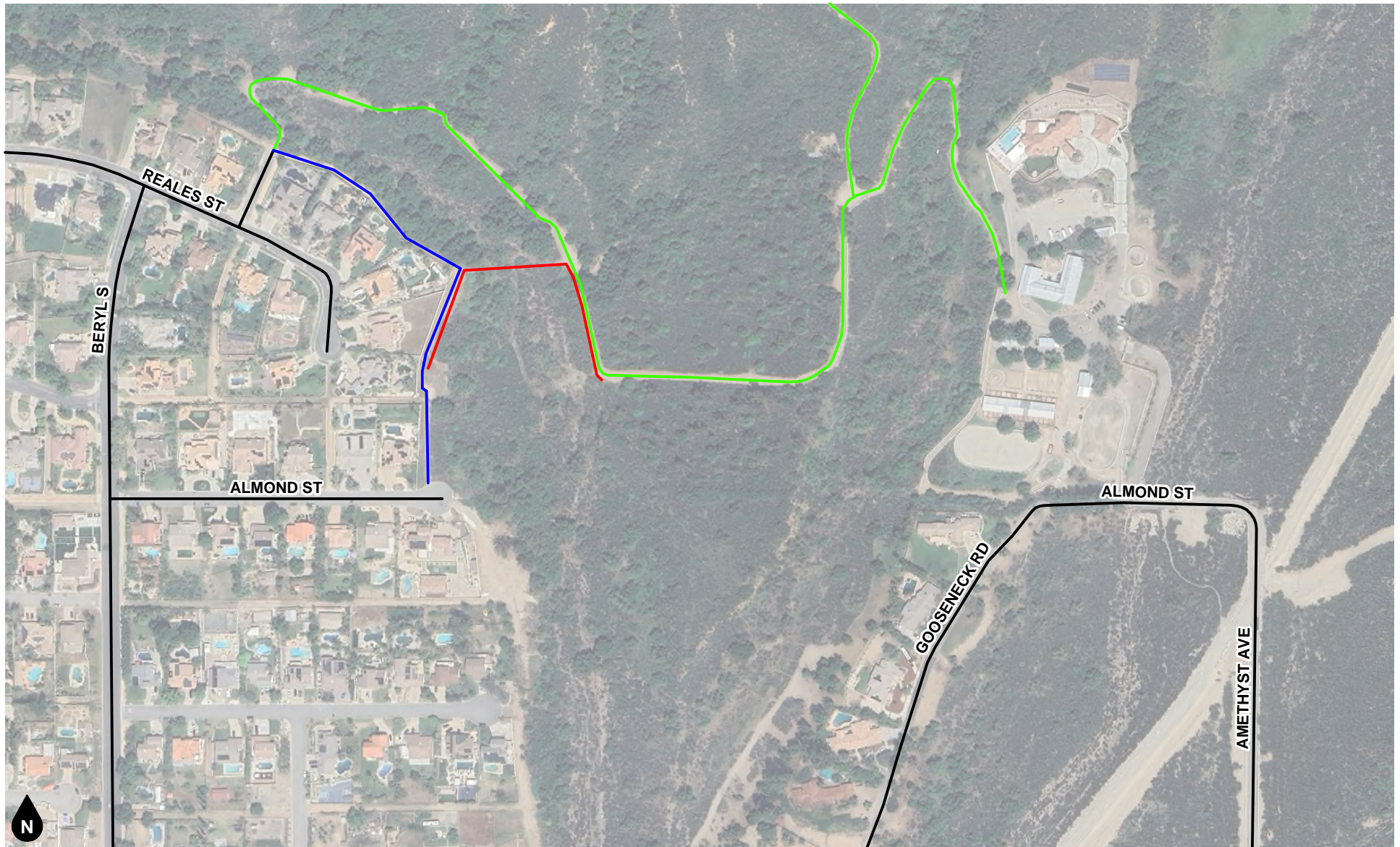
The proposed alignment is located in the northern region of the City of Rancho Cucamonga, occurring northeast of Almond Street and south of Angalls Canyon. More specifically, the proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point. The proposed project includes abandonment of approximately 300 linear feet of 14-inch and 16-inch waterlines, which extend from the western connection point to the eastern connection point, directly across the drainage. This analysis assumes that the Proposed Project would be constructed during daylight hours and the time period allowed by the City of Rancho Cucamonga Noise Ordinance (construction from 7 am to 8 pm Monday through Saturday). It is anticipated that no nighttime or weekend construction would occur.

## BEST MANAGEMENT PRACTICES

Although, project construction noise impacts would not exceed applicable thresholds, the following additional best management practices (BMPs) can be provided on project plans and in contract specifications to further minimize construction noise emanating from the proposed project:

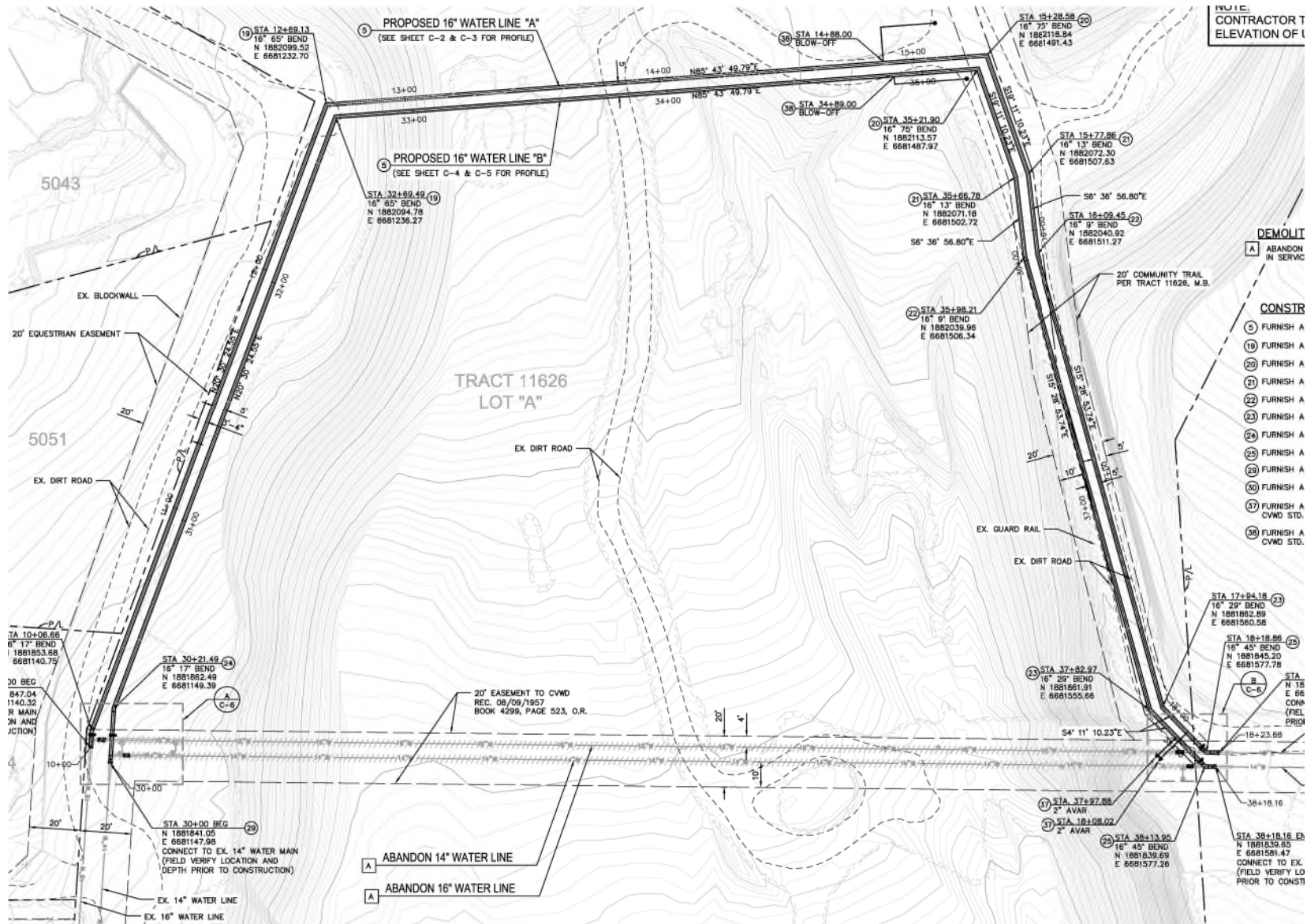
1. All equipment, whether fixed or mobile, will be equipped with properly operating and maintained mufflers, consistent with manufacturer standards.
2. All stationary construction equipment will be placed so that emitted noise is directed away from the noise sensitive receptors nearest the proposed alignment.
3. As applicable, all equipment shall be shut off and not left to idle when not in use.
4. To the degree possible, equipment staging will be located in areas that create the greatest distance between construction-related noise and vibration sources and existing sensitive receptors.

5. Portable stationary noise sources will be directed away and shielded from existing residences in the vicinity of the proposed alignment. Either one-inch plywood or sound blankets can be utilized for this purpose. They should reach up from the ground and block the line of sight between equipment and existing residences. The shielding should be without holes and cracks.
6. No amplified music and/or voice will be allowed on the proposed alignment during construction.



- Legend**
- Proposed Water Line
  - Equestrian Easment
  - Community Trail

**Figure 1**  
**Project Location Map**



**Figure 2  
Site Plan**

## 2. NOISE AND VIBRATION FUNDAMENTALS

---

This section provides an overview of key noise and vibration concepts.

### NOISE FUNDAMENTALS

Sound is a pressure wave created by a moving or vibrating source that travels through an elastic medium such as air. Noise is defined as unwanted or objectionable sound. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and in extreme circumstances, hearing impairment.

Commonly used noise terms are presented in Appendix B. The unit of measurement used to describe a noise level is the decibel (dB). The human ear is not equally sensitive to all frequencies within the sound spectrum. Therefore, the “A-weighted” noise scale, which weights the frequencies to which humans are sensitive, is used for measurements. Noise levels using A-weighted measurements are written dB(A) or dBA.

From the noise source to the receiver, noise changes both in level and frequency spectrum. The most obvious is the decrease in noise as the distance from the source increases. The manner in which noise reduces with distance depends on whether the source is a point or line source as well as ground absorption, atmospheric effects and refraction, and shielding by natural and manmade features. Sound from point sources, such as air conditioning condensers, radiates uniformly outward as it travels away from the source in a spherical pattern. The noise drop-off rate associated with this geometric spreading is 6 dBA per each doubling of the distance (dBA/DD). Transportation noise sources such as roadways are typically analyzed as line sources, since at any given moment the receiver may be impacted by noise from multiple vehicles at various locations along the roadway. Because of the geometry of a line source, the noise drop-off rate associated with the geometric spreading of a line source is 3 dBA/DD.

Decibels are measured on a logarithmic scale, which quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. Thus, a doubling of the energy of a noise source, such as a doubled traffic volume, would increase the noise levels by 3 dBA; halving of the energy would result in a 3 dBA decrease. Figure 3 shows the relationship of various noise levels to commonly experienced noise events.

Average noise levels over a period of minutes or hours are usually expressed as dBA  $L_{eq}$ , or the equivalent noise level for that period of time. For example,  $L_{eq(3)}$  would represent a 3-hour average. When no period is specified, a one-hour average is assumed.

Noise standards for land use compatibility are stated in terms of the Community Noise Equivalent Level (CNEL) and the Day-Night Average Noise Level (DNL). CNEL is a 24-hour weighted average measure of community noise. CNEL is obtained by adding five decibels to sound levels in the evening (7:00 PM to 10:00 PM), and by adding ten decibels to sound levels at night (10:00 PM to 7:00 AM). This weighting accounts for the increased human sensitivity to noise during the evening and nighttime hours. DNL is a very similar 24-hour average measure that weights only the nighttime hours.

It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA; that a change of 5 dBA is readily perceptible, and that an increase (decrease) of 10 dBA sounds twice (half) as loud. This definition is recommended by the California Department of Transportation’s Technical Noise Supplement to the Traffic Noise Analysis Protocol (2013).

### VIBRATION FUNDAMENTALS

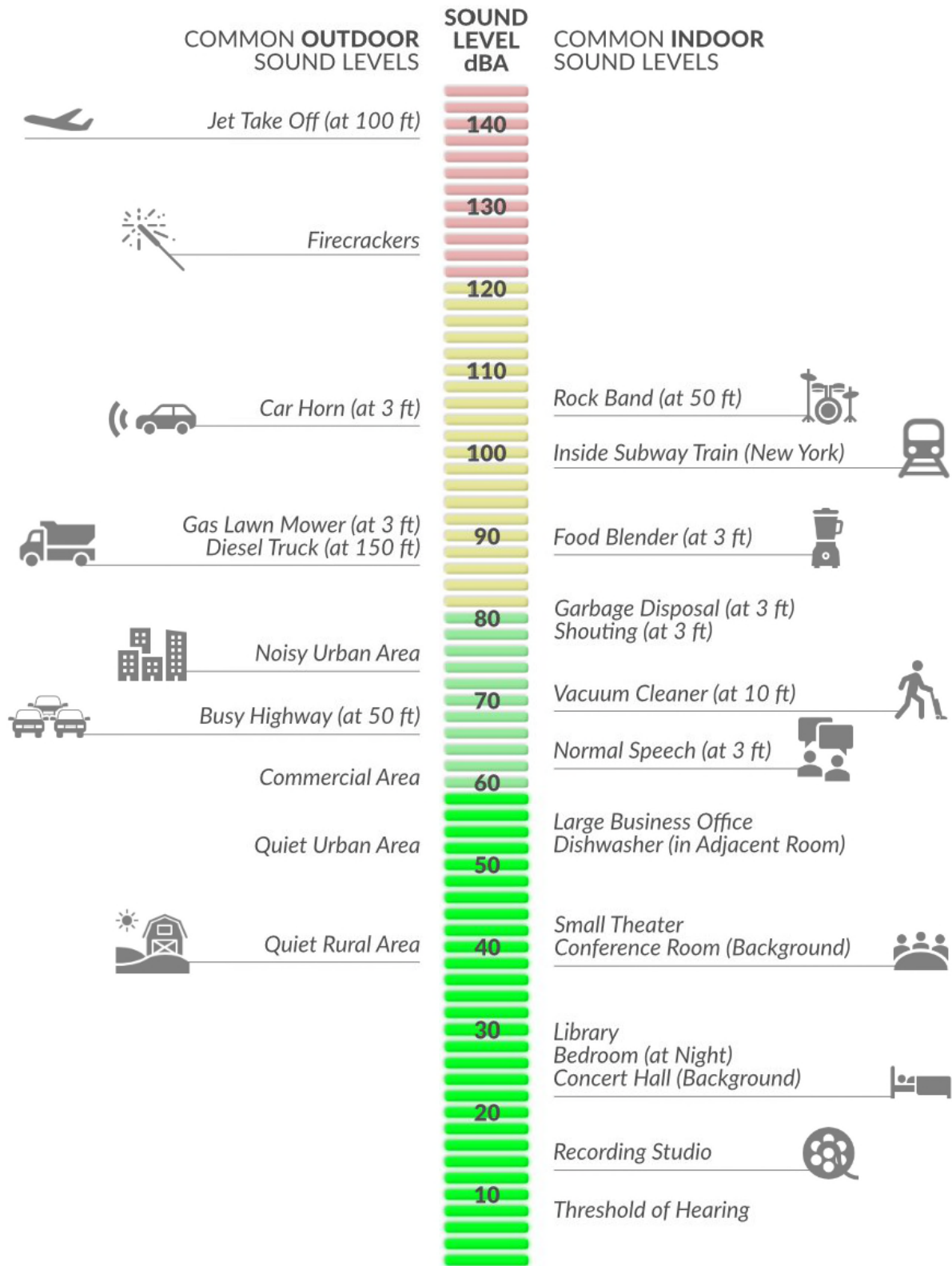
The way in which vibration is transmitted through the earth is called propagation. Propagation of earthborn vibrations is complicated and difficult to predict because of the endless variations in the soil through which waves travel. There are three main types of vibration propagation: surface, compression and shear waves.

Surface waves, or Rayleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water. Compression waves, or P-waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. Shear waves, or S-waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse or "side-to-side and perpendicular to the direction of propagation".

As vibration waves propagate from a source, the energy is spread over an ever-increasing area such that the energy level striking a given point is reduced with the distance from the energy source. This geometric spreading loss is inversely proportional to the square of the distance. Wave energy is also reduced with distance as a result of material damping in the form of internal friction, soil layering, and void spaces. The amount of attenuation provided by material damping varies with soil type and condition as well as the frequency of the wave.

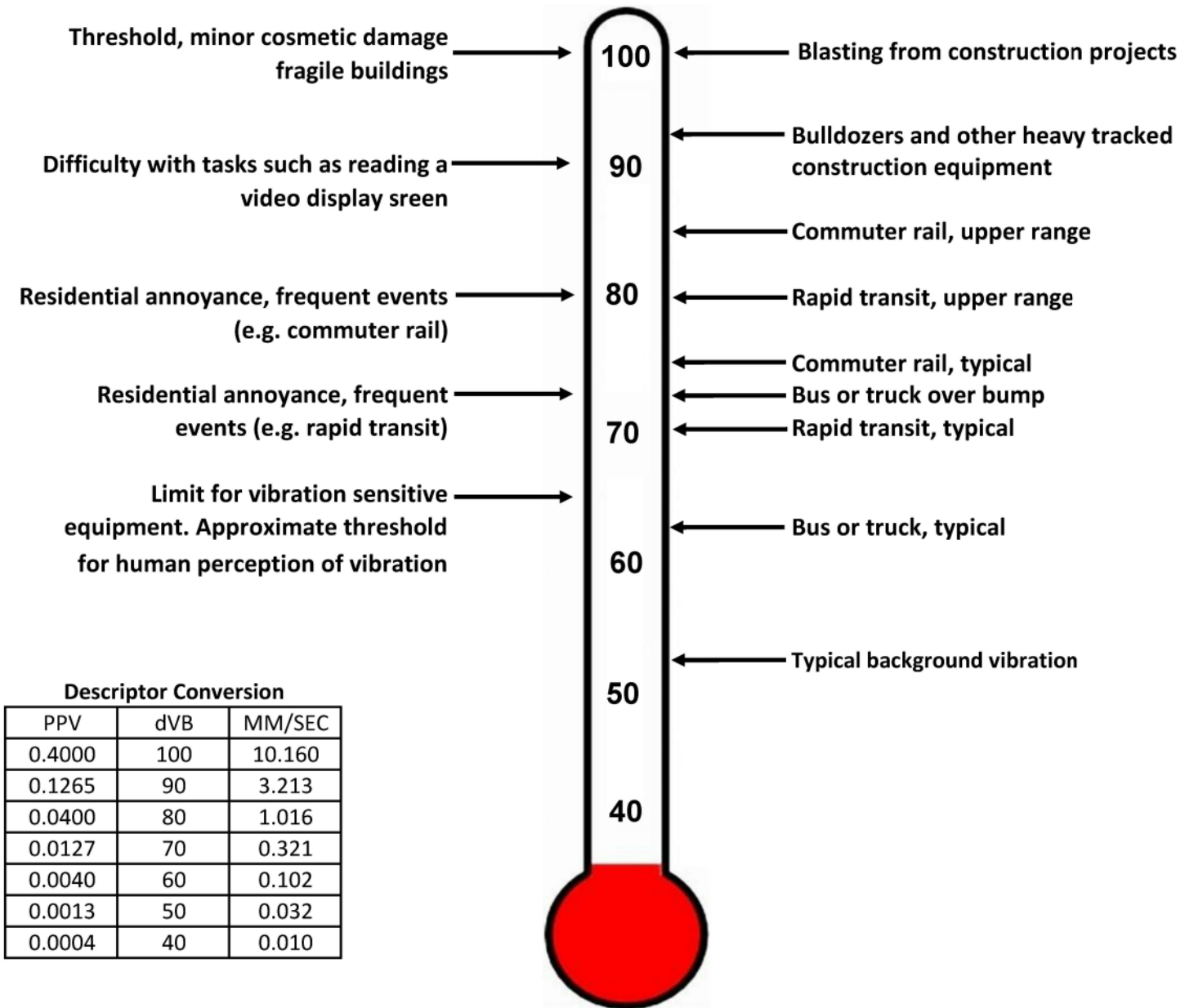
Vibration amplitudes are usually expressed as either peak particle velocity (PPV) or the root mean square (RMS) velocity. The PPV is defined as the maximum instantaneous peak of the vibration signal in inches per second. The RMS of a signal is the average of the squared amplitude of the signal in vibration decibels (VdB), ref one micro-inch per second. The Federal Railroad Administration uses the abbreviation "VdB" for vibration decibels to reduce the potential for confusion with sound decibel.

PPV is appropriate for evaluating the potential of building damage. Decibel notation acts to compress the range of numbers required in measuring vibration. Similar to the noise descriptors,  $L_{eq}$  and  $L_{max}$  can be used to describe the average vibration and the maximum vibration level observed during a single vibration measurement interval. Figure 4 illustrates common vibration sources and the human and structural responses to ground-borne vibration.



© Ganddini Group, Inc.  
Based on Policy & Guidance from Federal Aviation Administration

**Figure 3**  
**A-Weighted Comparative Sound Levels**



Source: FRA, 2012. Federal Railroad Administration High-Speed Ground Transportation Noise and Vibration Impact Assessment. Office of Railroad Policy Development, Washington, D.C. DOT/FRA/ORD-12/15. September.

**Figure 4**  
**Typical Levels of Groundborne Vibration**

### 3. EXISTING NOISE ENVIRONMENT

---

This section describes the existing noise setting in the project vicinity.

#### EXISTING LAND USES AND SENSITIVE RECEPTORS

The proposed alignment is bordered by Base Line Road to the north, an assisted living facility to the east, and single-family residential to the south and west of the proposed alignment.

The State of California defines sensitive receptors as those land uses that require serenity or are otherwise adversely affected by noise events or conditions. Schools, libraries, churches, hospitals, single and multiple-family residential, including transient lodging, motels and hotel uses make up the majority of these areas.

Sensitive land uses that may be affected by project noise include the existing single-family residential property lines located adjacent to the west and south and approximately 137 feet east and 191 feet north and an assisted living facility located adjacent to the east of the proposed alignment.

#### AMBIENT NOISE MEASUREMENTS

An American National Standards Institute (ANSI Section S1.4 2014, Class 1) Larson Davis model LxT sound level meter was used to document existing ambient noise levels. In order to document existing ambient noise levels in the project area, four (4) 15-minute daytime noise measurements were taken between 12:18 PM and 2:40 PM on May 20, 2025. Figure 5 shows the noise measurement location map. Field worksheets and noise measurement worksheets are provided in Appendix C.

As shown on Figure 5, existing ambient noise measurements were taken at the following locations:

- STNM1: represents the existing noise environment of the residential uses in the vicinity of 5029 Lomas Court Street approximately 540 feet north of the proposed alignment.
- STNM2: represents the existing noise environment of the residential uses located in the vicinity of 5051 Lomas Court approximately 250 feet north of the proposed alignment.
- STNM3: represents the existing noise environment of the residential uses located in the vicinity of 9204 Almond Street, just north of the proposed alignment.
- STNM4: represents the existing noise environment of the residential uses located in the vicinity of 9434 Gooseneck Road located immediately east of the east end of the proposed alignment.

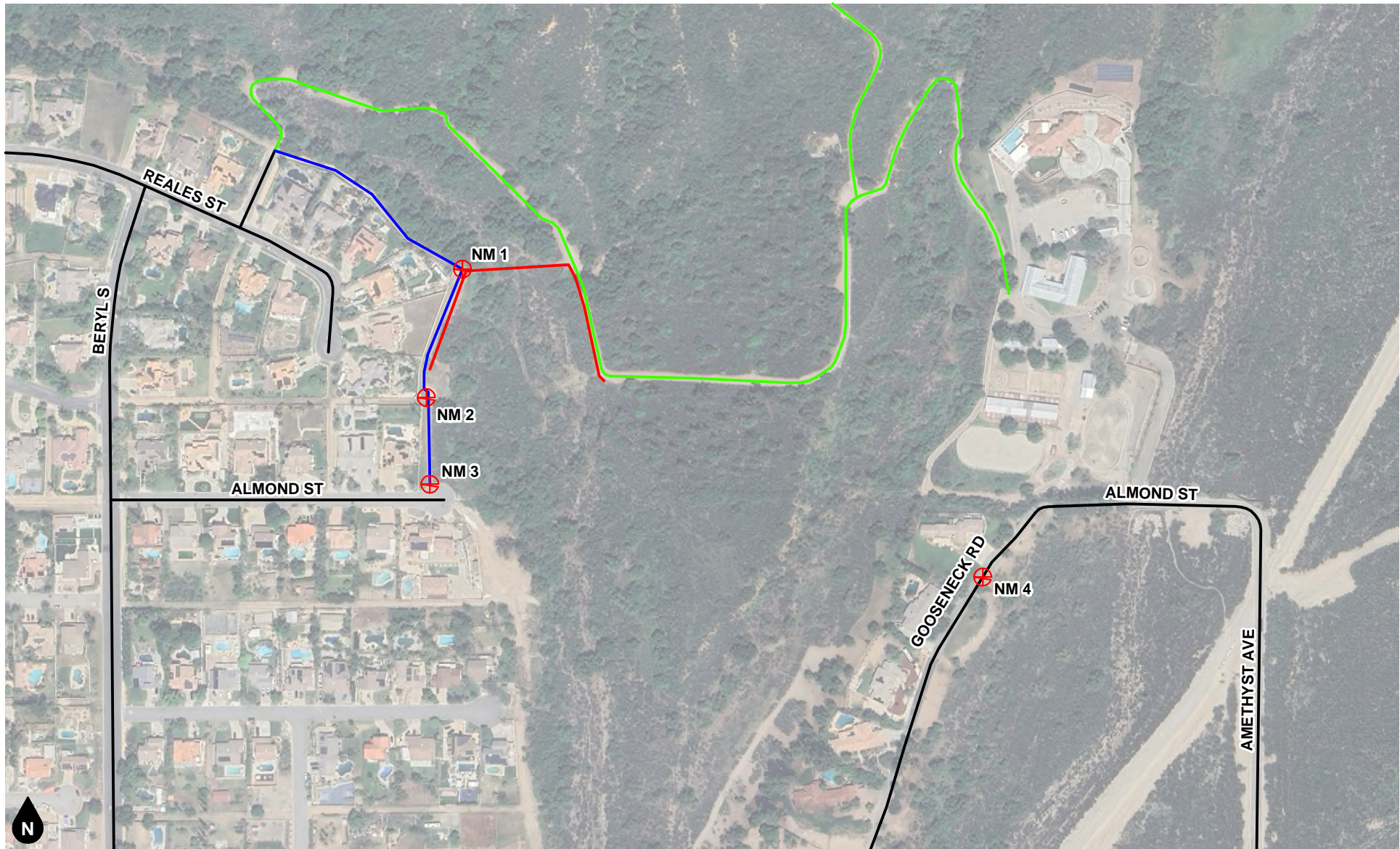
Table 1 provides a summary of the short-term ambient noise measurements which ranged between 43.0 and 48.0 dBA  $L_{eq}$ . The dominant noise source in the project vicinity was residential ambiance including heating and ventilation systems, bird song, and occasional aircraft overflight.

**Table 1**  
**Short-Term Noise Measurement Summary (dBA)**

Site Location	Time Started	Leq	Lmax	L(2)	L(8)	L(25)	L(50)
STNM1	12:18 PM	43.0	58.3	53.6	46.0	39.6	36.8
STNM2	12:48 PM	45.4	64.6	54.1	46.7	41.2	37.4
STNM3	1:18 PM	46.9	66.7	56.2	48.9	42.6	39.2
STNM4	2:25 PM	48.0	62.7	57.9	53.1	44.5	42.1

Notes:

- (1) See Figure 5 for noise measurement locations. Each noise measurement was performed over a 15-minute duration.
- (2) Noise measurements performed on May 20, 2025.



- Legend**
- Proposed Water Line
  - Equestrian Easment
  - Community Trail
  - ⊕ Noise Measurement Location
- NM 1**

**Figure 5**  
**Noise Measurement Location Map**

## 4. REGULATORY SETTING

---

### CITY OF RANCHO CUCAMONGA GENERAL PLAN

**Goal N-1 Noise** A city with appropriate noise and vibration levels that support a range of places from quiet neighborhoods to active, exciting districts.

*Policy N-1.8* Vibration Impact Assessment. Require new development to reduce vibration to 85 or below within 200 feet of an existing structure.

### CITY OF RANCHO CUCAMONGA MUNICIPAL ORDINANCE

#### *Section 17.66.050 Noise Standards*

Sound emanating from the following sources is exempt from the provisions of Chapter 9.48 Noise Regulation Special exclusions. The following activities shall be exempted from the provisions of this section:

Noise sources associated with, or vibration created by, construction, repair, remodeling, or grading of any real property or during authorized seismic surveys, provided said activities:

- a. When adjacent to a residential land use, school, church or similar type of use, the noise generating activity does not take place between the hours of 8:00 PM and 7:00 AM on weekdays, including Saturday, or at any time on Sunday or a national holiday, and provided noise levels created do not exceed the noise standard of 65 dBA<sup>1</sup> when measured at the adjacent property line.

#### *Section 17.66.070 Vibration*

Uses that generate vibrations that may be considered a public nuisance or hazard on any adjacent property shall be cushioned or isolated to prevent generation of vibrations. Uses shall be operated in compliance with the following provisions:

- New development shall not cause vibration of more than 85 VdB within 200 feet of an existing structure.
- Uses, activities, and processes shall not generate vibrations that cause discomfort or annoyance to reasonable persons of normal sensitivity or which endangers the comfort, repose, health, or peace of residents whose property<sup>3</sup> abuts the property line of the parcel.
- Uses shall not generate ground vibration that interferes with the operations of equipment and facilities of adjoining parcels.
- Vibrations from temporary construction/demolition and vehicles that leave the subject parcel (e.g., trucks, trains, and aircraft) are exempt from the provisions of this section.

### FEDERAL TRANSIT ADMINISTRATION

The Federal Transit Administration (FTA) has published reasonable criteria for assessing construction and groundborne vibration impacts (FTA 2018) that is appropriate to supplement lead agency criteria or to use as the primary criteria when appropriate. FTA construction noise criteria is presented in

---

<sup>1</sup> Considering that 65 dBA is the level of a normal conversation, this part of the ordinance was interpreted to apply to nighttime hours implying that technically, construction could occur during nighttime hours as long as it did not exceed the 65 dBA L<sub>eq</sub> threshold.

The FTA construction noise criteria is based on the potential for adverse community reaction. As shown in Table 2, the daytime noise threshold for residential land uses is 80 dBA  $L_{eq}$  averaged over an 8-hour period ( $L_{eq (8-hr)}$ ); and the nighttime noise threshold is 70 dBA  $L_{eq (8-hr)}$ .

The FTA has adopted vibration standards that are used to evaluate potential building damage impacts related to construction activities. As shown in Table 3, the threshold at which there is a risk to “architectural” damage to non-engineered timber and masonry buildings is a peak particle velocity (PPV) of 0.2 inches/second at engineered concrete and masonry buildings a PPV of 0.3, and at reinforced-concrete, steel, or timber buildings a PPV of 0.5 inches/second.

**Table 2**  
**FTA Construction Noise Criteria**

Land Use	Leq equipment (8 hour), dBA	
	Day	Night
Residential	80	70
Commercial	85	85
Industrial	90	90

Source: Federal Transit Administration (FTA), Transit Noise and Vibration Impact Assessment Manual (September 2018).

**Table 3  
Construction Vibration Damage Criteria**

Building/Structural Category	PPV, in/sec	Approximate $L_v^{(1)}$
I. Reinforced-concrete, steel or timber (no plaster)	0.5	102
II. Engineered concrete and masonry (no plaster)	0.3	98
III. Non-engineered timber and masonry buildings	0.2	94
IV. Buildings extremely susceptible to vibration damage	0.1	90

Source: Federal Transit Administration (FTA), Transit Noise and Vibration Impact Assessment Manual (September 2018).

(1) RMS velocity in decibels, VdB re 1 micro-in/sec.

## 5. ANALYTICAL METHODOLOGY AND MODEL PARAMETERS

This section discusses the analysis methodologies used to assess noise impacts.

### CONSTRUCTION NOISE MODELING

Construction noise will vary depending on the construction process, type of equipment involved, location of the work with respect to sensitive receptors, the schedule proposed to carry out each task (e.g., hours and days of the week) and the duration of the work.

Construction noise associated with the proposed project was calculated at the sensitive receptor locations utilizing the SoundPLAN noise model which takes into consideration the topography of the site as well as that of the surrounding area and methodology presented in the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual (2018) together with several key construction parameters, including: distance to each sensitive receiver, equipment usage, percent usage factor, and baseline parameters for the proposed alignment.

The equipment used to calculate the construction noise levels for each phase were based on the assumptions provided by the Cucamonga Valley Water District. Sound emission levels associated with typical construction equipment as well as typical usage factors are provided in Table 4. SoundPLAN modeling input and output is provided in Appendix D.

### GROUNDBORNE VIBRATION MODELING

Groundborne vibration modeling is performed using vibration propagation equations and construction equipment source levels obtained from the FTA *Transit Noise and Vibration Impact Assessment Manual* (2018). As shown in Table 5 there are a several; pieces of construction equipment that could cause vibration levels high enough to reach the threshold for potential architectural or structural damage to nearby structures; however, the most vibratory equipment that is proposed to be used along the project alignment are backhoes, excavators and loaders which could be expected to groundborne vibration levels similar to a small bulldozer (0.0003 PPV inches per second at a distance of 25 feet from the source). Groundborne vibration at sensitive receptors associated with this equipment would drop off as the equipment moves away. It should be noted that the vibration levels provided in Table 5 are reference levels and may vary slightly depending upon soil type and specific usage of each piece of equipment.

The fundamental equation used to calculate vibration propagation through average soil conditions and distance is as follows:

$$PPV_{\text{equipment}} = PPV_{\text{ref}} (25/D_{\text{rec}})^n$$

Where:  $PPV_{\text{ref}}$  = reference PPV at 25ft

$D_{\text{rec}}$  = distance from equipment to receiver in ft

$n = 1.5$  (the value related to the attenuation rate through ground)

**Table 4  
CA/T Equipment Noise Emissions and Acoustical Usage Factor Database**

Equipment Description	Impact Device?	Acoustical Use Factor (%)	Spec. Lmax @ 50ft (dBA, slow)	Actual Measured Lmax @ 50ft (dBA, slow)	No. of Actual Data Samples (Count)
All Other Equipment > 5 HP	No	50	85	-N/A-	0
Backhoe	No	40	80	78	372
Compressor (air)	No	40	80	78	18
Concrete Batch Plant	No	15	83	-N/A-	0
Concrete Mixer Truck	No	40	85	79	40
Concrete Pump Truck	No	20	82	81	30
Crane	No	16	85	81	405
Dozer	No	40	85	82	55
Drum Mixer	No	50	80	80	1
Dump Truck	No	40	84	76	31
Excavator	No	40	85	81	170
Flat Bed Truck	No	40	84	74	4
Forklift <sup>2,3</sup>	No	50	n/a	61	n/a
Front End Loader	No	40	80	79	96
Generator	No	50	82	81	19
Generator (<25KVA, VMS signs)	No	50	70	73	74
Gradall	No	40	85	83	70
Grader	No	40	85	-N/A-	0
Grapple (on backhoe)	No	40	85	87	1
Horizontal Boring Hydr. Jack	No	25	80	82	6
Hydra Break Ram	Yes	10	90	-N/A-	0
Impact Pile Driver	Yes	20	95	101	11
Jackhammer	Yes	20	85	89	133
Pavement Scarafier	No	20	85	90	2
Paver	No	50	85	77	9
Pickup Truck	No	50	85	77	9
Paving Equipment	No	50	85	77	9
Pneumatic Tools	No	50	85	85	90
Roller	No	20	85	80	16
Scraper	No	40	85	84	12
Tractor	No	40	84	-N/A-	0
Vibratory Concrete Mixer	No	20	80	80	1
Warning Horn	No	5	85	83	12
Welder/Torch	No	40	73	74	5

Notes:

(1) Source: FHWA Roadway Construction Noise Model User's Guide January 2006.

(2) Warehouse & Forklift Noise Exposure - NoiseTesting.info Carl Stautins, November 4, 2014  
<http://www.noisetesting.info/blog/carl-strautins/page-3/>

(3) Data provided Leq as measured at the operator. Sound Level at 50 feet is calculated using Inverse Square Law.

**Table 5  
Construction Equipment Vibration Source Levels**

Equipment		PPV at 25 ft, in/sec	Approximate Lv* at 25 ft
Pile Driver (impact)	upper range	1.518	112
	typical	0.644	104
Pile Driver (sonic)	upper range	0.734	105
	typical	0.170	93
clam shovel drop (slurry wall)		0.202	94
Hydromill (slurry wall)	in soil	0.008	66
	in rock	0.017	75
Vibratory Roller		0.210	94
Hoe Ram		0.089	87
Large Bulldozer		0.089	87
Caisson Drilling		0.089	87
Loaded Trucks		0.076	86
Jackhammer		0.035	79
Small Bulldozer		0.003	58

Source: Federal Transit Administration: Transit Noise and Vibration Impact Assessment Manual, 2018.

\*RMS velocity in decibels, VdB re 1 micro-in/sec

## 6. CONSTRUCTION NOISE AND VIBRATION IMPACTS

---

This section analyzes the significance of project-related noise and groundborne vibration impacts relative to standards established by the City of Rancho Cucamonga and other applicable agencies in the context of CEQA. Appendix G of the California Environmental Quality Act Guidelines (Title 14, Division 6, Chapter 3 of the California Code of Regulations) includes an environmental checklist that identifies issues upon which findings of significance should be made.

### NOISE IMPACTS

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?*

#### **Finding: Less Than Significant**

Noise associated with construction will vary depending on the construction process, type of equipment involved, location of the construction activity with respect to sensitive receptors, the schedule proposed to carry out each task (e.g., hours and days of the week) and the duration of each activity. Assumptions for the phasing, duration, and required equipment for the construction of the proposed project were obtained from the project applicant. Project construction noise levels were modeled in at the surrounding land uses using FTA methodology (2018) in the SoundPLAN noise model which takes into consideration the topography of the site as well as that of the surrounding area. SoundPLAN modeling input and output is provided in Appendix D.

As shown on Figure 6 through 8, construction noise levels will reach up to 78 dBA  $L_{eq}$  at the nearest sensitive receptor on the west side of the proposed alignment and up to 46 dBA at the nearest sensitive receptor on east of the proposed alignment, and therefore, will not exceed the FTA daytime construction noise thresholds for impacts residential land uses (80 dBA  $L_{eq}$  (8-hr)). Further, project construction will adhere to the hours identified as exempt in Section 17.66.050 of the Municipal Code. Project construction will result in less than significant impacts; no mitigation is required.

Notwithstanding the above, BMPs that can be implemented to further minimize construction noise at adjacent properties are provided in the Project Description.

### GROUNDBORNE VIBRATION IMPACTS

Would the project result in:

- b) *Generation of excessive groundborne vibration or groundborne noise levels?*

#### **Finding: Less Than Significant**

In relation to the Environmental Checklist noise issue “b”, vibrations from temporary construction/demolition and vehicles that leave the subject parcel (e.g., trucks, trains, and aircraft) are exempt from the provisions Section 17.66.070 of the City of Rancho Cucamonga Municipal Code which establishes the City's vibration related standards. Therefore, in the absence of City-established thresholds, groundborne vibration impacts are based on guidance from the *Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual* (FTA, September 2018) (see Regulatory Setting section). Accordingly, the project would result in a significant impact if:

### **Construction-Related Vibration Impacts**

The closest existing structure to the proposed alignment is located approximately 50 feet south of the western end of the alignment and the most vibratory equipment to be used within the proposed alignment are loaders, backhoes, and excavators which would result in groundborne vibration similar to that associated with a small bulldozer (0.003 PPV inches per second or 57.5 VdB at a distance of 25 feet). Therefore, project construction would not generate groundborne vibration strong enough to result in structural damage to nearby structures. This impact is less than significant and no mitigation is required.

### **Operation-Related Vibration Impacts**

The most substantial sources of groundborne vibration during post-construction project operations will include the movement of passenger vehicles and trucks on paved and generally smooth surfaces. Loaded trucks generally have a VdB of 85.6 at a distance of 25 feet (Caltrans 2020). As stated previously, the nearest structure is 50 feet from the proposed alignment. Therefore, groundborne vibration levels generated by project operation would not exceed the City groundborne vibration standard for land uses of 85 VdB at a sensitive receptor. This impact would not be significant. No mitigation is required.

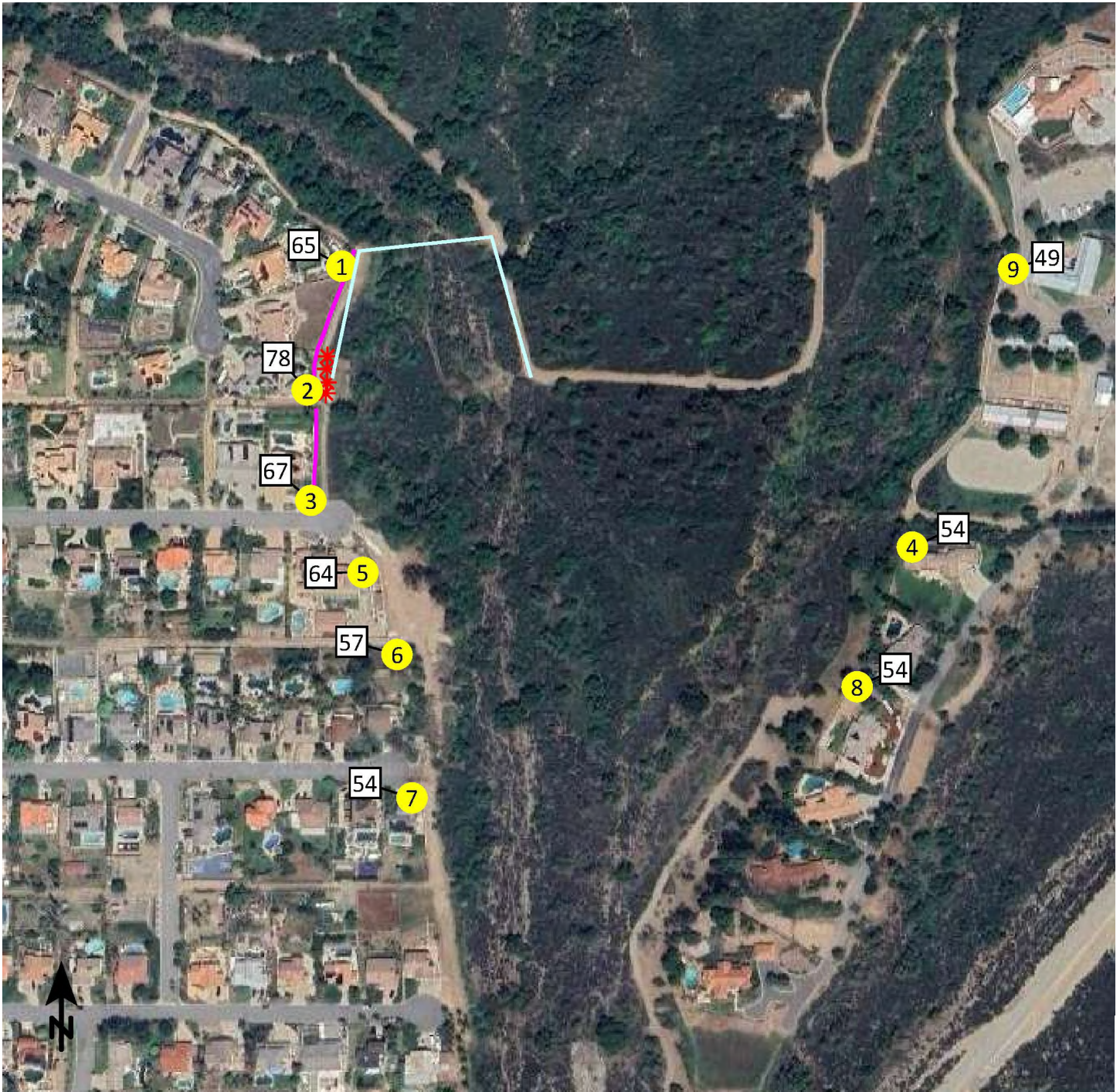
### **AIR TRAFFIC IMPACTS**

*Would the project result in:*

- 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 area to excessive noise levels?*

### **Finding: No Impact**

As the proposed pipeline alignment is located approximately 5.3 miles northeast of the nearest airport (Ontario International Airport) and is not located within an airport noise contour. The project would not expose people residing or working in the project area to excessive noise levels associated with airports; impacts are less than significant and no mitigation is required.

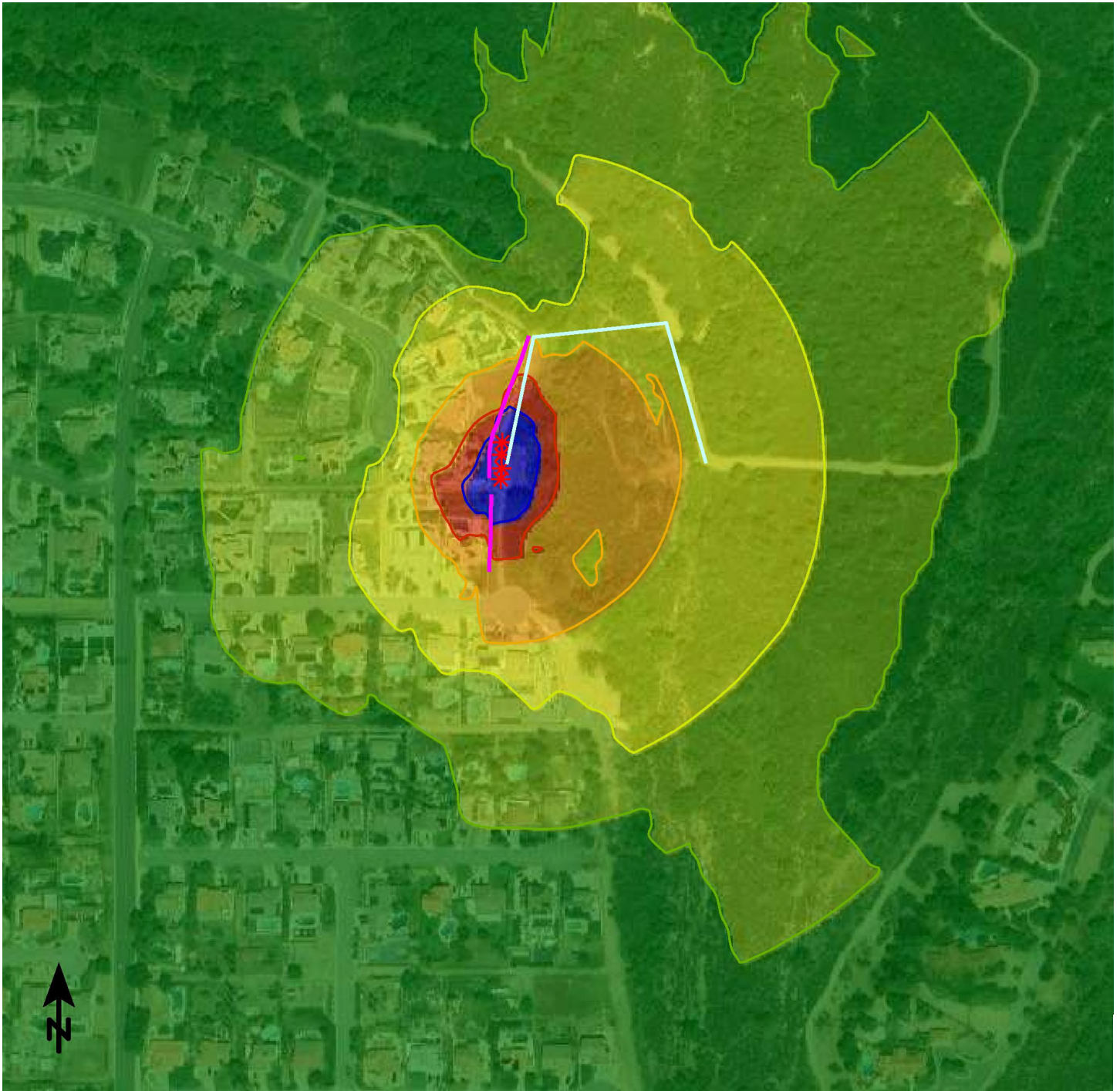


**Signs and symbols**

- Proposed Alignment
- Existing Concrete Walls (6 ft)
- Receiver
- \* Point source (Construction Equipment)
- |   |    |    |
|---|----|----|
| 3 | 33 | 33 |
| 2 | 20 | 20 |
| 1 | 15 | 15 |

 Noise Level Tables (dBA, Leq)

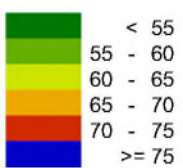
**Figure 6**  
**Construction Noise Levels – West End of Proposed Alignment**



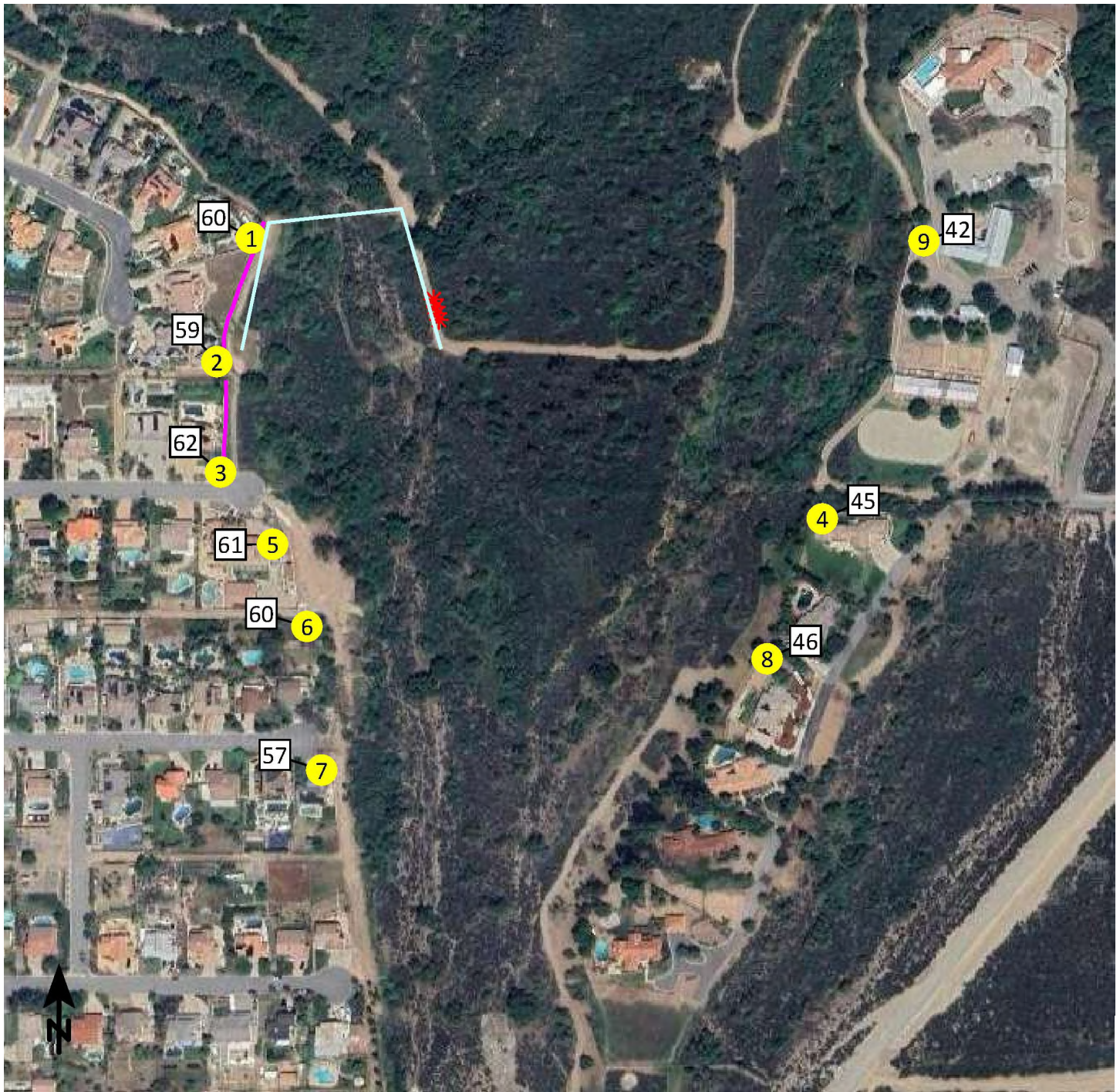
**Signs and symbols**

- Proposed Alignment
- Existing Concrete Walls (6 ft)
- \* Point source (Construction Equipment)

**Levels in dB(A)**



**Figure 7**  
**Construction Noise Level Contours – West End of Proposed Alignment**

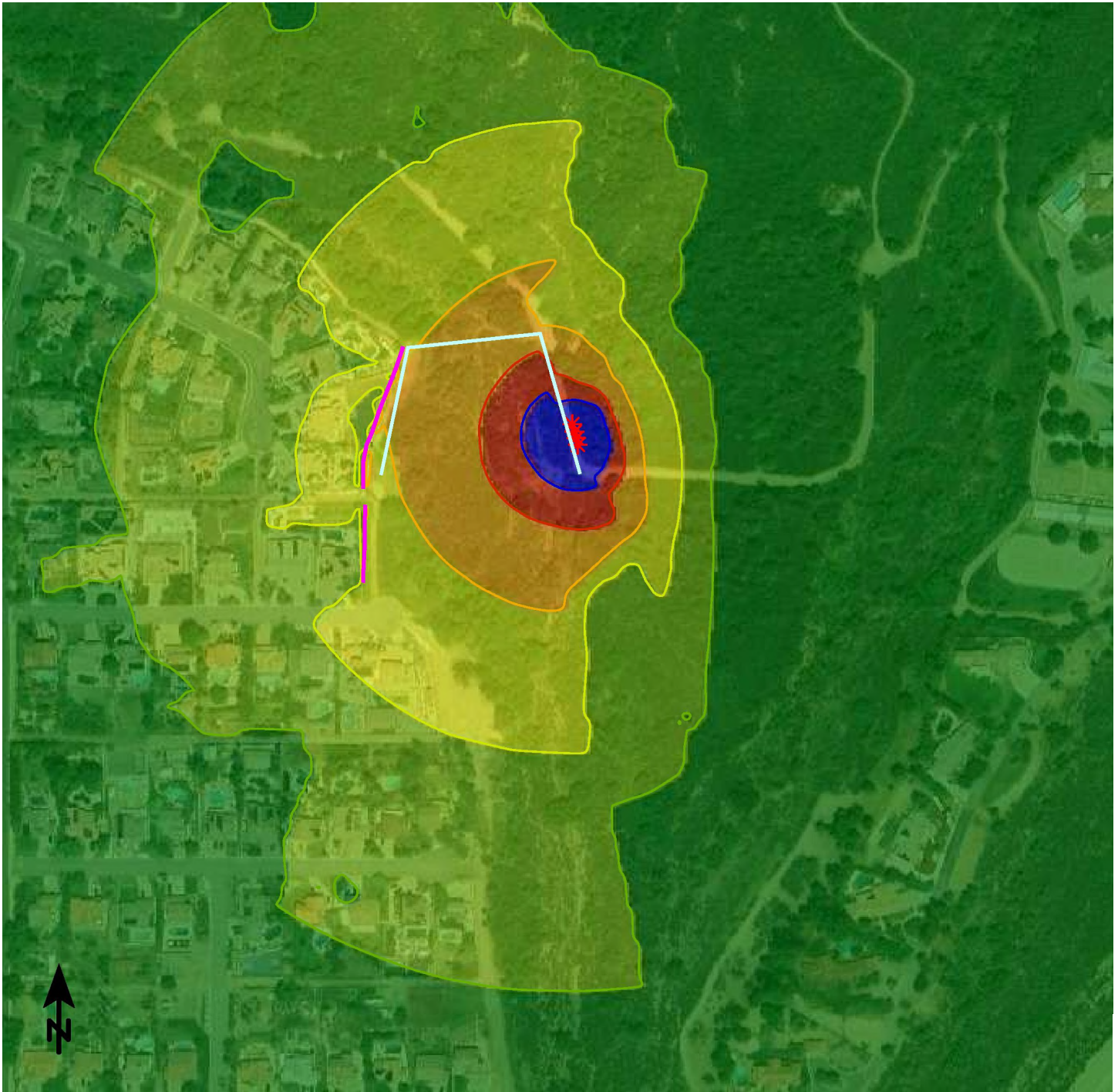


**Signs and symbols**

- Proposed Alignment
- Existing Concrete Walls (6 ft)
- Receiver
- \* Point source (Construction Equipment)
- |  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

 Noise Level Tables (dBA, Leq)

**Figure 8**  
**Construction Noise Levels – East End of Proposed Alignment**



**Signs and symbols**

- Proposed Alignment
- Existing Concrete Walls (6 ft)
- \* Point source (Construction Equipment)

**Levels in dB(A)**

	< 55
	55 - 60
	60 - 65
	65 - 70
	70 - 75
	>= 75

**Figure 9**  
**Construction Noise Level Contours – East End of Proposed Alignment**

## 7. REFERENCES

---

**California, State of, Department of Transportation (Caltrans)**

2020 Transportation and Construction Vibration Guidance Manual. April.

**Federal Transit Administration (FTA)**

2018 Transit Noise and Vibration Impact Assessment. Typical Construction Equipment Vibration Emissions.

**Federal Highway Administration (FHWA)**

2006 Roadway Construction Noise Model User's Guide January.

**Rancho Cucamonga, City of**

2021 General Plan (PlanRC). December.  
Municipal Code (Updated through April 2, 2025)

## APPENDICES

---

Appendix A List of Acronyms

Appendix B Glossary

Appendix C Noise Measurement Field Worksheets

Appendix D Soundplan Construction Noise Modeling

**APPENDIX A**  
**LIST OF ACRONYMS**

Term	Definition
ADT	Average Daily Traffic
ANSI	American National Standard Institute
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
D/E/N	Day / Evening / Night
dB	Decibel
dBA or dB(A)	Decibel "A-Weighted"
dBA/DD	Decibel per Double Distance
dBA Leq	Average Noise Level over a Period of Time
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
L <sub>02</sub> ,L <sub>08</sub> ,L <sub>50</sub> ,L <sub>90</sub>	A-weighted Noise Levels at 2 percent, 8 percent, 50 percent, and 90 percent, respectively, of the time period
DNL	Day-Night Average Noise Level
Leq(x)	Equivalent Noise Level for "x" period of time
Leq	Equivalent Noise Level
L <sub>max</sub>	Maximum Level of Noise (measured using a sound level meter)
L <sub>min</sub>	Minimum Level of Noise (measured using a sound level meter)
LOS C	Level of Service C
OPR	California Governor's Office of Planning and Research
PPV	Peak Particle Velocities
RCNM	Road Construction Noise Model
REMEL	Reference Energy Mean Emission Level
RMS	Root Mean Square

## **APPENDIX B**

### **GLOSSARY**

Term	Definition
Ambient Noise Level	The all-encompassing noise environment associated with a given environment, at a specified time, usually a composite of sound from many sources, at many directions, near and far, in which usually no particular sound is dominant.
A-Weighted Sound Level, dBA	The sound level obtained by use of A-weighting. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear.
CNEL	Community Noise Equivalent Level. CNEL is a weighted 24-hour noise level that is obtained by adding five decibels to sound levels in the evening (7:00 PM to 10:00 PM), and by adding ten decibels to sound levels at night (10:00 PM to 7:00 AM). This weighting accounts for the increased human sensitivity to noise during the evening and nighttime hours.
Decibel, dB	A logarithmic unit of noise level measurement that relates the energy of a noise source to that of a constant reference level; the number of decibels is 10 times the logarithm (to the base 10) of this ratio.
DNL, Ldn	Day Night Level. The DNL, or Ldn is a weighted 24-hour noise level that is obtained by adding ten decibels to sound levels at night (10:00 PM to 7:00 AM). This weighting accounts for the increased human sensitivity to noise during the nighttime hours.
Equivalent Continuous Noise Level, $L_{eq}$	A level of steady state sound that in a stated time period, and a stated location, has the same A-weighted sound energy as the time-varying sound.
Fast/Slow Meter Response	The fast and slow meter responses are different settings on a sound level meter. The fast response setting takes a measurement every 100 milliseconds, while a slow setting takes one every second.
Frequency, Hertz	In a function periodic in time, the number of times that the quantity repeats itself in one second (i.e., the number of cycles per second).
$L_{02}$ , $L_{08}$ , $L_{50}$ , $L_{90}$	The A-weighted noise levels that are equaled or exceeded by a fluctuating sound level, 2 percent, 8 percent, 50 percent, and 90 percent of a stated time period, respectively.
$L_{max}$ , $L_{min}$	$L_{max}$ is the RMS (root mean squared) maximum level of a noise source or environment measured on a sound level meter, during a designated time interval, using fast meter response. $L_{min}$ is the minimum level.
Offensive/ Offending/ Intrusive Noise	The noise that intrudes over and above the existing ambient noise at a given location. The relative intrusiveness of sound depends on its amplitude, duration, frequency, and time of occurrence, and tonal information content as well as the prevailing ambient noise level.
Root Mean Square (RMS)	A measure of the magnitude of a varying noise source quantity. The name derives from the calculation of the square root of the mean of the squares of the values. It can be calculated from either a series of lone values or a continuous varying function.

## **APPENDIX C**

### **NOISE MEASUREMENT FIELD WORKSHEETS**

**Noise Measurement  
Field Data**

**Project Name:** CVWD Reservoir 6 & Almond Street Waterline Replacement, Rancho Cucamonga **Date:** May 20, 2025

**Project #:** 19823

**Noise Measurement #:** STNM1 Run Time 15 minutes **Technician:** Ian Edward Gallagher

**Nearest Address or Cross Street:** 5029 Lomas Ct, Rancho Cucamonga, CA 91737

**Site Description (Type of Existing Land Use and any other notable features):** Project Site: Dirt access road just E of backyard of residence 5029 Lomas Ct.

Adjacent: Open land, natural wash/ ravine to the E, open land to the N. Residential SF homes to the SW.

**Weather:** No cloud, full sun. Sunset: 7:49PM **Settings:** SLOW FAST

**Temperature:** 87 deg F **Wind:** 4 mph **Humidity:** 24% **Terrain:** Hilly

**Start Time:** 12:18 PM **End Time:** 12:33 PM **Run Time:** \_\_\_\_\_

**Leq:** 43 dB **Primary Noise Source:** Bird song, overhead propeller aircraft.

**Lmax** 58.3 dB \_\_\_\_\_

**L2** 53.6 dB **Secondary Noise Sources:** Leaf rustle from 4 mph breeze, Very distant traffic ambiance,

**L8** 46.0 dB \_\_\_\_\_

**L25** 39.6 dB \_\_\_\_\_

**L50** 36.8 dB \_\_\_\_\_

**NOISE METER:** SoundTrack LXT Class 1 **CALIBRATOR:** Larson Davis CAL 250

**MAKE:** Larson Davis **MAKE:** Larson Davis

**MODEL:** LXT1 **MODEL:** CAL 250

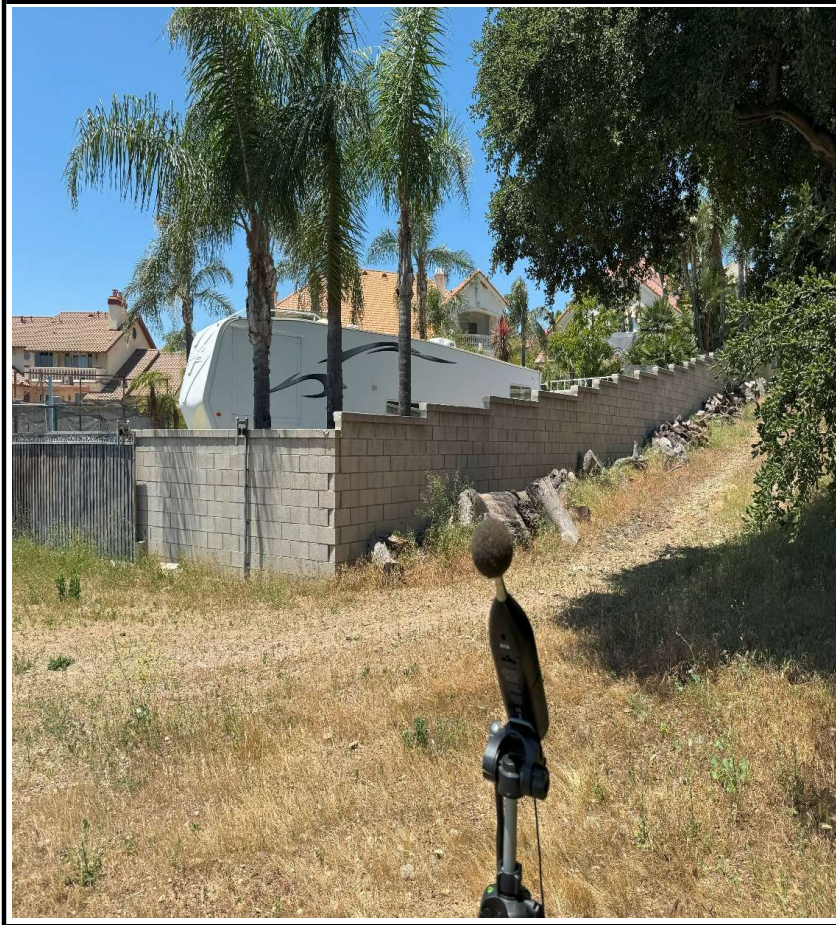
**SERIAL NUMBER:** 3099 **SERIAL NUMBER:** 2723

**FACTORY CALIBRATION DATE:** 7/31/2024 **FACTORY CALIBRATION DATE:** 7/10/2024

**FIELD CALIBRATION DATE:** 5/20/2025

Noise Measurement  
Field Data

PHOTOS:



STNM1 looking W from dirt access road towards backyard of residence 5029 Lomas Ct, Rancho Cucamonga.



STNM1 looking E across natural wash ravine towards unnamed dirt road leading to horse training facility, Alta Loma.

# Measurement Report

## Report Summary

Meter's File Name	LxT_Data.578.s	Computer's File Name	LxT_0003099-20250520 121807-LxT_Data.578.ltd
Meter	LxT1 0003099		
Firmware	2.404		
User	Ian Edward Gallagher	Location	STNM1 34° 9'48.36"N 117°36'17.33"W
Job Description	15 minute noise measuremnt		
Note	Ganddini Project# 19823 CVWD Reservoir 6 & Almond St Waterline, Rancho Cucamonga.		
Start Time	2025-05-20 12:18:07	Duration	0:15:00.0
End Time	2025-05-20 12:33:07	Run Time	0:15:00.0
		Pause Time	0:00:00.0

## Results

### Overall Metrics

LA <sub>eq</sub>	43.0 dB		
LAE	72.5 dB	SEA	--- dB
EA	2.0 µPa²h	LAFTM5	48.8 dB
EA8	63.9 µPa²h		
EA40	319.4 µPa²h		
LA <sub>peak</sub>	79.0 dB	2025-05-20 12:18:22	
LAS <sub>max</sub>	58.3 dB	2025-05-20 12:33:05	
LAS <sub>min</sub>	31.4 dB	2025-05-20 12:29:38	
LA <sub>eq</sub>	43.0 dB		
LC <sub>eq</sub>	55.7 dB	LC <sub>eq</sub> - LA <sub>eq</sub>	12.7 dB
LAI <sub>eq</sub>	46.9 dB	LAI <sub>eq</sub> - LA <sub>eq</sub>	3.9 dB

### Exceedances

	Count	Duration
LAS > 65.0 dB	0	0:00:00.0
LAS > 85.0 dB	0	0:00:00.0
LA <sub>peak</sub> > 135.0 dB	0	0:00:00.0
LA <sub>peak</sub> > 137.0 dB	0	0:00:00.0
LA <sub>peak</sub> > 140.0 dB	0	0:00:00.0

Community Noise	LDN	LDay	LNight
	--- dB	--- dB	0.0 dB
	LDEN	LDay	LEve
	--- dB	--- dB	---
			LNight
			--- dB

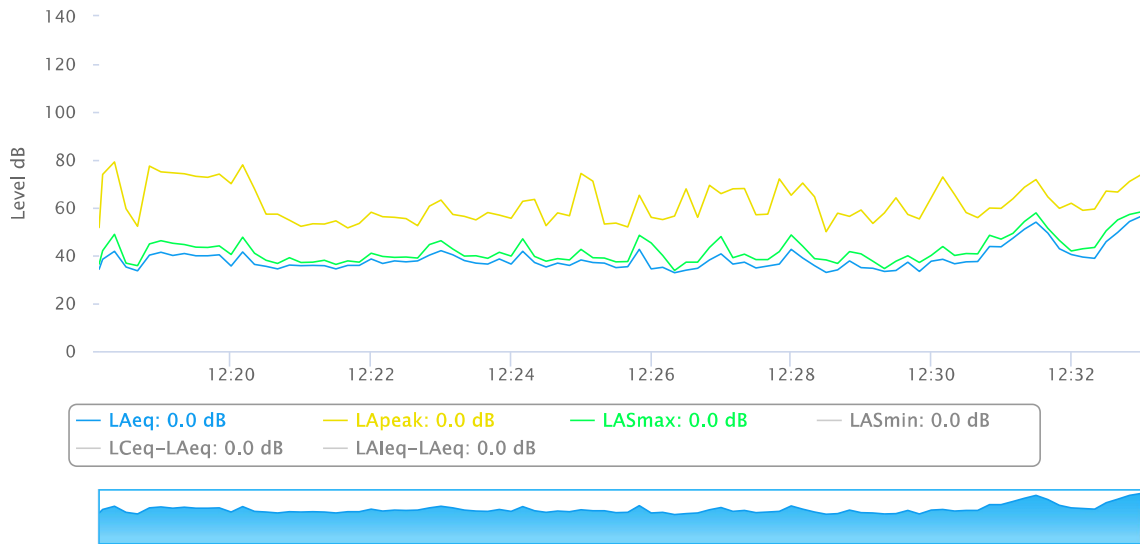
Any Data	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L <sub>eq</sub>	43.0 dB		55.7 dB		---	
LS <sub>(max)</sub>	58.3 dB	2025-05-20 12:33:05	---		---	
LS <sub>(min)</sub>	31.4 dB	2025-05-20 12:29:38	---		---	
L <sub>Peak(max)</sub>	79.0 dB	2025-05-20 12:18:22	---		---	

Overloads	Count	Duration	OBA Count	OBA Duration
	0	0:00:00.0	0	0:00:00.0

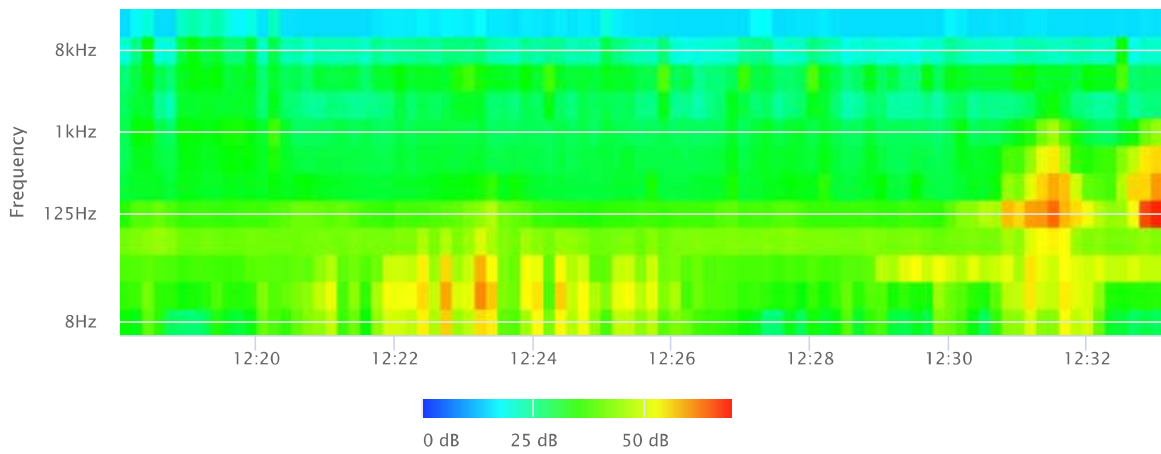
### Statistics

LAS 2.0	53.6 dB
LAS 8.0	46.0 dB
LAS 25.0	39.6 dB
LAS 50.0	36.8 dB
LAS 66.6	35.4 dB
LAS 90.0	33.5 dB

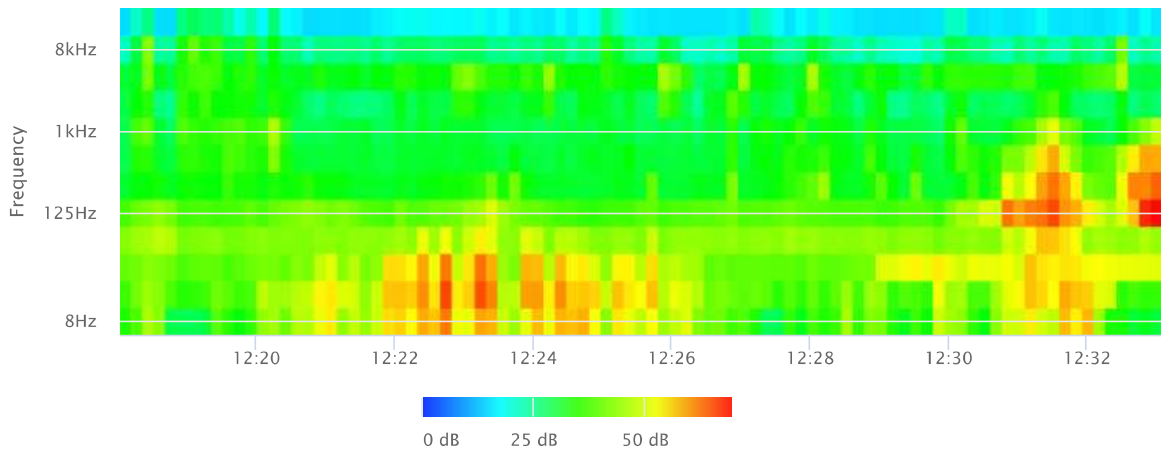
## Time History



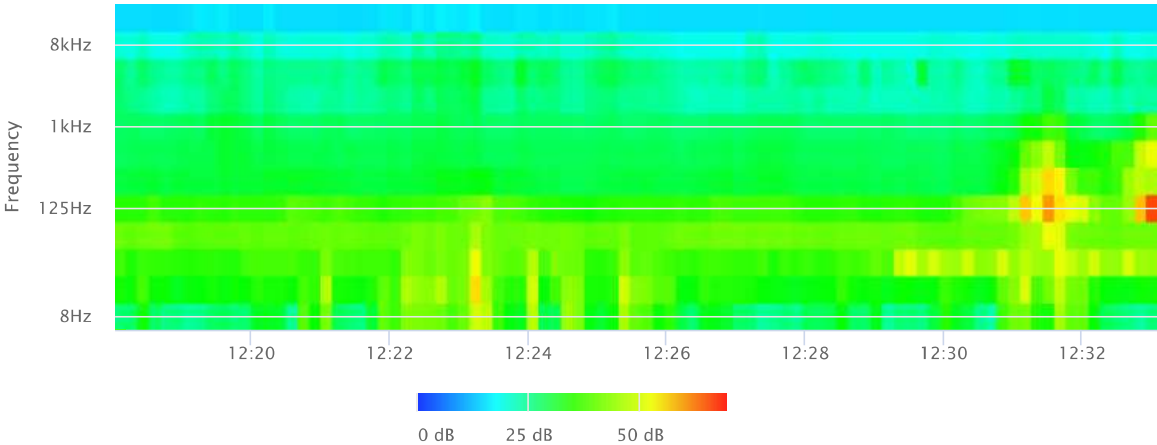
## OBA 1/1 Leq



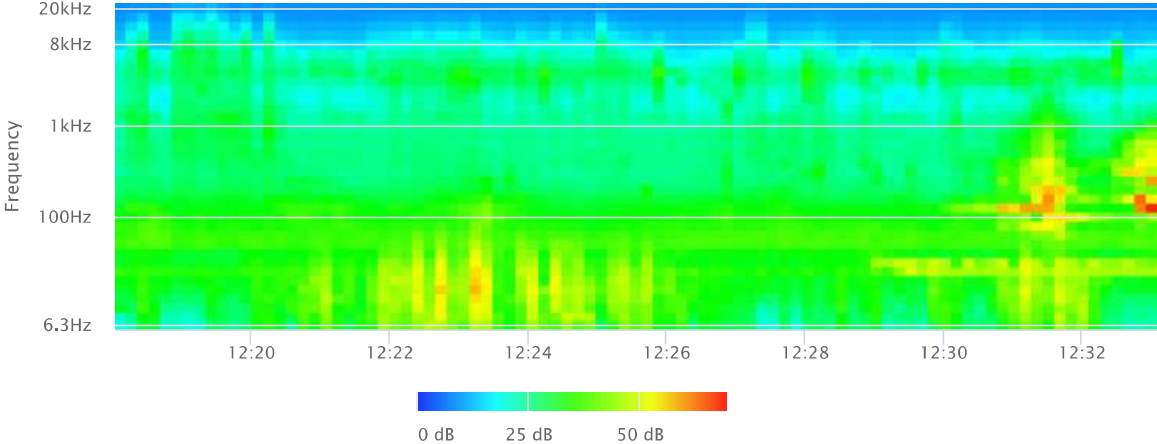
## OBA 1/1 Lmax



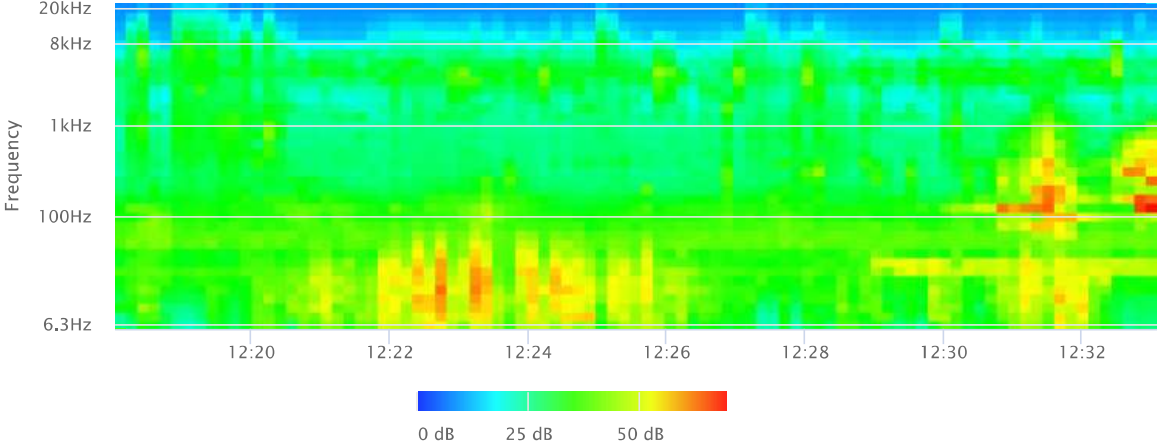
OBA 1/1 Lmin



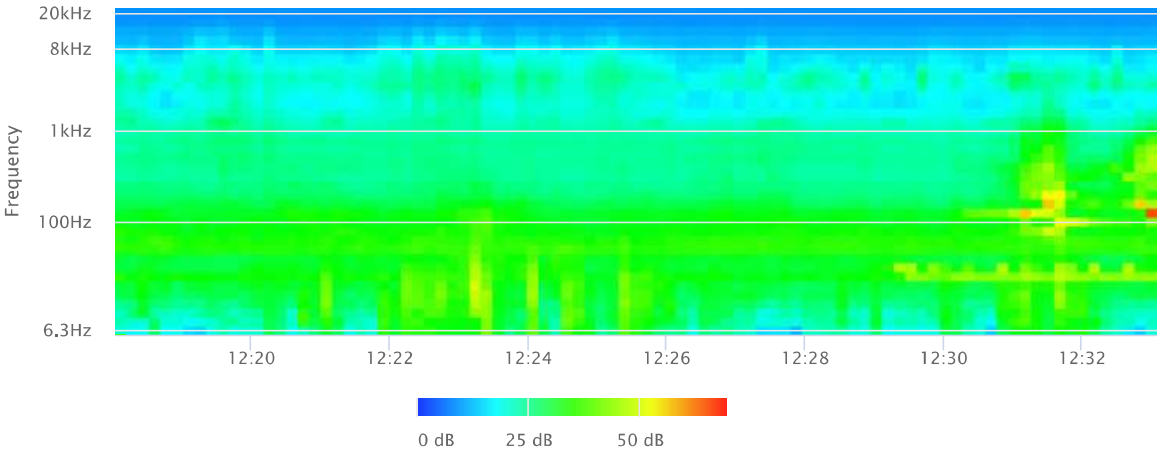
OBA 1/3 Leq



OBA 1/3 Lmax



OBA 1/3 Lmin



**Noise Measurement  
Field Data**

**Project Name:** CVWD Reservoir 6 & Almond Street Waterline Replacement, Rancho Cucamonga **Date:** May 20, 2025

**Project #:** 19823

**Noise Measurement #:** STNM2 Run Time 15 minutes **Technician:** Ian Edward Gallagher

**Nearest Address or Cross Street:** 5051 Lomas Ct, Rancho Cucamonga, CA 91737

**Site Description (Type of Existing Land Use and any other notable features):** Project Site: SE corner of residence 5051 Lomas Ct, on dirt access road Laramie Dr.

Adjacent: Open land, natural wash/ ravine to the E. Residential SF houses & residential roads to the W.

**Weather:** No cloud, full sun. Sunset: 7:49PM **Settings:** SLOW FAST

**Temperature:** 87 deg F **Wind:** 4 mph **Humidity:** 24% **Terrain:** Hilly

**Start Time:** 12:48 PM **End Time:** 1:04 PM **Run Time:** \_\_\_\_\_

**Leq:** 45.4 dB **Primary Noise Source:** Bird song. Overhead propeller aircraft.

**Lmax** 64.6 dB \_\_\_\_\_

**L2** 54.1 dB **Secondary Noise Sources:** Residential ambiance. Very distant trsffic ambiance. Leaf rustle from 4mph

**L8** 46.7 dB breeze.

**L25** 41.2 dB \_\_\_\_\_

**L50** 37.4 dB \_\_\_\_\_

**NOISE METER:** SoundTrack LXT Class 1 **CALIBRATOR:** Larson Davis CAL 250

**MAKE:** Larson Davis **MAKE:** Larson Davis

**MODEL:** LXT1 **MODEL:** CAL 250

**SERIAL NUMBER:** 3099 **SERIAL NUMBER:** 2723

**FACTORY CALIBRATION DATE:** 7/31/2024 **FACTORY CALIBRATION DATE:** 7/10/2024

**FIELD CALIBRATION DATE:** 5/20/2025

Noise Measurement  
Field Data

PHOTOS:



STNM2 looking W across dirt access roads intersection, backyard to residence 5150 Loma Ct, Rancho Cucamonga on the right.



STNM2 looking E across natural wash ravine towards unnamed dirt road leading to horse training facility, Alta Loma.

# Measurement Report

## Report Summary

Meter's File Name	LxT_Data.579.s	Computer's File Name	LxT_0003099-20250520 124954-LxT_Data.579.ltd
Meter	LxT1 0003099		
Firmware	2.404		
User	Ian Edward Gallagher	Location	STNM2 34° 9'45.38"N 117°36'18.10"W
Job Description	15 minute noise measurement		
Note	Ganddini Project# 19823 CVWD Reservoir 6 & Almond St Waterline, Rancho Cucamonga.		
Start Time	2025-05-20 12:49:54	Duration	0:15:00.0
End Time	2025-05-20 13:04:54	Run Time	0:15:00.0
		Pause Time	0:00:00.0

## Results

### Overall Metrics

LA <sub>eq</sub>	45.4 dB		
LAE	74.9 dB	SEA	--- dB
EA	3.4 µPa²h	LAFTM5	51.3 dB
EA8	110.0 µPa²h		
EA40	550.0 µPa²h		
LA <sub>peak</sub>	80.0 dB	2025-05-20 12:51:49	
LAS <sub>max</sub>	64.6 dB	2025-05-20 12:51:49	
LAS <sub>min</sub>	32.7 dB	2025-05-20 13:03:59	
LA <sub>eq</sub>	45.4 dB		
LC <sub>eq</sub>	57.1 dB	LC <sub>eq</sub> - LA <sub>eq</sub>	11.8 dB
LAI <sub>eq</sub>	48.9 dB	LAI <sub>eq</sub> - LA <sub>eq</sub>	3.6 dB

### Exceedances

	Count	Duration
LAS > 65.0 dB	0	0:00:00.0
LAS > 85.0 dB	0	0:00:00.0
LA <sub>peak</sub> > 135.0 dB	0	0:00:00.0
LA <sub>peak</sub> > 137.0 dB	0	0:00:00.0
LA <sub>peak</sub> > 140.0 dB	0	0:00:00.0

Community Noise	LDN	LDay	LNight
	--- dB	--- dB	0.0 dB
	LDEN	LDay	LEve
	--- dB	--- dB	---
			LNight
			--- dB

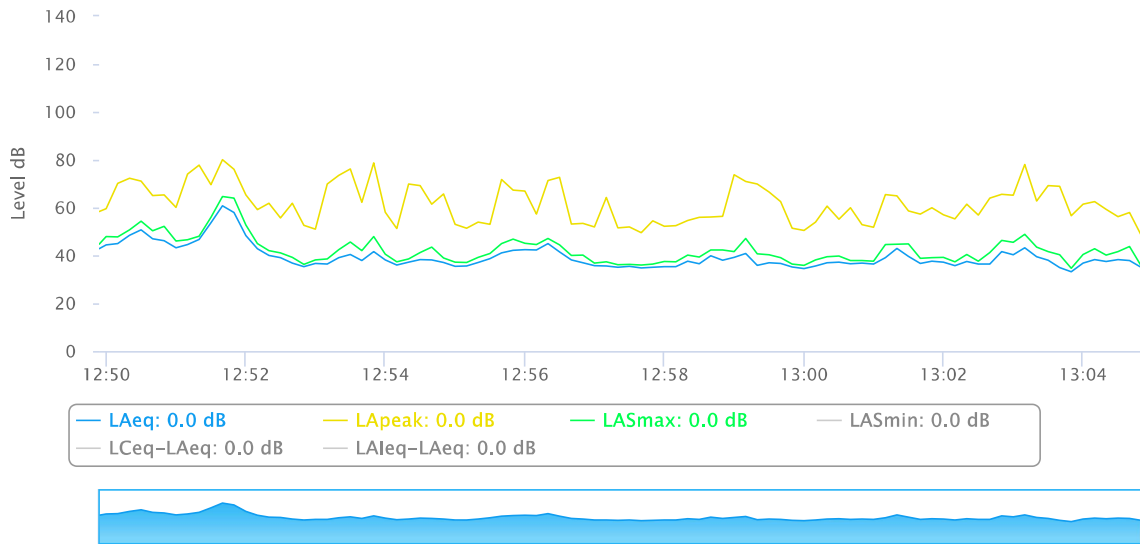
Any Data	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L <sub>eq</sub>	45.4 dB		57.1 dB		---	
LS <sub>(max)</sub>	64.6 dB	2025-05-20 12:51:49	---		---	
LS <sub>(min)</sub>	32.7 dB	2025-05-20 13:03:59	---		---	
L <sub>Peak(max)</sub>	80.0 dB	2025-05-20 12:51:49	---		---	

Overloads	Count	Duration	OBA Count	OBA Duration
	0	0:00:00.0	0	0:00:00.0

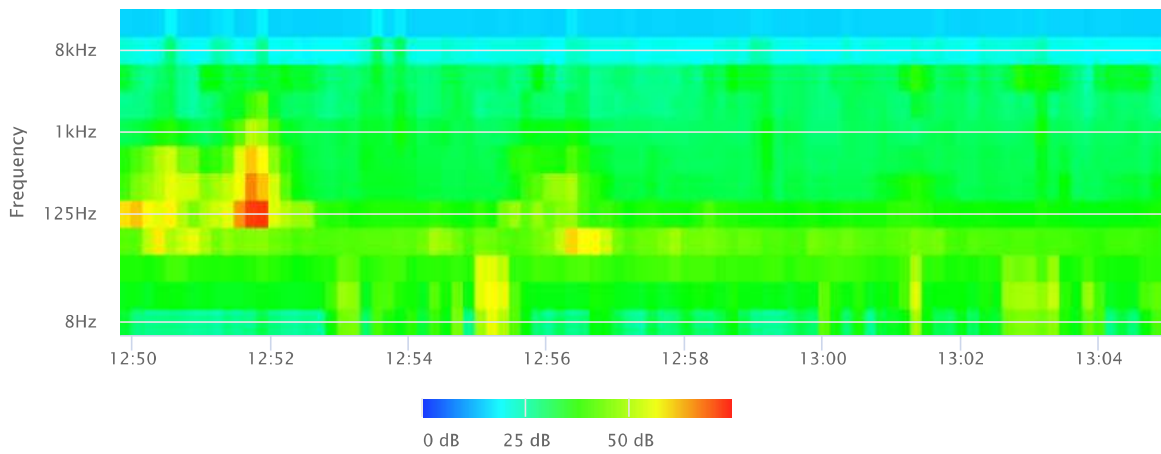
### Statistics

LAS 2.0	54.1 dB
LAS 8.0	46.7 dB
LAS 25.0	41.2 dB
LAS 50.0	37.4 dB
LAS 66.6	36.3 dB
LAS 90.0	34.9 dB

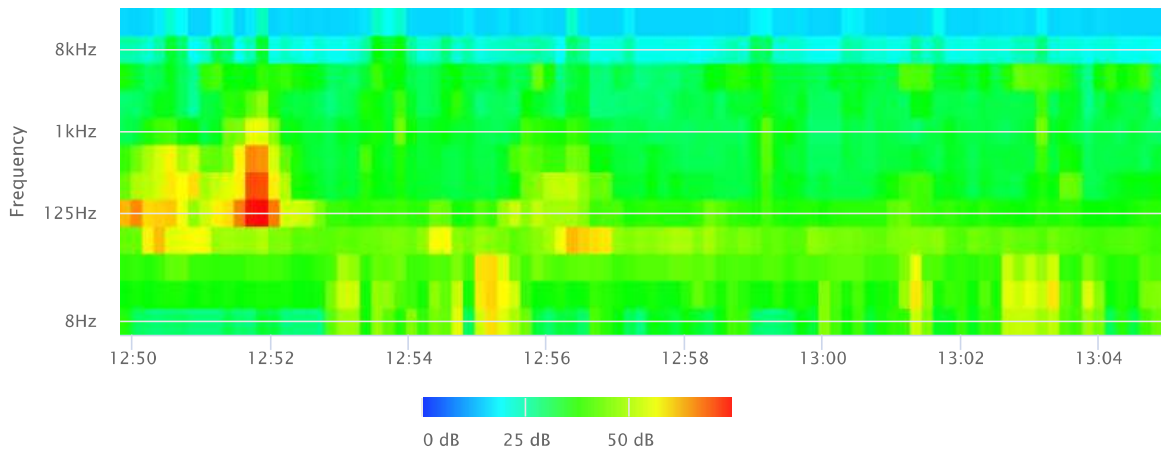
## Time History



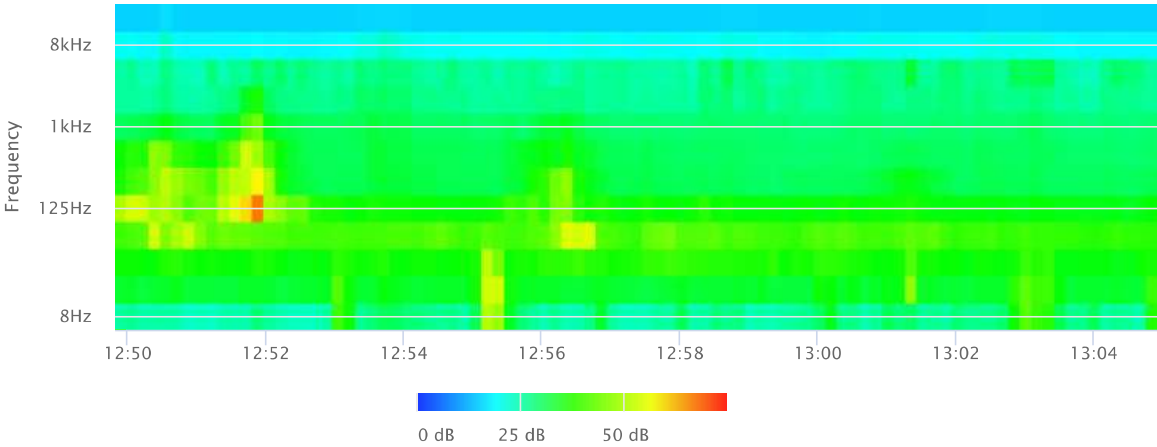
## OBA 1/1 Leq



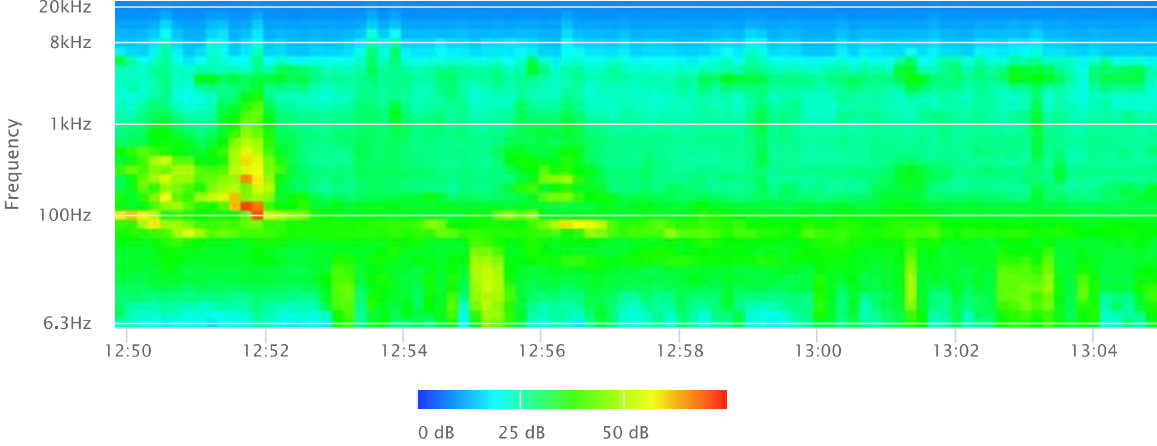
## OBA 1/1 Lmax



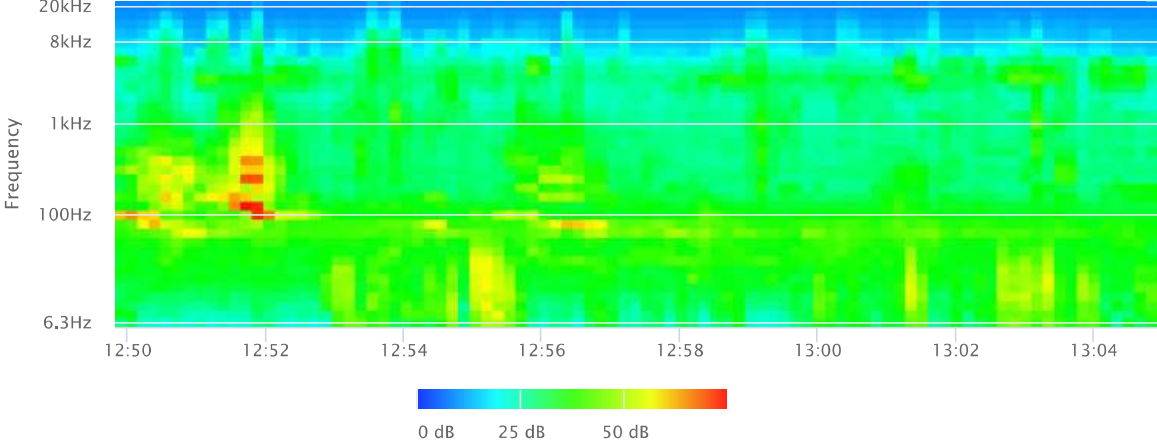
OBA 1/1 Lmin



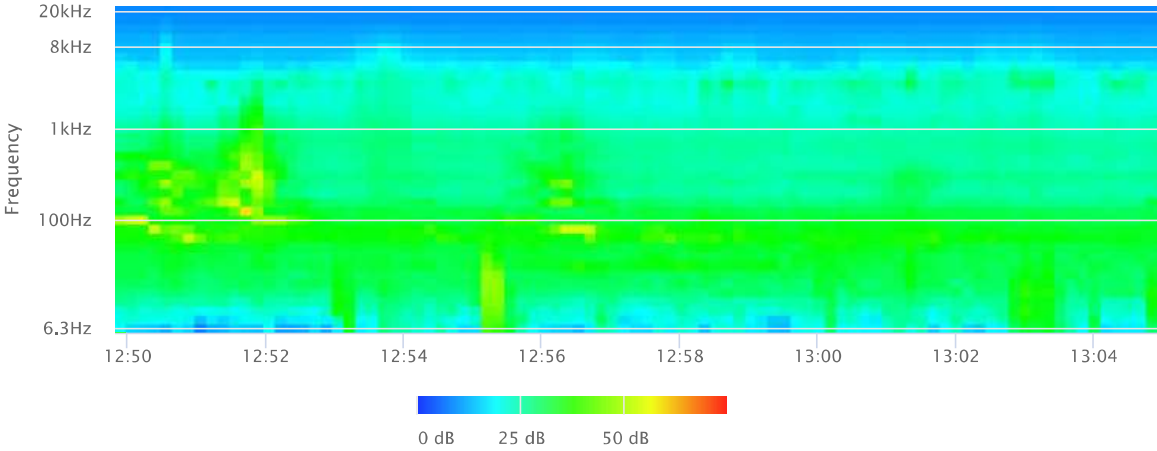
OBA 1/3 Leq



OBA 1/3 Lmax



OBA 1/3 Lmin



**Noise Measurement  
Field Data**

**Project Name:** CVWD Reservoir 6 & Almond Street Waterline Replacement, Rancho Cucamonga **Date:** May 20, 2025

**Project #:** 19823

**Noise Measurement #:** STNM3 Run Time 15 minutes **Technician:** Ian Edward Gallagher

**Nearest Address or Cross Street:** 9204 Almond Street, Rancho Cucamonga, CA 91737

**Site Description (Type of Existing Land Use and any other notable features):** Project Site: N of Almond Street, just E of frontyard to residence 9204 Almond St.

Adjacent: East end of Almond St, Almond Stbrunning W. Open land, natual wash/ ravine to the E. Residential with SF homes to the W.

**Weather:** No cloud, full sun. Sunset: 7:49PM **Settings:** SLOW FAST

**Temperature:** 87 deg F **Wind:** 4 mph **Humidity:** 24% **Terrain:** Hilly

**Start Time:** 1:18 PM **End Time:** 1:33 PM **Run Time:** \_\_\_\_\_

**Leq:** 46.9 dB **Primary Noise Source:** Bird song, overhead propeller aircraft 1:27PM, one vehicle turning around on

**Lmax** 66.7 dB Almond Street at 1:28PM.

**L2** 56.2 dB **Secondary Noise Sources:** Conatantb humming noise from some silver metal box of electrics with cooling fan.

**L8** 48.9 dB Leaf rustle from 4mph breeze.

**L25** 42.6 dB

**L50** 39.2 dB

**NOISE METER:** SoundTrack LXT Class 1 **CALIBRATOR:** Larson Davis CAL 250

**MAKE:** Larson Davis **MAKE:** Larson Davis

**MODEL:** LXT1 **MODEL:** CAL 250

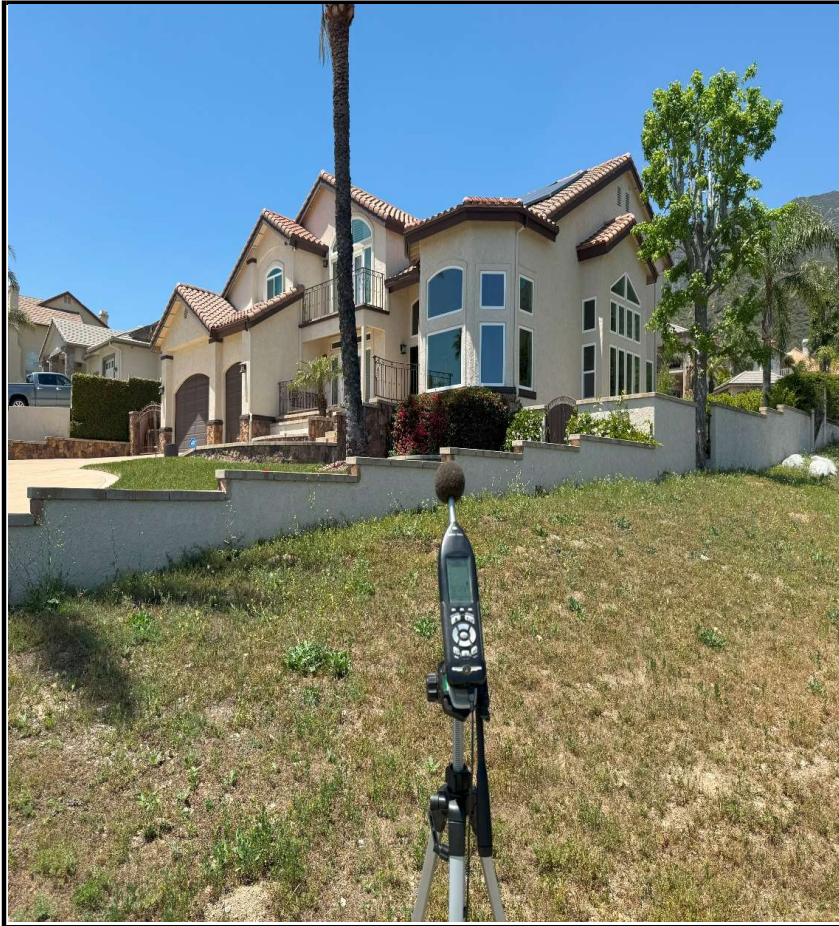
**SERIAL NUMBER:** 3099 **SERIAL NUMBER:** 2723

**FACTORY CALIBRATION DATE:** 7/31/2024 **FACTORY CALIBRATION DATE:** 7/10/2024

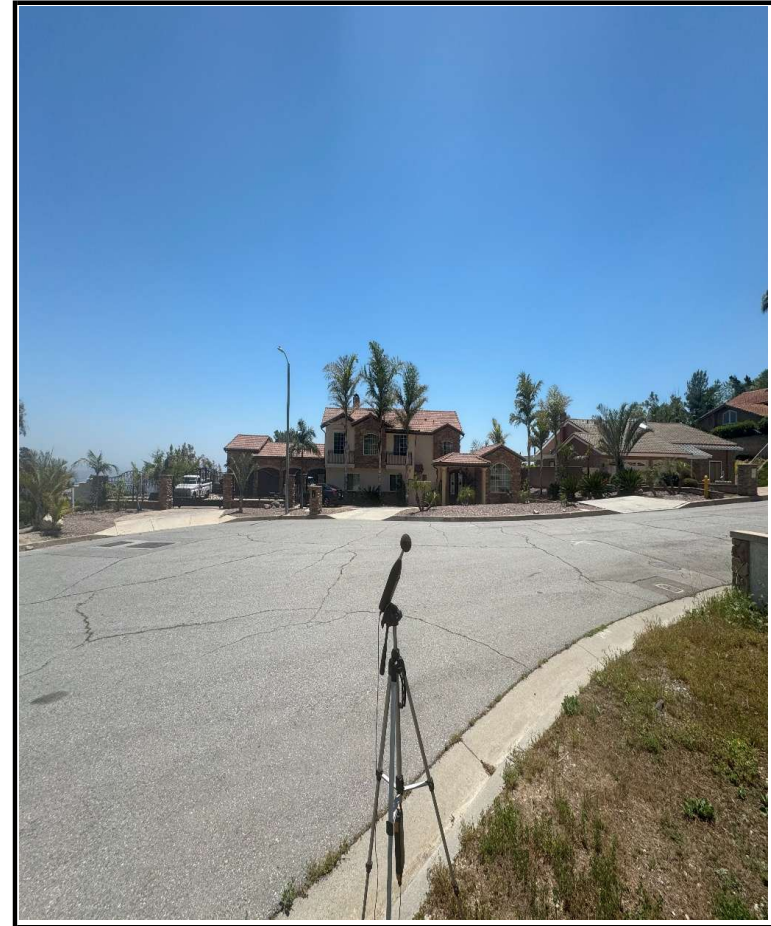
**FIELD CALIBRATION DATE:** 5/20/2025

Noise Measurement  
Field Data

PHOTOS:



STNM3 looking NW towards frontyard of residence 9204 Almond Street, Rancho Cucamonga.



STNM3 looking S across Almond Street towards frontyard of residence 9211 Almond Street, Alta Loma.

# Measurement Report

## Report Summary

Meter's File Name	LxT_Data,580.s	Computer's File Name	LxT_0003099-20250520 131826-LxT_Data,580.ldt
Meter	LxT1 0003099		
Firmware	2.404		
User	Ian Edward Gallagher	Location	STNM3 34° 9'43.33"N 117°36'18.29"W
Job Description	15 minute noise measurement		
Note	Ganddini Project# 19823 CVWD Reservoir 6 & Almond St Waterline, Rancho Cucamonga.		
Start Time	2025-05-20 13:18:26	Duration	0:15:00.0
End Time	2025-05-20 13:33:26	Run Time	0:15:00.0
		Pause Time	0:00:00.0

## Results

### Overall Metrics

LA <sub>eq</sub>	46.9 dB		
LAE	76.5 dB	SEA	--- dB
EA	4.9 µPa²h	LAFTM5	55.1 dB
EA8	158.0 µPa²h		
EA40	789.9 µPa²h		
LA <sub>peak</sub>	97.2 dB	2025-05-20 13:29:19	
LAS <sub>max</sub>	66.7 dB	2025-05-20 13:28:16	
LAS <sub>min</sub>	34.5 dB	2025-05-20 13:32:01	
LA <sub>eq</sub>	46.9 dB		
LC <sub>eq</sub>	60.5 dB	LC <sub>eq</sub> - LA <sub>eq</sub>	13.5 dB
LAI <sub>eq</sub>	53.9 dB	LAI <sub>eq</sub> - LA <sub>eq</sub>	7.0 dB

### Exceedances

	Count	Duration
LAS > 65.0 dB	2	0:00:03.7
LAS > 85.0 dB	0	0:00:00.0
LA <sub>peak</sub> > 135.0 dB	0	0:00:00.0
LA <sub>peak</sub> > 137.0 dB	0	0:00:00.0
LA <sub>peak</sub> > 140.0 dB	0	0:00:00.0

Community Noise	LDN	LDay	LNight
	--- dB	--- dB	0.0 dB
	LDEN	LDay	LEve
	--- dB	--- dB	--- dB
			LNight
			--- dB

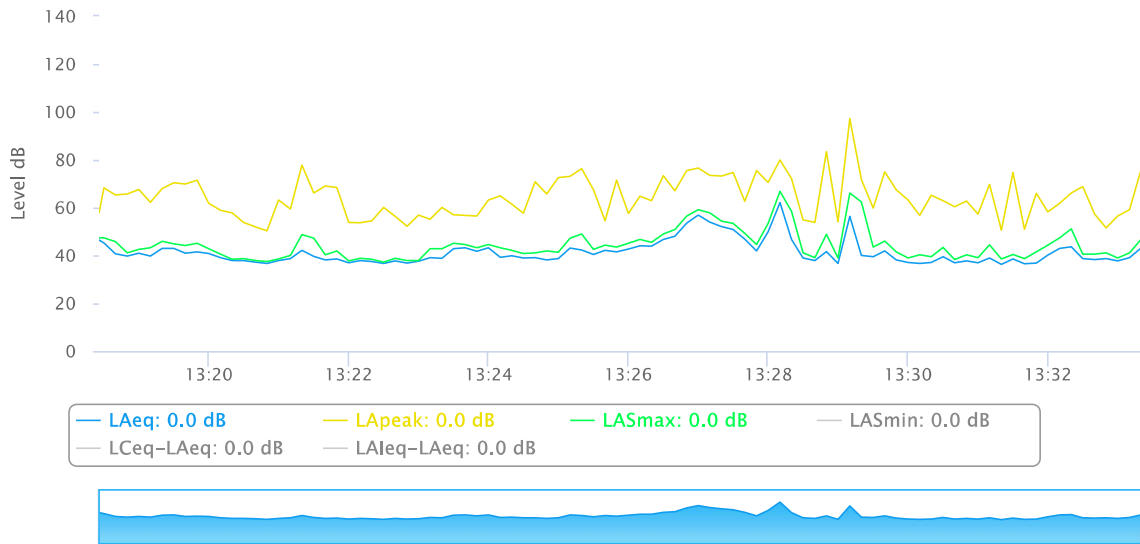
Any Data	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L <sub>eq</sub>	46.9 dB		60.5 dB		--- dB	
LS <sub>(max)</sub>	66.7 dB	2025-05-20 13:28:16	--- dB		--- dB	
LS <sub>(min)</sub>	34.5 dB	2025-05-20 13:32:01	--- dB		--- dB	
L <sub>Peak(max)</sub>	97.2 dB	2025-05-20 13:29:19	--- dB		--- dB	

Overloads	Count	Duration	OBA Count	OBA Duration
	0	0:00:00.0	0	0:00:00.0

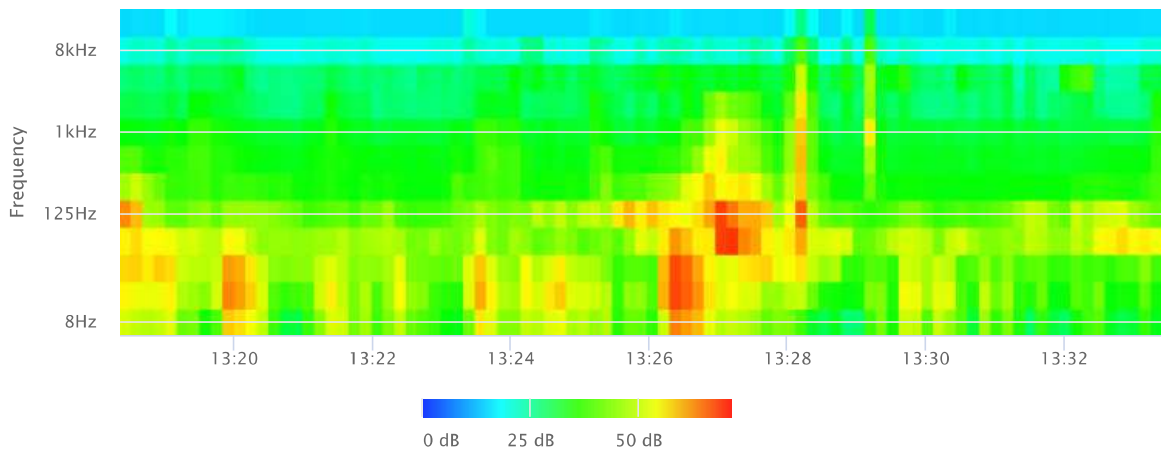
### Statistics

LAS 2.0	56.2 dB
LAS 8.0	48.9 dB
LAS 25.0	42.6 dB
LAS 50.0	39.2 dB
LAS 66.6	37.9 dB
LAS 90.0	36.6 dB

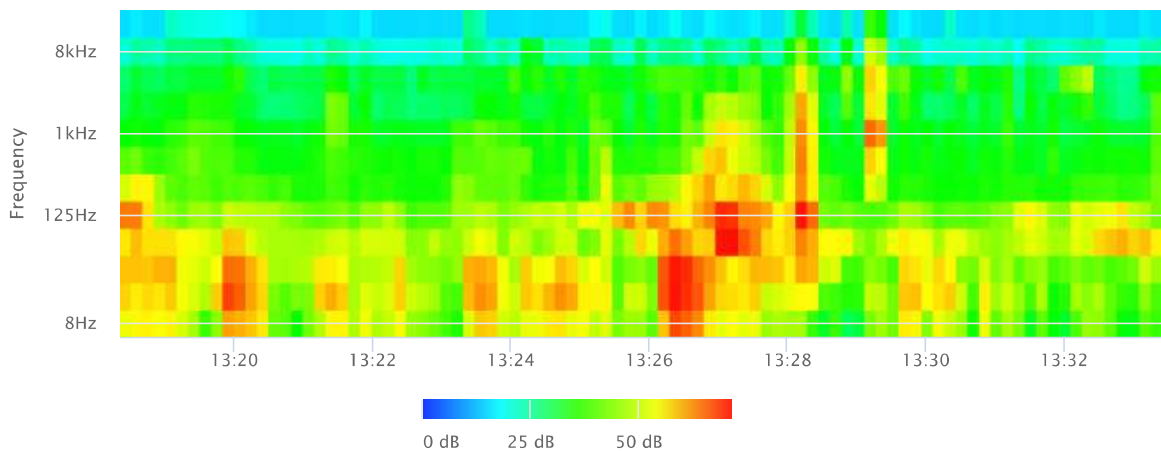
## Time History



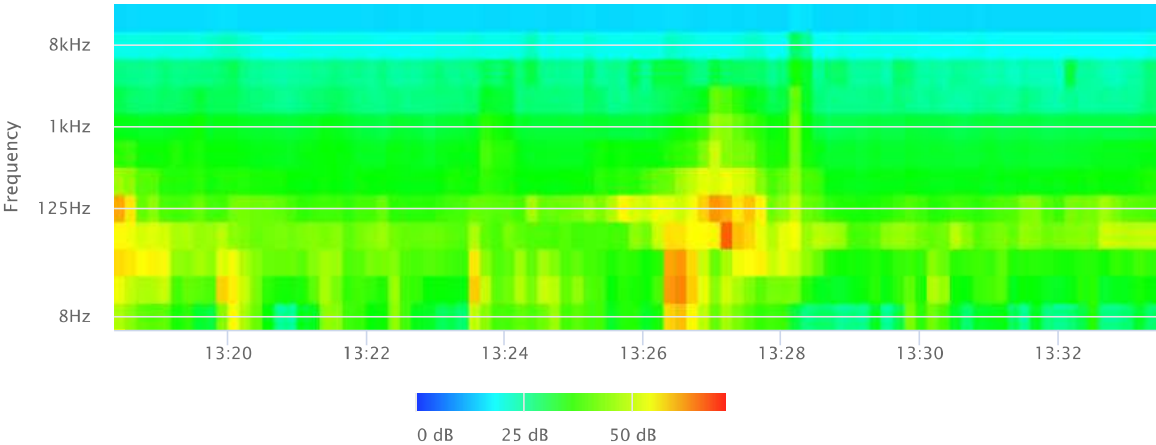
## OBA 1/1 Leq



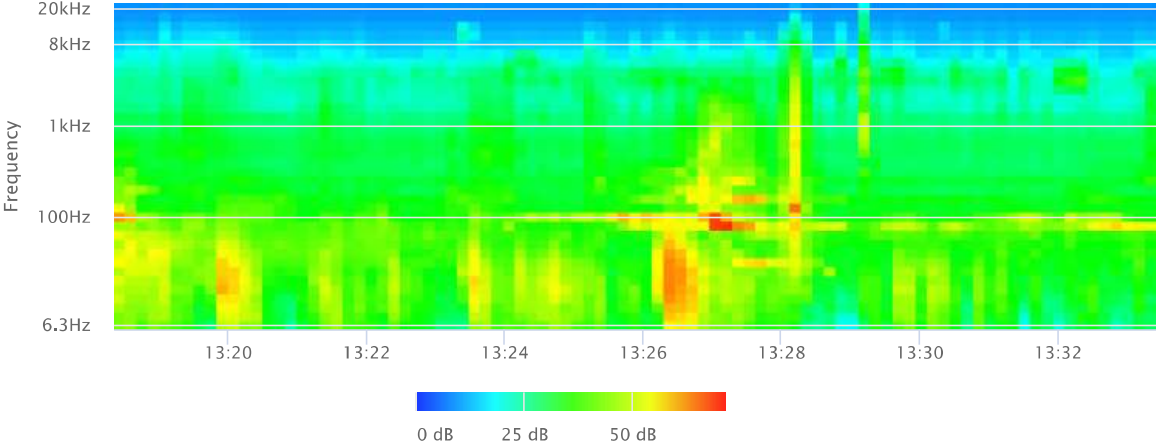
## OBA 1/1 Lmax



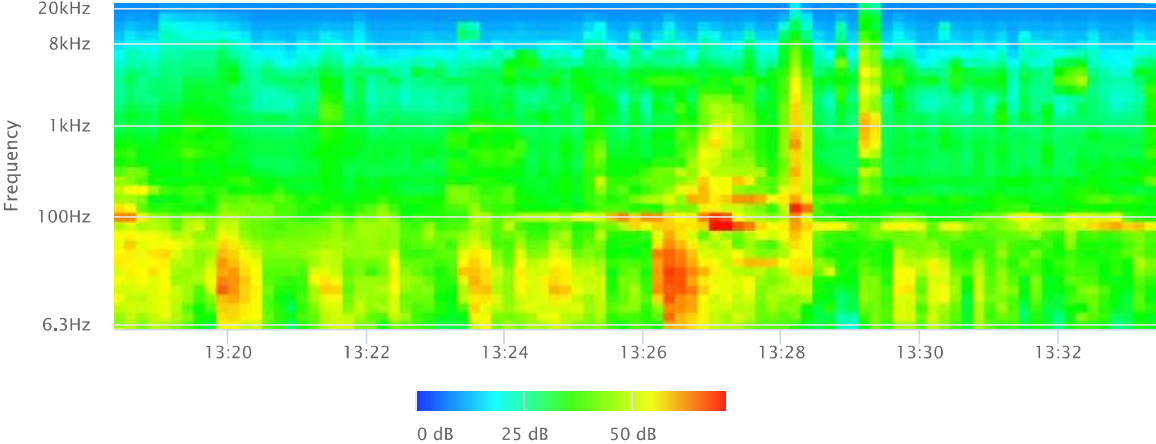
OBA 1/1 Lmin



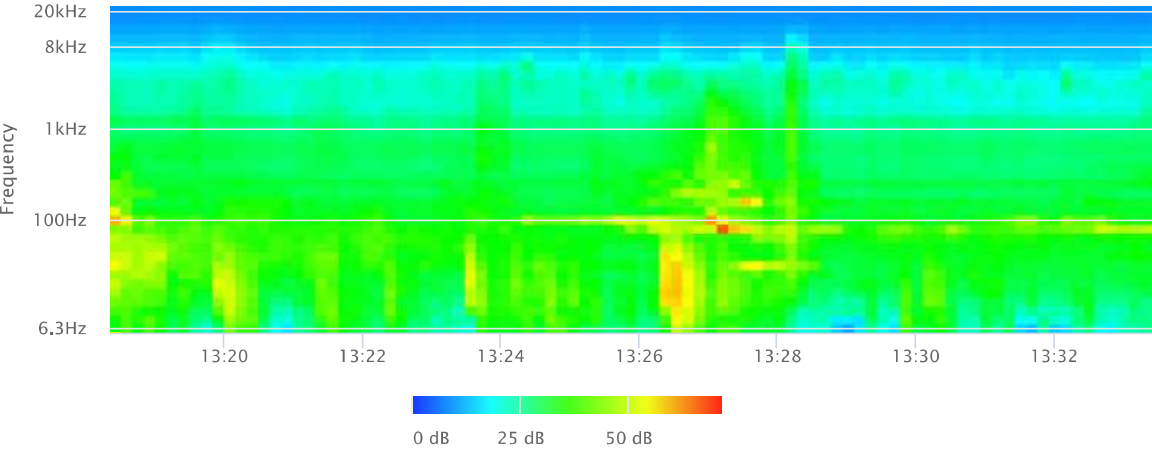
OBA 1/3 Leq



OBA 1/3 Lmax



OBA 1/3 Lmin



**Noise Measurement  
Field Data**

**Project Name:** CVWD Reservoir 6 & Almond Street Waterline Replacement, Rancho Cucamonga **Date:** May 20, 2025

**Project #:** 19823

**Noise Measurement #:** STNM4 Run Time 15 minutes **Technician:** Ian Edward Gallagher

**Nearest Address or Cross Street:** 1 Gooseneck Road, Rancho Cucamonga, CA 91737

**Site Description (Type of Existing Land Use and any other notable features):** Project Site: On opposite side of Gooseneck Rd from residence 1 Gooseneck Rd,

Adjacent: Residences on NW side of Gooseneck Rd, open land/ natural wash, ravine on SE side of Gooseneck Rd. Residential to the S, open land/ mountains to the N.

**Weather:** No cloud, full sun. Sunset: 7:49PM **Settings:** SLOW FAST

**Temperature:** 87 deg F **Wind:** 4 mph **Humidity:** 24% **Terrain:** Hilly

**Start Time:** 2:25 PM **End Time:** 2:40 PM **Run Time:** \_\_\_\_\_

**Leq:** 48 dB **Primary Noise Source:** Bird song. Residential ambiance, distant power tool in use (sounds like band saw) to

**Lmax** 62.7 dB the SW. Distant dirt moving machinery (reverse alarm) to the NE, 9400 Almond St.

**L2** 57.9 dB **Secondary Noise Sources:** Occasional overhead propellor aircraft. Leaf rustle due to 4mph breeze.

**L8** 53.1 dB \_\_\_\_\_

**L25** 44.5 dB \_\_\_\_\_

**L50** 42.1 dB \_\_\_\_\_

**NOISE METER:** SoundTrack LXT Class 1 **CALIBRATOR:** Larson Davis CAL 250

**MAKE:** Larson Davis **MAKE:** Larson Davis

**MODEL:** LXT1 **MODEL:** CAL 250

**SERIAL NUMBER:** 3099 **SERIAL NUMBER:** 2723

**FACTORY CALIBRATION DATE:** 7/31/2024 **FACTORY CALIBRATION DATE:** 7/10/2024

**FIELD CALIBRATION DATE:** 5/20/2025

Noise Measurement  
Field Data

PHOTOS:



STNM4 looking N across Gooseneck Road towards residence 1 Gooseneck Road, Rancho Cucamonga.



STNM4 looking SW down Gooseneck Road.

# Measurement Report

## Report Summary

Meter's File Name	LxT_Data.581.s	Computer's File Name	LxT_0003099-20250520 142531-LxT_Data.581.ltd
Meter	LxT1 0003099		
Firmware	2.404		
User	Ian Edward Gallagher	Location	STNM4 34° 9'41.26"N 117°36'2.41"W
Job Description	15 minute noise measuremnt		
Note	Ganddini Project# 19823 CVWD Reservoir 6 & Almond St Waterline, Rancho Cucamonga.		
Start Time	2025-05-20 14:25:31	Duration	0:15:00.0
End Time	2025-05-20 14:40:31	Run Time	0:15:00.0
		Pause Time	0:00:00.0

## Results

### Overall Metrics

LA <sub>eq</sub>	48.0 dB		
LAE	77.6 dB	SEA	--- dB
EA	6.4 µPa²h	LAFTM5	52.6 dB
EA8	203.3 µPa²h		
EA40	1.0 mPa²h		
LA <sub>peak</sub>	81.0 dB	2025-05-20 14:27:15	
LAS <sub>max</sub>	62.7 dB	2025-05-20 14:26:05	
LAS <sub>min</sub>	37.3 dB	2025-05-20 14:39:58	
LA <sub>eq</sub>	48.0 dB		
LC <sub>eq</sub>	61.2 dB	LC <sub>eq</sub> - LA <sub>eq</sub>	13.2 dB
LAI <sub>eq</sub>	50.6 dB	LAI <sub>eq</sub> - LA <sub>eq</sub>	2.6 dB

### Exceedances

	Count	Duration
LAS > 65.0 dB	0	0:00:00.0
LAS > 85.0 dB	0	0:00:00.0
LA <sub>peak</sub> > 135.0 dB	0	0:00:00.0
LA <sub>peak</sub> > 137.0 dB	0	0:00:00.0
LA <sub>peak</sub> > 140.0 dB	0	0:00:00.0

### Community Noise

LDN	LDay	LNight		
--- dB	--- dB	0.0 dB		
LDEN	LDay	LEve	LNight	
--- dB	--- dB	--- dB	--- dB	

### Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L <sub>eq</sub>	48.0 dB		61.2 dB		--- dB	
LS <sub>(max)</sub>	62.7 dB	2025-05-20 14:26:05	--- dB		--- dB	
LS <sub>(min)</sub>	37.3 dB	2025-05-20 14:39:58	--- dB		--- dB	
L <sub>Peak(max)</sub>	81.0 dB	2025-05-20 14:27:15	--- dB		--- dB	

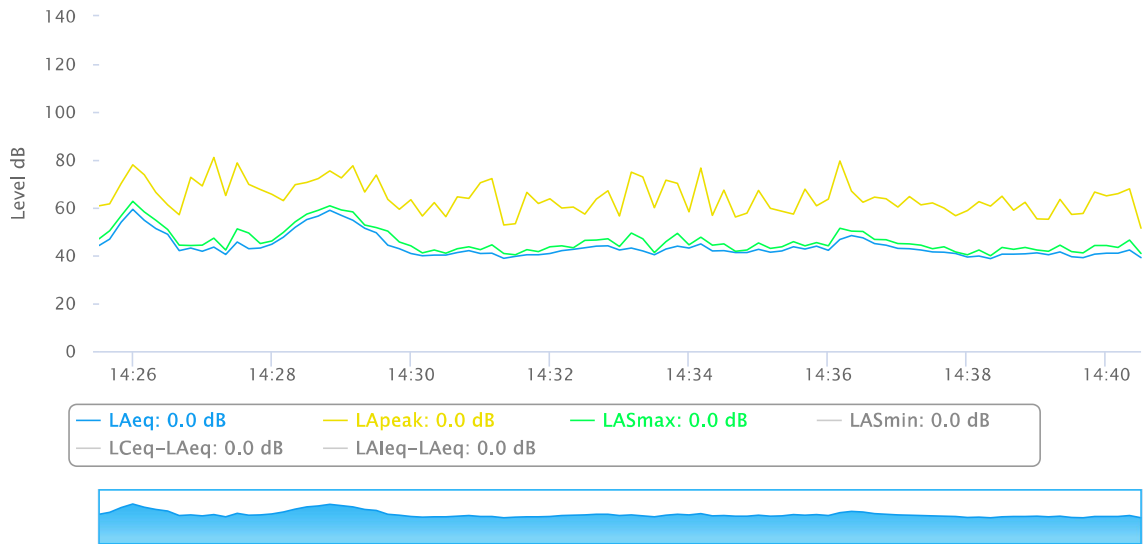
### Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

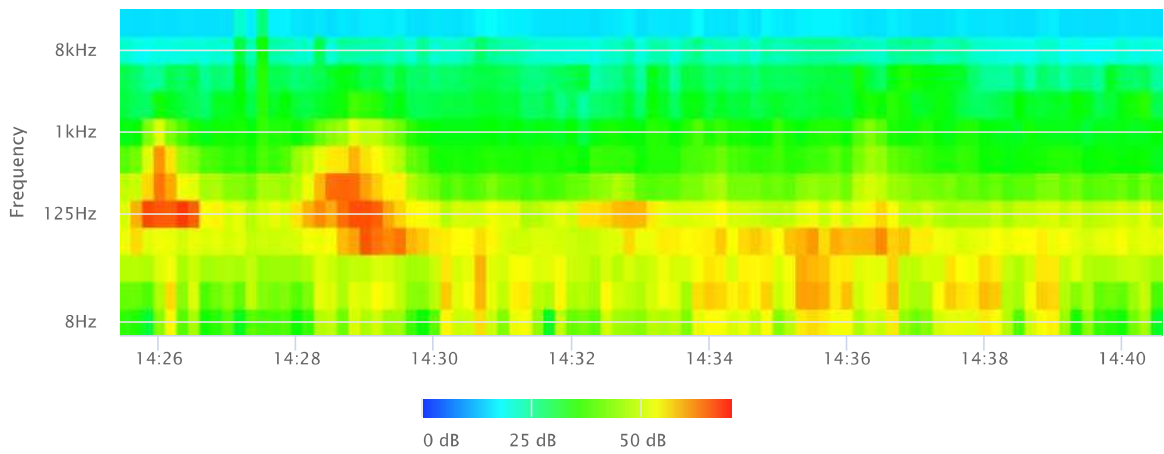
### Statistics

LAS 2.0	57.9 dB
LAS 8.0	53.1 dB
LAS 25.0	44.6 dB
LAS 50.0	42.1 dB
LAS 66.6	41.1 dB
LAS 90.0	39.4 dB

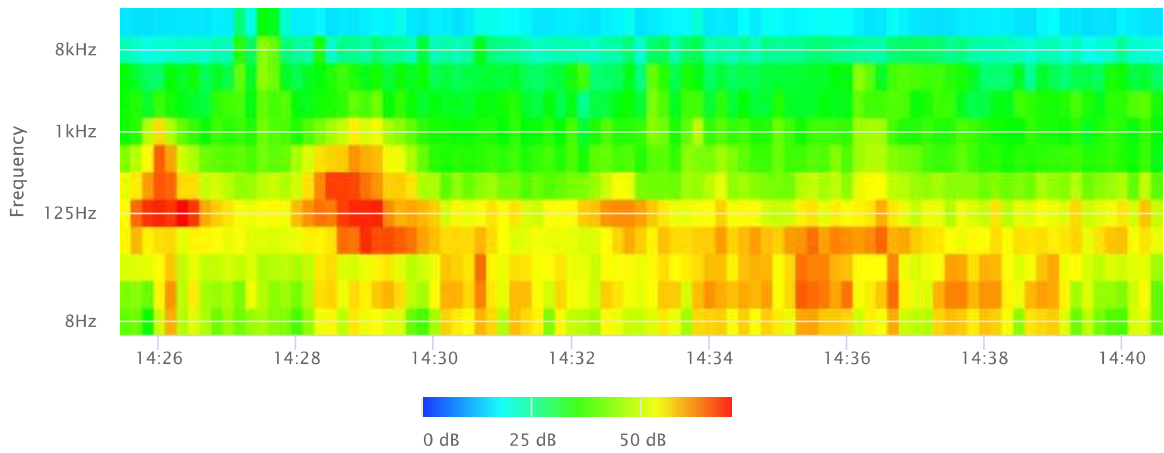
## Time History



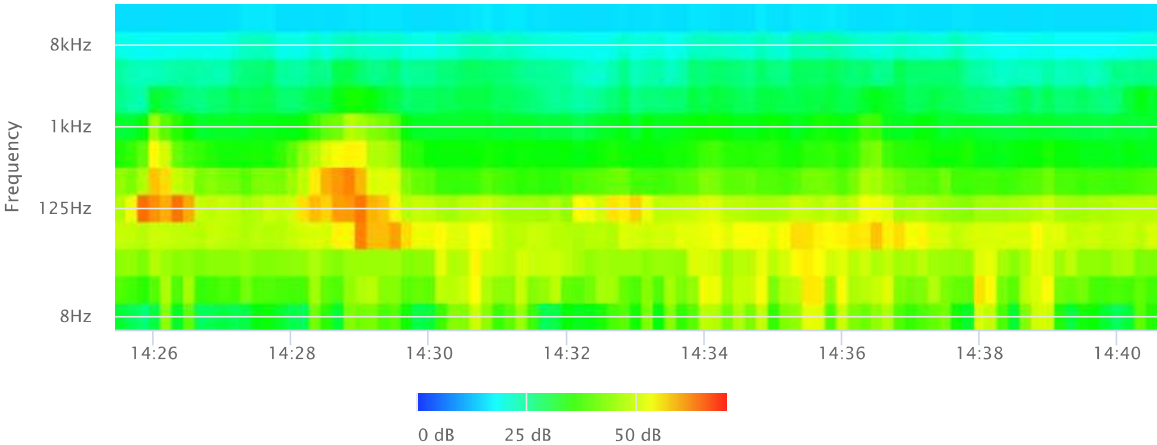
## OBA 1/1 Leq



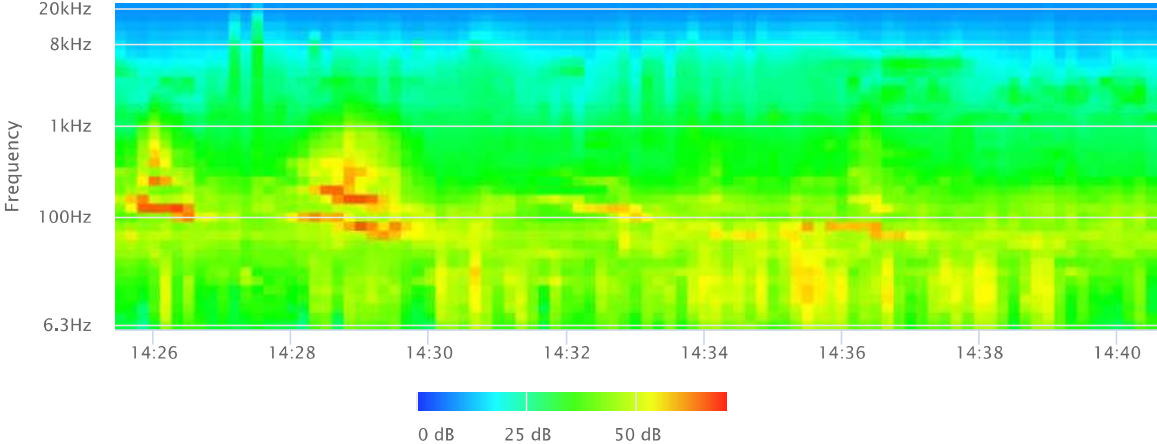
## OBA 1/1 Lmax



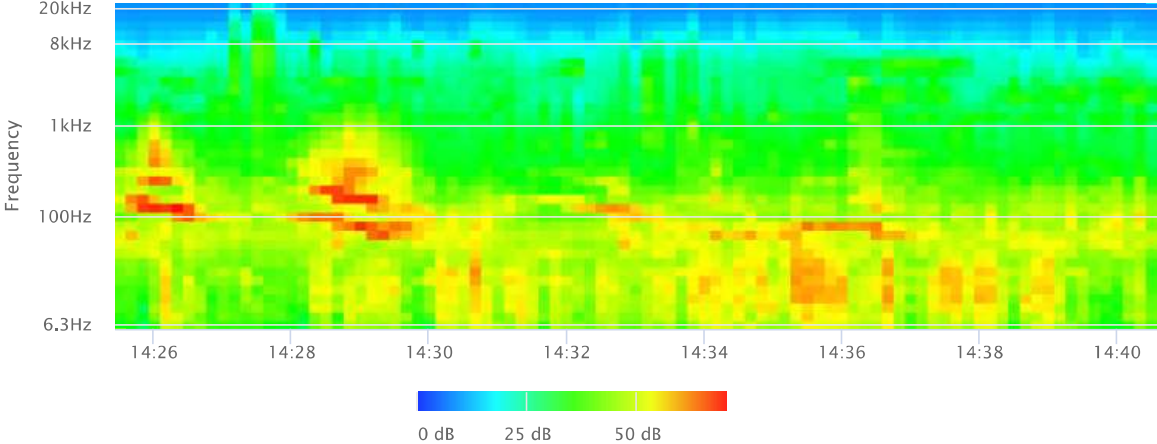
OBA 1/1 Lmin



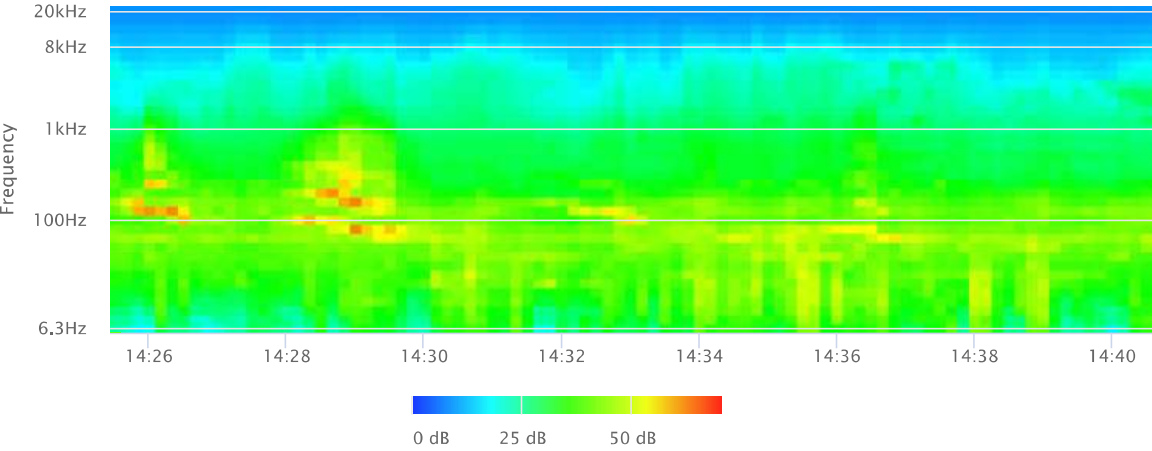
OBA 1/3 Leq



OBA 1/3 Lmax



OBA 1/3 Lmin



## **APPENDIX D**

### **SOUNDPLAN CONSTRUCTION NOISE MODELING**

## Noise emissions of industry sources

Source name	Reference	Level dB(A)	Frequency spectrum [dB(A)]																Correction									
			63 Hz	80 Hz	100 Hz	125 Hz	160 Hz	200 Hz	250 Hz	315 Hz	400 Hz	500 Hz	630 Hz	800 Hz	1 kHz	1.3 kHz	1.6 kHz	2 kHz	2.5 kHz	3.2 kHz	4 kHz	5 kHz	6.3 kHz	8 kHz	Cwa dB	Cl dB	CT dB	
Excavator	Lw/unit	Da 108.6	-	-	-	-	-	-	-	-	-	-	108.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Loader	Lw/unit	Da 106.6	-	-	-	-	-	-	-	-	-	-	106.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Backhoe	Lw/unit	Da 106.6	86.6	90.3	85.7	88.7	91.4	91.4	94.1	96.1	98.1	99.6	100.	101.	101.	102.	99.4	100.	100.	99.4	98.4	98.4	88.	87.	-	-	-	
Diesel Gene	Lw/unit	Da 109.6	102.	105.	103.	106.	108.	94.1	96.1	98.1	97.4	99.0	100.	100.	101.	101.	97.4	97.4	97.5	94.4	94.4	93.4	85.	84.	-	-	-	

## Receiver list

No.	Receiver name	Building side	Floor	Limit Day dB(A)	Level Day dB(A)	Conflict Day dB
1	1	-	EG	-	64.8	-
2	2	-	EG	-	78.4	-
3	3	-	EG	-	66.5	-
4	4	-	EG	-	53.5	-
5	5	-	EG	-	64.2	-
6	6	-	EG	-	57.2	-
7	7	-	EG	-	53.7	-
8	8	-	EG	-	54.1	-
9	9	-	EG	-	49.1	-

## Receiver list

No.	Receiver name	Building side	Floor	Limit Day dB(A)	Level Day dB(A)	Conflict Day dB
1	1	-	EG	-	60.4	-
2	2	-	EG	-	59.4	-
3	3	-	EG	-	61.7	-
4	4	-	EG	-	45.4	-
5	5	-	EG	-	61.2	-
6	6	-	EG	-	59.5	-
7	7	-	EG	-	56.5	-
8	8	-	EG	-	46.5	-
9	9	-	EG	-	41.7	-



**GANDDINI GROUP INC.**

714.795.3100 | [ganddini.com](http://ganddini.com)

## **Appendix F**

### AB 52 Letters and Responses

**John Bosler**

Secretary/General Manager/CEO

July 9, 2025

Lacy Padilla, Director of Historic Preservation/THPO  
Agua Caliente Band of Cahuilla Indians  
5401 Dinah Shore Drive  
Palm Springs, CA, 92264

**SUBJECT: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of Decision to Undertake a Project, pursuant to Public Resources Code § 21080.3.1**

Dear Ms. Padilla:

Cucamonga Valley Water District (CVWD) is evaluating a pipeline replacement project situated northeast of the intersection of Almond Street and Lomas Court within the city of Rancho Cucamonga, San Bernardino County, California. CVWD is the lead agency, pursuant to the California Environmental Quality Act (CEQA), for the preparation of an environmental document for the proposed Reservoir 6 and Almond Street Pipeline Replacement Project (proposed project).

**Project Name:** Reservoir 6 and Almond Street Waterline Replacement Project

CVWD proposes to install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated steel waterlines to replace approximately 300 linear feet of existing 14-inch and 16-inch waterlines which are deteriorating. The pipelines are also located in a flood zone with portions currently exposed due to erosion from flood scouring. This project will relocate the existing pipelines to an area more accessible for maintenance and deeper than the existing pipelines which will protect them from future flood scouring and damage. The pipelines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents. Two alternative alignments for the replacement waterline were studied to determine the best option for avoiding any sensitive biological and/or cultural resources, and constructability.

The proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point.

The CVWD is contacting you in accordance with AB 52 as a Native American Tribe interested in projects within the District's service area for AB 52 consultation. We are requesting any knowledge you may have of cultural resources within the project vicinity or if you would like to request consultation with the CVWD regarding the proposed project.

If you require any additional information or have any questions, please contact Ben Roden, Assistant Engineer at (909) 360-6356, or via e-mail at [benr@cvwdwater.com](mailto:benr@cvwdwater.com)

Thank you for your assistance.

Pursuant to PRC § 21080.3.1 (b), please respond within 30 days from the receipt of this letter to request consultation, in writing, with the District.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eduardo Espinoza', written in a cursive style.

Eduardo Espinoza, Assistant General Manager  
On behalf of John Bosler, General Manager  
Cucamonga Valley Water District

**John Bosler**  
Secretary/General Manager/CEO

July 9, 2025

Anthony Madrigal, Tribal Historic Preservation Officer  
Cahuilla Band of Indians  
52701 CA Highway 371  
Anza, CA, 92539

**SUBJECT: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of Decision to Undertake a Project, pursuant to Public Resources Code § 21080.3.1**

Dear Mr. Madrigal:

Cucamonga Valley Water District (CVWD) is evaluating a pipeline replacement project situated northeast of the intersection of Almond Street and Lomas Court within the city of Rancho Cucamonga, San Bernardino County, California. CVWD is the lead agency, pursuant to the California Environmental Quality Act (CEQA), for the preparation of an environmental document for the proposed Reservoir 6 and Almond Street Pipeline Replacement Project (proposed project).

**Project Name:** Reservoir 6 and Almond Street Waterline Replacement Project

CVWD proposes to install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated steel waterlines to replace approximately 300 linear feet of existing 14-inch and 16-inch waterlines which are deteriorating. The pipelines are also located in a flood zone with portions currently exposed due to erosion from flood scouring. This project will relocate the existing pipelines to an area more accessible for maintenance and deeper than the existing pipelines which will protect them from future flood scouring and damage. The pipelines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents. Two alternative alignments for the replacement waterline were studied to determine the best option for avoiding any sensitive biological and/or cultural resources, and constructability.

The proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point.

The CVWD is contacting you in accordance with AB 52 as a Native American Tribe interested in projects within the District's service area for AB 52 consultation. We are requesting any knowledge you may have of cultural resources within the project vicinity or if you would like to request consultation with the CVWD regarding the proposed project.

If you require any additional information or have any questions, please contact Ben Roden, Assistant Engineer at (909) 360-6356, or via e-mail at [benr@cvwdwater.com](mailto:benr@cvwdwater.com)

Thank you for your assistance.

Pursuant to PRC § 21080.3.1 (b), please respond within 30 days from the receipt of this letter to request consultation, in writing, with the District.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eduardo Espinoza', written in a cursive style.

Eduardo Espinoza, Assistant General Manager  
On behalf of John Bosler, General Manager  
Cucamonga Valley Water District

**John Bosler**  
Secretary/General Manager/CEO

July 9, 2025

BobbyRay Esparza, Cultural Director  
Cahuilla Band of Indians  
52701 CA Highway 371  
Anza, CA, 92539

**SUBJECT: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of Decision to Undertake a Project, pursuant to Public Resources Code § 21080.3.1**

Dear Mr. Esparza:

Cucamonga Valley Water District (CVWD) is evaluating a pipeline replacement project situated northeast of the intersection of Almond Street and Lomas Court within the city of Rancho Cucamonga, San Bernardino County, California. CVWD is the lead agency, pursuant to the California Environmental Quality Act (CEQA), for the preparation of an environmental document for the proposed Reservoir 6 and Almond Street Pipeline Replacement Project (proposed project).

**Project Name:** Reservoir 6 and Almond Street Waterline Replacement Project

CVWD proposes to install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated steel waterlines to replace approximately 300 linear feet of existing 14-inch and 16-inch waterlines which are deteriorating. The pipelines are also located in a flood zone with portions currently exposed due to erosion from flood scouring. This project will relocate the existing pipelines to an area more accessible for maintenance and deeper than the existing pipelines which will protect them from future flood scouring and damage. The pipelines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents. Two alternative alignments for the replacement waterline were studied to determine the best option for avoiding any sensitive biological and/or cultural resources, and constructability.

The proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point.

The CVWD is contacting you in accordance with AB 52 as a Native American Tribe interested in projects within the District's service area for AB 52 consultation. We are requesting any knowledge you may have of cultural resources within the project vicinity or if you would like to request consultation with the CVWD regarding the proposed project.

If you require any additional information or have any questions, please contact Ben Roden, Assistant Engineer at (909) 360-6356, or via e-mail at [benr@cvwdwater.com](mailto:benr@cvwdwater.com)

Thank you for your assistance.

Pursuant to PRC § 21080.3.1 (b), please respond within 30 days from the receipt of this letter to request consultation, in writing, with the District.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eduardo Espinoza', written in a cursive style.

Eduardo Espinoza, Assistant General Manager  
On behalf of John Bosler, General Manager  
Cucamonga Valley Water District

**John Bosler**  
Secretary/General Manager/CEO

July 9, 2025

Erica Schenk, Chairperson  
Cahuilla Band of Indians  
52701 CA Highway 371  
Anza, CA, 92539

**SUBJECT: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of Decision to Undertake a Project, pursuant to Public Resources Code § 21080.3.1**

Dear Ms. Schenk:

Cucamonga Valley Water District (CVWD) is evaluating a pipeline replacement project situated northeast of the intersection of Almond Street and Lomas Court within the city of Rancho Cucamonga, San Bernardino County, California. CVWD is the lead agency, pursuant to the California Environmental Quality Act (CEQA), for the preparation of an environmental document for the proposed Reservoir 6 and Almond Street Pipeline Replacement Project (proposed project).

**Project Name:** Reservoir 6 and Almond Street Waterline Replacement Project

CVWD proposes to install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated steel waterlines to replace approximately 300 linear feet of existing 14-inch and 16-inch waterlines which are deteriorating. The pipelines are also located in a flood zone with portions currently exposed due to erosion from flood scouring. This project will relocate the existing pipelines to an area more accessible for maintenance and deeper than the existing pipelines which will protect them from future flood scouring and damage. The pipelines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents. Two alternative alignments for the replacement waterline were studied to determine the best option for avoiding any sensitive biological and/or cultural resources, and constructability.

The proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point.

The CVWD is contacting you in accordance with AB 52 as a Native American Tribe interested in projects within the District's service area for AB 52 consultation. We are requesting any knowledge you may have of cultural resources within the project vicinity or if you would like to request consultation with the CVWD regarding the proposed project.

If you require any additional information or have any questions, please contact Ben Roden, Assistant Engineer at (909) 360-6356, or via e-mail at [benr@cvwdwater.com](mailto:benr@cvwdwater.com)

Thank you for your assistance.

Pursuant to PRC § 21080.3.1 (b), please respond within 30 days from the receipt of this letter to request consultation, in writing, with the District.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eduardo Espinoza', written in a cursive style.

Eduardo Espinoza, Assistant General Manager  
On behalf of John Bosler, General Manager  
Cucamonga Valley Water District

**John Bosler**  
Secretary/General Manager/CEO

July 9, 2025

Andrew Salas, Chairperson  
Gabrieleno Band of Mission Indians - Kizh Nation  
P.O. Box 393  
Covina, CA, 91723

**SUBJECT: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of Decision to Undertake a Project, pursuant to Public Resources Code § 21080.3.1**

Dear Mr. Salas:

Cucamonga Valley Water District (CVWD) is evaluating a pipeline replacement project situated northeast of the intersection of Almond Street and Lomas Court within the city of Rancho Cucamonga, San Bernardino County, California. CVWD is the lead agency, pursuant to the California Environmental Quality Act (CEQA), for the preparation of an environmental document for the proposed Reservoir 6 and Almond Street Pipeline Replacement Project (proposed project).

**Project Name:** Reservoir 6 and Almond Street Waterline Replacement Project

CVWD proposes to install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated steel waterlines to replace approximately 300 linear feet of existing 14-inch and 16-inch waterlines which are deteriorating. The pipelines are also located in a flood zone with portions currently exposed due to erosion from flood scouring. This project will relocate the existing pipelines to an area more accessible for maintenance and deeper than the existing pipelines which will protect them from future flood scouring and damage. The pipelines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents. Two alternative alignments for the replacement waterline were studied to determine the best option for avoiding any sensitive biological and/or cultural resources, and constructability.

The proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point.

The CVWD is contacting you in accordance with AB 52 as a Native American Tribe interested in projects within the District's service area for AB 52 consultation. We are requesting any knowledge you may have of cultural resources within the project vicinity or if you would like to request consultation with the CVWD regarding the proposed project.

If you require any additional information or have any questions, please contact Ben Roden, Assistant Engineer at (909) 360-6356, or via e-mail at [benr@cvwdwater.com](mailto:benr@cvwdwater.com)

Thank you for your assistance.

Pursuant to PRC § 21080.3.1 (b), please respond within 30 days from the receipt of this letter to request consultation, in writing, with the District.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eduardo Espinoza', written in a cursive style.

Eduardo Espinoza, Assistant General Manager  
On behalf of John Bosler, General Manager  
Cucamonga Valley Water District

**John Bosler**  
Secretary/General Manager/CEO

July 9, 2025

Christina Swindall Martinez, Secretary  
Gabrieleno Band of Mission Indians - Kizh Nation  
P.O. Box 393  
Covina, CA, 91723

**SUBJECT: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of Decision to Undertake a Project, pursuant to Public Resources Code § 21080.3.1**

Dear Ms. Martinez:

Cucamonga Valley Water District (CVWD) is evaluating a pipeline replacement project situated northeast of the intersection of Almond Street and Lomas Court within the city of Rancho Cucamonga, San Bernardino County, California. CVWD is the lead agency, pursuant to the California Environmental Quality Act (CEQA), for the preparation of an environmental document for the proposed Reservoir 6 and Almond Street Pipeline Replacement Project (proposed project).

**Project Name:** Reservoir 6 and Almond Street Waterline Replacement Project

CVWD proposes to install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated steel waterlines to replace approximately 300 linear feet of existing 14-inch and 16-inch waterlines which are deteriorating. The pipelines are also located in a flood zone with portions currently exposed due to erosion from flood scouring. This project will relocate the existing pipelines to an area more accessible for maintenance and deeper than the existing pipelines which will protect them from future flood scouring and damage. The pipelines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents. Two alternative alignments for the replacement waterline were studied to determine the best option for avoiding any sensitive biological and/or cultural resources, and constructability.

The proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point.

The CVWD is contacting you in accordance with AB 52 as a Native American Tribe interested in projects within the District's service area for AB 52 consultation. We are requesting any knowledge you may have of cultural resources within the project vicinity or if you would like to request consultation with the CVWD regarding the proposed project.

If you require any additional information or have any questions, please contact Ben Roden, Assistant Engineer at (909) 360-6356, or via e-mail at [benr@cvwdwater.com](mailto:benr@cvwdwater.com)

Thank you for your assistance.

Pursuant to PRC § 21080.3.1 (b), please respond within 30 days from the receipt of this letter to request consultation, in writing, with the District.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eduardo Espinoza', written in a cursive style.

Eduardo Espinoza, Assistant General Manager  
On behalf of John Bosler, General Manager  
Cucamonga Valley Water District

**John Bosler**  
Secretary/General Manager/CEO

July 9, 2025

Anthony Morales, Chairperson  
Gabrieleno/Tongva San Gabriel Band of Mission Indians  
P.O. Box 693  
San Gabriel, CA, 91778

**SUBJECT: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of Decision to Undertake a Project, pursuant to Public Resources Code § 21080.3.1**

Dear Mr. Morales:

Cucamonga Valley Water District (CVWD) is evaluating a pipeline replacement project situated northeast of the intersection of Almond Street and Lomas Court within the city of Rancho Cucamonga, San Bernardino County, California. CVWD is the lead agency, pursuant to the California Environmental Quality Act (CEQA), for the preparation of an environmental document for the proposed Reservoir 6 and Almond Street Pipeline Replacement Project (proposed project).

**Project Name:** Reservoir 6 and Almond Street Waterline Replacement Project

CVWD proposes to install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated steel waterlines to replace approximately 300 linear feet of existing 14-inch and 16-inch waterlines which are deteriorating. The pipelines are also located in a flood zone with portions currently exposed due to erosion from flood scouring. This project will relocate the existing pipelines to an area more accessible for maintenance and deeper than the existing pipelines which will protect them from future flood scouring and damage. The pipelines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents. Two alternative alignments for the replacement waterline were studied to determine the best option for avoiding any sensitive biological and/or cultural resources, and constructability.

The proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point.

The CVWD is contacting you in accordance with AB 52 as a Native American Tribe interested in projects within the District's service area for AB 52 consultation. We are requesting any knowledge you may have of cultural resources within the project vicinity or if you would like to request consultation with the CVWD regarding the proposed project.

If you require any additional information or have any questions, please contact Ben Roden, Assistant Engineer at (909) 360-6356, or via e-mail at [benr@cvwdwater.com](mailto:benr@cvwdwater.com)

Thank you for your assistance.

Pursuant to PRC § 21080.3.1 (b), please respond within 30 days from the receipt of this letter to request consultation, in writing, with the District.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eduardo Espinoza', written in a cursive style.

Eduardo Espinoza, Assistant General Manager  
On behalf of John Bosler, General Manager  
Cucamonga Valley Water District

**John Bosler**  
Secretary/General Manager/CEO

July 9, 2025

Robert Dorame, Chairperson  
Gabrielino Tongva Indians of California Tribal Council  
P.O. Box 490  
Bellflower, CA, 90707

**SUBJECT: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of Decision to Undertake a Project, pursuant to Public Resources Code § 21080.3.1**

Dear Mr. Dorame:

Cucamonga Valley Water District (CVWD) is evaluating a pipeline replacement project situated northeast of the intersection of Almond Street and Lomas Court within the city of Rancho Cucamonga, San Bernardino County, California. CVWD is the lead agency, pursuant to the California Environmental Quality Act (CEQA), for the preparation of an environmental document for the proposed Reservoir 6 and Almond Street Pipeline Replacement Project (proposed project).

**Project Name:** Reservoir 6 and Almond Street Waterline Replacement Project

CVWD proposes to install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated steel waterlines to replace approximately 300 linear feet of existing 14-inch and 16-inch waterlines which are deteriorating. The pipelines are also located in a flood zone with portions currently exposed due to erosion from flood scouring. This project will relocate the existing pipelines to an area more accessible for maintenance and deeper than the existing pipelines which will protect them from future flood scouring and damage. The pipelines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents. Two alternative alignments for the replacement waterline were studied to determine the best option for avoiding any sensitive biological and/or cultural resources, and constructability.

The proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point.

The CVWD is contacting you in accordance with AB 52 as a Native American Tribe interested in projects within the District's service area for AB 52 consultation. We are requesting any knowledge you may have of cultural resources within the project vicinity or if you would like to request consultation with the CVWD regarding the proposed project.

If you require any additional information or have any questions, please contact Ben Roden, Assistant Engineer at (909) 360-6356, or via e-mail at [benr@cvwdwater.com](mailto:benr@cvwdwater.com)

Thank you for your assistance.

Pursuant to PRC § 21080.3.1 (b), please respond within 30 days from the receipt of this letter to request consultation, in writing, with the District.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eduardo Espinoza', written in a cursive style.

Eduardo Espinoza, Assistant General Manager  
On behalf of John Bosler, General Manager  
Cucamonga Valley Water District

**John Bosler**  
Secretary/General Manager/CEO

July 9, 2025

Christina Conley, Cultural Resource Administrator  
Gabrielino Tongva Indians of California Tribal Council  
P.O. Box 941078  
Simi Valley, CA, 93094

**SUBJECT: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of Decision to Undertake a Project, pursuant to Public Resources Code § 21080.3.1**

Dear Ms. Conley:

Cucamonga Valley Water District (CVWD) is evaluating a pipeline replacement project situated northeast of the intersection of Almond Street and Lomas Court within the city of Rancho Cucamonga, San Bernardino County, California. CVWD is the lead agency, pursuant to the California Environmental Quality Act (CEQA), for the preparation of an environmental document for the proposed Reservoir 6 and Almond Street Pipeline Replacement Project (proposed project).

**Project Name:** Reservoir 6 and Almond Street Waterline Replacement Project

CVWD proposes to install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated steel waterlines to replace approximately 300 linear feet of existing 14-inch and 16-inch waterlines which are deteriorating. The pipelines are also located in a flood zone with portions currently exposed due to erosion from flood scouring. This project will relocate the existing pipelines to an area more accessible for maintenance and deeper than the existing pipelines which will protect them from future flood scouring and damage. The pipelines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents. Two alternative alignments for the replacement waterline were studied to determine the best option for avoiding any sensitive biological and/or cultural resources, and constructability.

The proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point.

The CVWD is contacting you in accordance with AB 52 as a Native American Tribe interested in projects within the District's service area for AB 52 consultation. We are requesting any knowledge you may have of cultural resources within the project vicinity or if you would like to request consultation with the CVWD regarding the proposed project.

If you require any additional information or have any questions, please contact Ben Roden, Assistant Engineer at (909) 360-6356, or via e-mail at [benr@cvwdwater.com](mailto:benr@cvwdwater.com)

Thank you for your assistance.

Pursuant to PRC § 21080.3.1 (b), please respond within 30 days from the receipt of this letter to request consultation, in writing, with the District.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eduardo Espinoza', written in a cursive style.

Eduardo Espinoza, Assistant General Manager  
On behalf of John Bosler, General Manager  
Cucamonga Valley Water District

**John Bosler**  
Secretary/General Manager/CEO

July 9, 2025

Sandonne Goad, Chairperson  
Gabrielino/Tongva Nation  
106 1/2 Judge John Aiso St., #231  
Los Angeles, CA, 90012

**SUBJECT: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of Decision to Undertake a Project, pursuant to Public Resources Code § 21080.3.1**

Dear Ms. Goad:

Cucamonga Valley Water District (CVWD) is evaluating a pipeline replacement project situated northeast of the intersection of Almond Street and Lomas Court within the city of Rancho Cucamonga, San Bernardino County, California. CVWD is the lead agency, pursuant to the California Environmental Quality Act (CEQA), for the preparation of an environmental document for the proposed Reservoir 6 and Almond Street Pipeline Replacement Project (proposed project).

**Project Name:** Reservoir 6 and Almond Street Waterline Replacement Project

CVWD proposes to install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated steel waterlines to replace approximately 300 linear feet of existing 14-inch and 16-inch waterlines which are deteriorating. The pipelines are also located in a flood zone with portions currently exposed due to erosion from flood scouring. This project will relocate the existing pipelines to an area more accessible for maintenance and deeper than the existing pipelines which will protect them from future flood scouring and damage. The pipelines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents. Two alternative alignments for the replacement waterline were studied to determine the best option for avoiding any sensitive biological and/or cultural resources, and constructability.

The proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point.

The CVWD is contacting you in accordance with AB 52 as a Native American Tribe interested in projects within the District's service area for AB 52 consultation. We are requesting any knowledge you may have of cultural resources within the project vicinity or if you would like to request consultation with the CVWD regarding the proposed project.

If you require any additional information or have any questions, please contact Ben Roden, Assistant Engineer at (909) 360-6356, or via e-mail at [benr@cvwdwater.com](mailto:benr@cvwdwater.com)

Thank you for your assistance.

Pursuant to PRC § 21080.3.1 (b), please respond within 30 days from the receipt of this letter to request consultation, in writing, with the District.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eduardo Espinoza', written in a cursive style.

Eduardo Espinoza, Assistant General Manager  
On behalf of John Bosler, General Manager  
Cucamonga Valley Water District

**John Bosler**  
Secretary/General Manager/CEO

July 9, 2025

Sam Dunlap, Cultural Resource Director  
Gabrielino-Tongva Tribe  
P.O. Box 3919  
Seal Beach, CA, 90740

**SUBJECT: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of Decision to Undertake a Project, pursuant to Public Resources Code § 21080.3.1**

Dear Mr. Dunlap:

Cucamonga Valley Water District (CVWD) is evaluating a pipeline replacement project situated northeast of the intersection of Almond Street and Lomas Court within the city of Rancho Cucamonga, San Bernardino County, California. CVWD is the lead agency, pursuant to the California Environmental Quality Act (CEQA), for the preparation of an environmental document for the proposed Reservoir 6 and Almond Street Pipeline Replacement Project (proposed project).

**Project Name:** Reservoir 6 and Almond Street Waterline Replacement Project

CVWD proposes to install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated steel waterlines to replace approximately 300 linear feet of existing 14-inch and 16-inch waterlines which are deteriorating. The pipelines are also located in a flood zone with portions currently exposed due to erosion from flood scouring. This project will relocate the existing pipelines to an area more accessible for maintenance and deeper than the existing pipelines which will protect them from future flood scouring and damage. The pipelines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents. Two alternative alignments for the replacement waterline were studied to determine the best option for avoiding any sensitive biological and/or cultural resources, and constructability.

The proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point.

The CVWD is contacting you in accordance with AB 52 as a Native American Tribe interested in projects within the District's service area for AB 52 consultation. We are requesting any knowledge you may have of cultural resources within the project vicinity or if you would like to request consultation with the CVWD regarding the proposed project.

If you require any additional information or have any questions, please contact Ben Roden, Assistant Engineer at (909) 360-6356, or via e-mail at [benr@cvwdwater.com](mailto:benr@cvwdwater.com)

Thank you for your assistance.

Pursuant to PRC § 21080.3.1 (b), please respond within 30 days from the receipt of this letter to request consultation, in writing, with the District.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eduardo Espinoza', written in a cursive style.

Eduardo Espinoza, Assistant General Manager  
On behalf of John Bosler, General Manager  
Cucamonga Valley Water District

**John Bosler**  
Secretary/General Manager/CEO

July 9, 2025

Charles Alvarez, Chairperson  
Gabrielino-Tongva Tribe  
23454 Vanowen Street  
West Hills, CA, 91307

**SUBJECT: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of Decision to Undertake a Project, pursuant to Public Resources Code § 21080.3.1**

Dear Mr. Alvarez:

Cucamonga Valley Water District (CVWD) is evaluating a pipeline replacement project situated northeast of the intersection of Almond Street and Lomas Court within the city of Rancho Cucamonga, San Bernardino County, California. CVWD is the lead agency, pursuant to the California Environmental Quality Act (CEQA), for the preparation of an environmental document for the proposed Reservoir 6 and Almond Street Pipeline Replacement Project (proposed project).

**Project Name:** Reservoir 6 and Almond Street Waterline Replacement Project

CVWD proposes to install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated steel waterlines to replace approximately 300 linear feet of existing 14-inch and 16-inch waterlines which are deteriorating. The pipelines are also located in a flood zone with portions currently exposed due to erosion from flood scouring. This project will relocate the existing pipelines to an area more accessible for maintenance and deeper than the existing pipelines which will protect them from future flood scouring and damage. The pipelines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents. Two alternative alignments for the replacement waterline were studied to determine the best option for avoiding any sensitive biological and/or cultural resources, and constructability.

The proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point.

The CVWD is contacting you in accordance with AB 52 as a Native American Tribe interested in projects within the District's service area for AB 52 consultation. We are requesting any knowledge you may have of cultural resources within the project vicinity or if you would like to request consultation with the CVWD regarding the proposed project.

If you require any additional information or have any questions, please contact Ben Roden, Assistant Engineer at (909) 360-6356, or via e-mail at [benr@cvwdwater.com](mailto:benr@cvwdwater.com)

Thank you for your assistance.

Pursuant to PRC § 21080.3.1 (b), please respond within 30 days from the receipt of this letter to request consultation, in writing, with the District.

Sincerely,

A handwritten signature in black ink, appearing to read "Eduardo Espinoza". The signature is fluid and cursive, with a large initial "E" and a long, sweeping underline.

Eduardo Espinoza, Assistant General Manager  
On behalf of John Bosler, General Manager  
Cucamonga Valley Water District

**John Bosler**  
Secretary/General Manager/CEO

July 9, 2025

Ann Brierty, THPO  
Morongo Band of Mission Indians  
12700 Pumarra Road  
Banning, CA, 92220

**SUBJECT: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of Decision to Undertake a Project, pursuant to Public Resources Code § 21080.3.1**

Dear Ms. Brierty:

Cucamonga Valley Water District (CVWD) is evaluating a pipeline replacement project situated northeast of the intersection of Almond Street and Lomas Court within the city of Rancho Cucamonga, San Bernardino County, California. CVWD is the lead agency, pursuant to the California Environmental Quality Act (CEQA), for the preparation of an environmental document for the proposed Reservoir 6 and Almond Street Pipeline Replacement Project (proposed project).

**Project Name:** Reservoir 6 and Almond Street Waterline Replacement Project

CVWD proposes to install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated steel waterlines to replace approximately 300 linear feet of existing 14-inch and 16-inch waterlines which are deteriorating. The pipelines are also located in a flood zone with portions currently exposed due to erosion from flood scouring. This project will relocate the existing pipelines to an area more accessible for maintenance and deeper than the existing pipelines which will protect them from future flood scouring and damage. The pipelines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents. Two alternative alignments for the replacement waterline were studied to determine the best option for avoiding any sensitive biological and/or cultural resources, and constructability.

The proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point.

The CVWD is contacting you in accordance with AB 52 as a Native American Tribe interested in projects within the District's service area for AB 52 consultation. We are requesting any knowledge you may have of cultural resources within the project vicinity or if you would like to request consultation with the CVWD regarding the proposed project.

If you require any additional information or have any questions, please contact Ben Roden, Assistant Engineer at (909) 360-6356, or via e-mail at [benr@cvwdwater.com](mailto:benr@cvwdwater.com)

Thank you for your assistance.

Pursuant to PRC § 21080.3.1 (b), please respond within 30 days from the receipt of this letter to request consultation, in writing, with the District.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eduardo Espinoza', written in a cursive style.

Eduardo Espinoza, Assistant General Manager  
On behalf of John Bosler, General Manager  
Cucamonga Valley Water District

**John Bosler**  
Secretary/General Manager/CEO

July 9, 2025

Robert Martin, Chairperson  
Morongo Band of Mission Indians  
12700 Pumarra Road  
Banning, CA, 92220

**SUBJECT: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of Decision to Undertake a Project, pursuant to Public Resources Code § 21080.3.1**

Dear Mr. Martin:

Cucamonga Valley Water District (CVWD) is evaluating a pipeline replacement project situated northeast of the intersection of Almond Street and Lomas Court within the city of Rancho Cucamonga, San Bernardino County, California. CVWD is the lead agency, pursuant to the California Environmental Quality Act (CEQA), for the preparation of an environmental document for the proposed Reservoir 6 and Almond Street Pipeline Replacement Project (proposed project).

**Project Name:** Reservoir 6 and Almond Street Waterline Replacement Project

CVWD proposes to install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated steel waterlines to replace approximately 300 linear feet of existing 14-inch and 16-inch waterlines which are deteriorating. The pipelines are also located in a flood zone with portions currently exposed due to erosion from flood scouring. This project will relocate the existing pipelines to an area more accessible for maintenance and deeper than the existing pipelines which will protect them from future flood scouring and damage. The pipelines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents. Two alternative alignments for the replacement waterline were studied to determine the best option for avoiding any sensitive biological and/or cultural resources, and constructability.

The proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point.

The CVWD is contacting you in accordance with AB 52 as a Native American Tribe interested in projects within the District's service area for AB 52 consultation. We are requesting any knowledge you may have of cultural resources within the project vicinity or if you would like to request consultation with the CVWD regarding the proposed project.

If you require any additional information or have any questions, please contact Ben Roden, Assistant Engineer at (909) 360-6356, or via e-mail at [benr@cvwdwater.com](mailto:benr@cvwdwater.com)

Thank you for your assistance.

Pursuant to PRC § 21080.3.1 (b), please respond within 30 days from the receipt of this letter to request consultation, in writing, with the District.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eduardo Espinoza', written in a cursive style.

Eduardo Espinoza, Assistant General Manager  
On behalf of John Bosler, General Manager  
Cucamonga Valley Water District

**John Bosler**  
Secretary/General Manager/CEO

July 9, 2025

Jonathan Koteen, President, Quechan Tribal Council  
Quechan Indian Tribe of the Fort Yuma Reservation  
P.O.Box 1899  
Yuma, AZ, 85366-1899

**SUBJECT: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of Decision to Undertake a Project, pursuant to Public Resources Code § 21080.3.1**

Dear Mr. Koteen:

Cucamonga Valley Water District (CVWD) is evaluating a pipeline replacement project situated northeast of the intersection of Almond Street and Lomas Court within the city of Rancho Cucamonga, San Bernardino County, California. CVWD is the lead agency, pursuant to the California Environmental Quality Act (CEQA), for the preparation of an environmental document for the proposed Reservoir 6 and Almond Street Pipeline Replacement Project (proposed project).

**Project Name:** Reservoir 6 and Almond Street Waterline Replacement Project

CVWD proposes to install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated steel waterlines to replace approximately 300 linear feet of existing 14-inch and 16-inch waterlines which are deteriorating. The pipelines are also located in a flood zone with portions currently exposed due to erosion from flood scouring. This project will relocate the existing pipelines to an area more accessible for maintenance and deeper than the existing pipelines which will protect them from future flood scouring and damage. The pipelines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents. Two alternative alignments for the replacement waterline were studied to determine the best option for avoiding any sensitive biological and/or cultural resources, and constructability.

The proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point.

The CVWD is contacting you in accordance with AB 52 as a Native American Tribe interested in projects within the District's service area for AB 52 consultation. We are requesting any knowledge you may have of cultural resources within the project vicinity or if you would like to request consultation with the CVWD regarding the proposed project.

If you require any additional information or have any questions, please contact Ben Roden, Assistant Engineer at (909) 360-6356, or via e-mail at [benr@cvwdwater.com](mailto:benr@cvwdwater.com)

Thank you for your assistance.

Pursuant to PRC § 21080.3.1 (b), please respond within 30 days from the receipt of this letter to request consultation, in writing, with the District.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eduardo Espinoza', written in a cursive style.

Eduardo Espinoza, Assistant General Manager  
On behalf of John Bosler, General Manager  
Cucamonga Valley Water District

**John Bosler**  
Secretary/General Manager/CEO

July 9, 2025

Jill McCormick, Historic Preservation Officer  
Quechan Indian Tribe of the Fort Yuma Reservation  
P.O. Box 1899  
Yuma, AZ, 85366-1899

**SUBJECT: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of Decision to Undertake a Project, pursuant to Public Resources Code § 21080.3.1**

Dear Ms. McCormick:

Cucamonga Valley Water District (CVWD) is evaluating a pipeline replacement project situated northeast of the intersection of Almond Street and Lomas Court within the city of Rancho Cucamonga, San Bernardino County, California. CVWD is the lead agency, pursuant to the California Environmental Quality Act (CEQA), for the preparation of an environmental document for the proposed Reservoir 6 and Almond Street Pipeline Replacement Project (proposed project).

**Project Name:** Reservoir 6 and Almond Street Waterline Replacement Project

CVWD proposes to install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated steel waterlines to replace approximately 300 linear feet of existing 14-inch and 16-inch waterlines which are deteriorating. The pipelines are also located in a flood zone with portions currently exposed due to erosion from flood scouring. This project will relocate the existing pipelines to an area more accessible for maintenance and deeper than the existing pipelines which will protect them from future flood scouring and damage. The pipelines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents. Two alternative alignments for the replacement waterline were studied to determine the best option for avoiding any sensitive biological and/or cultural resources, and constructability.

The proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point.

The CVWD is contacting you in accordance with AB 52 as a Native American Tribe interested in projects within the District's service area for AB 52 consultation. We are requesting any knowledge you may have of cultural resources within the project vicinity or if you would like to request consultation with the CVWD regarding the proposed project.

If you require any additional information or have any questions, please contact Ben Roden, Assistant Engineer at (909) 360-6356, or via e-mail at [benr@cvwdwater.com](mailto:benr@cvwdwater.com)

Thank you for your assistance.

Pursuant to PRC § 21080.3.1 (b), please respond within 30 days from the receipt of this letter to request consultation, in writing, with the District.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eduardo Espinoza', written in a cursive style.

Eduardo Espinoza, Assistant General Manager  
On behalf of John Bosler, General Manager  
Cucamonga Valley Water District

**John Bosler**  
Secretary/General Manager/CEO

July 9, 2025

Alexandra McCleary, Senior Manager of Cultural Resources Management  
San Manuel Band of Mission Indians  
26569 Community Center Drive  
Highland, CA, 92346

**SUBJECT: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of Decision to Undertake a Project, pursuant to Public Resources Code § 21080.3.1**

Dear Ms. McCleary:

Cucamonga Valley Water District (CVWD) is evaluating a pipeline replacement project situated northeast of the intersection of Almond Street and Lomas Court within the city of Rancho Cucamonga, San Bernardino County, California. CVWD is the lead agency, pursuant to the California Environmental Quality Act (CEQA), for the preparation of an environmental document for the proposed Reservoir 6 and Almond Street Pipeline Replacement Project (proposed project).

**Project Name:** Reservoir 6 and Almond Street Waterline Replacement Project

CVWD proposes to install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated steel waterlines to replace approximately 300 linear feet of existing 14-inch and 16-inch waterlines which are deteriorating. The pipelines are also located in a flood zone with portions currently exposed due to erosion from flood scouring. This project will relocate the existing pipelines to an area more accessible for maintenance and deeper than the existing pipelines which will protect them from future flood scouring and damage. The pipelines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents. Two alternative alignments for the replacement waterline were studied to determine the best option for avoiding any sensitive biological and/or cultural resources, and constructability.

The proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point.

The CVWD is contacting you in accordance with AB 52 as a Native American Tribe interested in projects within the District's service area for AB 52 consultation. We are requesting any knowledge you may have of cultural resources within the project vicinity or if you would like to request consultation with the CVWD regarding the proposed project.

If you require any additional information or have any questions, please contact Ben Roden, Assistant Engineer at (909) 360-6356, or via e-mail at [benr@cvwdwater.com](mailto:benr@cvwdwater.com)

Thank you for your assistance.

Pursuant to PRC § 21080.3.1 (b), please respond within 30 days from the receipt of this letter to request consultation, in writing, with the District.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eduardo Espinoza', written in a cursive style.

Eduardo Espinoza, Assistant General Manager  
On behalf of John Bosler, General Manager  
Cucamonga Valley Water District

**John Bosler**  
Secretary/General Manager/CEO

July 9, 2025

Steven Estrada, Tribal Chairman  
Santa Rosa Band of Cahuilla Indians  
P.O. Box 391820  
Anza, CA, 92539

**SUBJECT: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of Decision to Undertake a Project, pursuant to Public Resources Code § 21080.3.1**

Dear Mr. Estrada:

Cucamonga Valley Water District (CVWD) is evaluating a pipeline replacement project situated northeast of the intersection of Almond Street and Lomas Court within the city of Rancho Cucamonga, San Bernardino County, California. CVWD is the lead agency, pursuant to the California Environmental Quality Act (CEQA), for the preparation of an environmental document for the proposed Reservoir 6 and Almond Street Pipeline Replacement Project (proposed project).

**Project Name:** Reservoir 6 and Almond Street Waterline Replacement Project

CVWD proposes to install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated steel waterlines to replace approximately 300 linear feet of existing 14-inch and 16-inch waterlines which are deteriorating. The pipelines are also located in a flood zone with portions currently exposed due to erosion from flood scouring. This project will relocate the existing pipelines to an area more accessible for maintenance and deeper than the existing pipelines which will protect them from future flood scouring and damage. The pipelines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents. Two alternative alignments for the replacement waterline were studied to determine the best option for avoiding any sensitive biological and/or cultural resources, and constructability.

The proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point.

The CVWD is contacting you in accordance with AB 52 as a Native American Tribe interested in projects within the District's service area for AB 52 consultation. We are requesting any knowledge you may have of cultural resources within the project vicinity or if you would like to request consultation with the CVWD regarding the proposed project.

If you require any additional information or have any questions, please contact Ben Roden, Assistant Engineer at (909) 360-6356, or via e-mail at [benr@cvwdwater.com](mailto:benr@cvwdwater.com)

Thank you for your assistance.

Pursuant to PRC § 21080.3.1 (b), please respond within 30 days from the receipt of this letter to request consultation, in writing, with the District.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eduardo Espinoza', written in a cursive style.

Eduardo Espinoza, Assistant General Manager  
On behalf of John Bosler, General Manager  
Cucamonga Valley Water District

**John Bosler**  
Secretary/General Manager/CEO

July 9, 2025

Mercedes Estrada, Cultural Director  
Santa Rosa Band of Cahuilla Indians  
P.O. Box 391820  
Anza, CA, 92539

**SUBJECT: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of Decision to Undertake a Project, pursuant to Public Resources Code § 21080.3.1**

Dear Ms. Estrada:

Cucamonga Valley Water District (CVWD) is evaluating a pipeline replacement project situated northeast of the intersection of Almond Street and Lomas Court within the city of Rancho Cucamonga, San Bernardino County, California. CVWD is the lead agency, pursuant to the California Environmental Quality Act (CEQA), for the preparation of an environmental document for the proposed Reservoir 6 and Almond Street Pipeline Replacement Project (proposed project).

**Project Name:** Reservoir 6 and Almond Street Waterline Replacement Project

CVWD proposes to install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated steel waterlines to replace approximately 300 linear feet of existing 14-inch and 16-inch waterlines which are deteriorating. The pipelines are also located in a flood zone with portions currently exposed due to erosion from flood scouring. This project will relocate the existing pipelines to an area more accessible for maintenance and deeper than the existing pipelines which will protect them from future flood scouring and damage. The pipelines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents. Two alternative alignments for the replacement waterline were studied to determine the best option for avoiding any sensitive biological and/or cultural resources, and constructability.

The proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point.

The CVWD is contacting you in accordance with AB 52 as a Native American Tribe interested in projects within the District's service area for AB 52 consultation. We are requesting any knowledge you may have of cultural resources within the project vicinity or if you would like to request consultation with the CVWD regarding the proposed project.

If you require any additional information or have any questions, please contact Ben Roden, Assistant Engineer at (909) 360-6356, or via e-mail at [benr@cvwdwater.com](mailto:benr@cvwdwater.com)

Thank you for your assistance.

Pursuant to PRC § 21080.3.1 (b), please respond within 30 days from the receipt of this letter to request consultation, in writing, with the District.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eduardo Espinoza', written in a cursive style.

Eduardo Espinoza, Assistant General Manager  
On behalf of John Bosler, General Manager  
Cucamonga Valley Water District

**John Bosler**  
Secretary/General Manager/CEO

July 9, 2025

Vanessa Minott, Tribal Administrator  
Santa Rosa Band of Cahuilla Indians  
P.O. Box 391820  
Anza, CA, 92539

**SUBJECT: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of Decision to Undertake a Project, pursuant to Public Resources Code § 21080.3.1**

Dear Ms. Minott:

Cucamonga Valley Water District (CVWD) is evaluating a pipeline replacement project situated northeast of the intersection of Almond Street and Lomas Court within the city of Rancho Cucamonga, San Bernardino County, California. CVWD is the lead agency, pursuant to the California Environmental Quality Act (CEQA), for the preparation of an environmental document for the proposed Reservoir 6 and Almond Street Pipeline Replacement Project (proposed project).

**Project Name:** Reservoir 6 and Almond Street Waterline Replacement Project

CVWD proposes to install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated steel waterlines to replace approximately 300 linear feet of existing 14-inch and 16-inch waterlines which are deteriorating. The pipelines are also located in a flood zone with portions currently exposed due to erosion from flood scouring. This project will relocate the existing pipelines to an area more accessible for maintenance and deeper than the existing pipelines which will protect them from future flood scouring and damage. The pipelines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents. Two alternative alignments for the replacement waterline were studied to determine the best option for avoiding any sensitive biological and/or cultural resources, and constructability.

The proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point.

The CVWD is contacting you in accordance with AB 52 as a Native American Tribe interested in projects within the District's service area for AB 52 consultation. We are requesting any knowledge you may have of cultural resources within the project vicinity or if you would like to request consultation with the CVWD regarding the proposed project.

If you require any additional information or have any questions, please contact Ben Roden, Assistant Engineer at (909) 360-6356, or via e-mail at [benr@cvwdwater.com](mailto:benr@cvwdwater.com)

Thank you for your assistance.

Pursuant to PRC § 21080.3.1 (b), please respond within 30 days from the receipt of this letter to request consultation, in writing, with the District.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eduardo Espinoza', written in a cursive style.

Eduardo Espinoza, Assistant General Manager  
On behalf of John Bosler, General Manager  
Cucamonga Valley Water District

**John Bosler**  
Secretary/General Manager/CEO

July 9, 2025

Mark Cochrane, Co-Chairperson  
Serrano Nation of Mission Indians  
P. O. Box 343  
Patton, CA, 92369

**SUBJECT: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of Decision to Undertake a Project, pursuant to Public Resources Code § 21080.3.1**

Dear Mr. Cochrane:

Cucamonga Valley Water District (CVWD) is evaluating a pipeline replacement project situated northeast of the intersection of Almond Street and Lomas Court within the city of Rancho Cucamonga, San Bernardino County, California. CVWD is the lead agency, pursuant to the California Environmental Quality Act (CEQA), for the preparation of an environmental document for the proposed Reservoir 6 and Almond Street Pipeline Replacement Project (proposed project).

**Project Name:** Reservoir 6 and Almond Street Waterline Replacement Project

CVWD proposes to install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated steel waterlines to replace approximately 300 linear feet of existing 14-inch and 16-inch waterlines which are deteriorating. The pipelines are also located in a flood zone with portions currently exposed due to erosion from flood scouring. This project will relocate the existing pipelines to an area more accessible for maintenance and deeper than the existing pipelines which will protect them from future flood scouring and damage. The pipelines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents. Two alternative alignments for the replacement waterline were studied to determine the best option for avoiding any sensitive biological and/or cultural resources, and constructability.

The proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point.

The CVWD is contacting you in accordance with AB 52 as a Native American Tribe interested in projects within the District's service area for AB 52 consultation. We are requesting any knowledge you may have of cultural resources within the project vicinity or if you would like to request consultation with the CVWD regarding the proposed project.

If you require any additional information or have any questions, please contact Ben Roden, Assistant Engineer at (909) 360-6356, or via e-mail at [benr@cvwdwater.com](mailto:benr@cvwdwater.com)

Thank you for your assistance.

Pursuant to PRC § 21080.3.1 (b), please respond within 30 days from the receipt of this letter to request consultation, in writing, with the District.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eduardo Espinoza', written in a cursive style.

Eduardo Espinoza, Assistant General Manager  
On behalf of John Bosler, General Manager  
Cucamonga Valley Water District

**John Bosler**  
Secretary/General Manager/CEO

July 9, 2025

Wayne Walker, Co-Chairperson  
Serrano Nation of Mission Indians  
P. O. Box 343  
Patton, CA, 92369

**SUBJECT: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of Decision to Undertake a Project, pursuant to Public Resources Code § 21080.3.1**

Dear Mr. Walker:

Cucamonga Valley Water District (CVWD) is evaluating a pipeline replacement project situated northeast of the intersection of Almond Street and Lomas Court within the city of Rancho Cucamonga, San Bernardino County, California. CVWD is the lead agency, pursuant to the California Environmental Quality Act (CEQA), for the preparation of an environmental document for the proposed Reservoir 6 and Almond Street Pipeline Replacement Project (proposed project).

**Project Name:** Reservoir 6 and Almond Street Waterline Replacement Project

CVWD proposes to install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated steel waterlines to replace approximately 300 linear feet of existing 14-inch and 16-inch waterlines which are deteriorating. The pipelines are also located in a flood zone with portions currently exposed due to erosion from flood scouring. This project will relocate the existing pipelines to an area more accessible for maintenance and deeper than the existing pipelines which will protect them from future flood scouring and damage. The pipelines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents. Two alternative alignments for the replacement waterline were studied to determine the best option for avoiding any sensitive biological and/or cultural resources, and constructability.

The proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point.

The CVWD is contacting you in accordance with AB 52 as a Native American Tribe interested in projects within the District's service area for AB 52 consultation. We are requesting any knowledge you may have of cultural resources within the project vicinity or if you would like to request consultation with the CVWD regarding the proposed project.

If you require any additional information or have any questions, please contact Ben Roden, Assistant Engineer at (909) 360-6356, or via e-mail at [benr@cvwdwater.com](mailto:benr@cvwdwater.com)

Thank you for your assistance.

Pursuant to PRC § 21080.3.1 (b), please respond within 30 days from the receipt of this letter to request consultation, in writing, with the District.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eduardo Espinoza', written in a cursive style.

Eduardo Espinoza, Assistant General Manager  
On behalf of John Bosler, General Manager  
Cucamonga Valley Water District

**John Bosler**  
Secretary/General Manager/CEO

July 9, 2025

Jessica Valdez, Cultural Resource Specialist  
Soboba Band of Luiseno Indians  
P.O. Box 487  
San Jacinto, CA, 92581

**SUBJECT: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of Decision to Undertake a Project, pursuant to Public Resources Code § 21080.3.1**

Dear Ms. Valdez:

Cucamonga Valley Water District (CVWD) is evaluating a pipeline replacement project situated northeast of the intersection of Almond Street and Lomas Court within the city of Rancho Cucamonga, San Bernardino County, California. CVWD is the lead agency, pursuant to the California Environmental Quality Act (CEQA), for the preparation of an environmental document for the proposed Reservoir 6 and Almond Street Pipeline Replacement Project (proposed project).

**Project Name:** Reservoir 6 and Almond Street Waterline Replacement Project

CVWD proposes to install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated steel waterlines to replace approximately 300 linear feet of existing 14-inch and 16-inch waterlines which are deteriorating. The pipelines are also located in a flood zone with portions currently exposed due to erosion from flood scouring. This project will relocate the existing pipelines to an area more accessible for maintenance and deeper than the existing pipelines which will protect them from future flood scouring and damage. The pipelines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents. Two alternative alignments for the replacement waterline were studied to determine the best option for avoiding any sensitive biological and/or cultural resources, and constructability.

The proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point.

The CVWD is contacting you in accordance with AB 52 as a Native American Tribe interested in projects within the District's service area for AB 52 consultation. We are requesting any knowledge you may have of cultural resources within the project vicinity or if you would like to request consultation with the CVWD regarding the proposed project.

If you require any additional information or have any questions, please contact Ben Roden, Assistant Engineer at (909) 360-6356, or via e-mail at [benr@cvwdwater.com](mailto:benr@cvwdwater.com)

Thank you for your assistance.

Pursuant to PRC § 21080.3.1 (b), please respond within 30 days from the receipt of this letter to request consultation, in writing, with the District.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eduardo Espinoza', written in a cursive style.

Eduardo Espinoza, Assistant General Manager  
On behalf of John Bosler, General Manager  
Cucamonga Valley Water District

**John Bosler**  
Secretary/General Manager/CEO

July 9, 2025

Joseph Ontiveros, Tribal Historic Preservation Officer  
Soboba Band of Luiseno Indians  
P.O. Box 487  
San Jacinto, CA, 92581

**SUBJECT: Tribal Cultural Resources under the California Environmental Quality Act, AB 52 (Gatto, 2014). Formal Notification of Decision to Undertake a Project, pursuant to Public Resources Code § 21080.3.1**

Dear Mr. Ontiveros:

Cucamonga Valley Water District (CVWD) is evaluating a pipeline replacement project situated northeast of the intersection of Almond Street and Lomas Court within the city of Rancho Cucamonga, San Bernardino County, California. CVWD is the lead agency, pursuant to the California Environmental Quality Act (CEQA), for the preparation of an environmental document for the proposed Reservoir 6 and Almond Street Pipeline Replacement Project (proposed project).

**Project Name:** Reservoir 6 and Almond Street Waterline Replacement Project

CVWD proposes to install 800 linear feet of two (2) new 16-inch cement mortar-lined and coated steel waterlines to replace approximately 300 linear feet of existing 14-inch and 16-inch waterlines which are deteriorating. The pipelines are also located in a flood zone with portions currently exposed due to erosion from flood scouring. This project will relocate the existing pipelines to an area more accessible for maintenance and deeper than the existing pipelines which will protect them from future flood scouring and damage. The pipelines are utilized to convey water supply from CVWD Reservoir 6 which is the primary source of supply and pressure for over 20,000 residents. Two alternative alignments for the replacement waterline were studied to determine the best option for avoiding any sensitive biological and/or cultural resources, and constructability.

The proposed alignment spans approximately 800 linear feet, beginning at the western connection point and extending north within a newly established easement. It then turns east to cross the seasonal drainage and then continues south along the hiking trail to terminate at the eastern connection point.

The CVWD is contacting you in accordance with AB 52 as a Native American Tribe interested in projects within the District's service area for AB 52 consultation. We are requesting any knowledge you may have of cultural resources within the project vicinity or if you would like to request consultation with the CVWD regarding the proposed project.

If you require any additional information or have any questions, please contact Ben Roden, Assistant Engineer at (909) 360-6356, or via e-mail at [benr@cvwdwater.com](mailto:benr@cvwdwater.com)

Thank you for your assistance.

Pursuant to PRC § 21080.3.1 (b), please respond within 30 days from the receipt of this letter to request consultation, in writing, with the District.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eduardo Espinoza', written in a cursive style.

Eduardo Espinoza, Assistant General Manager  
On behalf of John Bosler, General Manager  
Cucamonga Valley Water District

**From:** [THPO Consulting](#)  
**To:** [Ben Roden](#)  
**Cc:** [General Manager](#); [Eduardo Espinoza](#)  
**Subject:** Tribal Cultural Resources under the California Environmental Quality Act, AB52. Project Name: Reservoir 6 and Almond Street Waterline Replacement Project  
**Date:** Monday, July 28, 2025 2:53:03 PM  
**Attachments:** [image001.png](#)  
[image003.png](#)

---

Greetings,

A records check of the Tribal Historic Preservation Office's cultural registry revealed that this project is not located within the Tribe's Traditional Use Area. Therefore, we defer to the other tribes in the area. This letter shall conclude our consultation efforts.

Thank you,

**Anthony Kline**  
Admin Coordinator THPO  
[akline@aguacaliente.net](mailto:akline@aguacaliente.net)  
C: (760) 413-5836 | D: (760) 883-1139  
5401 Dinah Shore Drive, Palm Springs



GABRIELEÑO BAND OF MISSION INDIANS - KIZH NATION  
Historically known as The San Gabriel Band of Mission Indians recognized by the State of California as the  
aboriginal tribe of the Los Angeles basin

July 14, 2025

Eduardo Espinoza  
Assistant General Manager  
On Behalf of John Bosler, General Manager  
Cucamonga Valley Water District  
benr@cvwdwater.com

Subject: Formal Request for Government-to-Government Consultation – Reservoir 6 and Almond St.  
Waterline Replacement Project

Dear Eduardo Espinoza,

On behalf of the Gabrieleno Band of Mission Indians Kizh Nation, I am formally requesting government-to-government consultation with the City of Rancho Cucamonga pursuant to Assembly Bill 52 (AB 52) and the California Environmental Quality Act (CEQA) regarding the proposed Reservoir 6 and Almond St. Pipeline Replacement Project. Our tribe has ancestral and cultural ties to this area, and we are concerned that the project may impact Tribal Cultural Resources (TCRs) within our traditional territory.

Under AB 52, lead agencies are required to engage in meaningful government-to-government consultation with our tribe who is ancestrally traditionally and culturally affiliated with the project area when the project undergoes CEQA review, in accordance with the law.

We request that formal consultation be initiated within the required timeframe, and we are prepared to meet at your earliest convenience. Please confirm receipt of this request and provide available dates for an initial consultation meeting.

For scheduling or further discussion, please contact me at [gabrielenoindians@gmail.com](mailto:gabrielenoindians@gmail.com) or (844) 390 - 0787. We appreciate your commitment to ensuring compliance with AB 52 and protecting the cultural heritage of our tribal community.

Best regards,

Hereditary Chief Andrew Salas  
Gabrieleno Band of Mission Indians–Kizh Nation

Andrew Salas, Chairman  
Mike Jesus Lemos, Treasurer I

Nadine Salas, Vice-Chairman  
Samantha Lemos, Treasurer II

Dr. Christina Swindall Martinez, Secretary  
Richard Gradias, Chairman of the council of Elders

PO Box 393 Covina, CA 91723 [www.gabrielenoindians.org](http://www.gabrielenoindians.org)  
admin@gabrielenoindians.org

**From:** [Ben Roden](#)  
**To:** [Raylene Borrego](#)  
**Cc:** [Tuan Truong](#); [Kristen Tuosto](#)  
**Subject:** RE: Response to AB52: Reservoir 6 and Almond Street Waterline Replacement Project, City of Rancho Cucamonga, San Bernardino County; [SD-CVWD-2025-1]

---

Thank you Raylene,

We will review the language you provided and provide the revised Initial Study once it is available. In the meantime, I will reach out if we have any questions.

Best regards,

Ben Roden  
Assistant Engineer  
Cucamonga Valley Water District  
(909) 483-7312 direct  
(909) 360-6356 mobile

---

**From:** Raylene Borrego <Raylene.Borrego@sanmanuel-nsn.gov>  
**Sent:** Wednesday, August 13, 2025 3:05 PM  
**To:** Ben Roden <BenR@cvwdwater.com>  
**Cc:** Tuan Truong <Tuant@cvwdwater.com>; Kristen Tuosto <Kristen.Tuosto@sanmanuel-nsn.gov>  
**Subject:** RE: Response to AB52: Reservoir 6 and Almond Street Waterline Replacement Project, City of Rancho Cucamonga, San Bernardino County; [SD-CVWD-2025-1]

Hello Ben,

Thank you for providing requested project documentation. The Yuhaaviatam of San Manuel Nation (YSMN, also known as the San Manuel Band of Mission Indians) appreciates the opportunity to review the project documentation, which was received by our Cultural Resources Management Department on July 23<sup>rd</sup>, 2025, pursuant to CEQA (AB 52) and CA PRC 21080.3.1. The proposed project area exists within Serrano ancestral territory and, therefore, is of interest to the Tribe. However, due to the nature and location of the proposed project, and given the CRM Department's present state of knowledge, YSMN does not have any concerns with the project's implementation, as planned, at this time. As a result, YSMN requests that the following language be made a part of the project/permit/plan conditions:

#### **CULMMs**

1. In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed within TCR-1, regarding any pre-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.
2. If significant pre-contact cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to YSMN for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

3. If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

#### **TCR MMs**

1. The Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN) shall be contacted, as detailed in CUL-1, of any pre-contact cultural resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a Cultural Resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with YSMN, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents YSMN for the remainder of the project, should YSMN elect to place a monitor on-site.
2. Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the applicant and Lead Agency for dissemination to YSMN. The Lead Agency and/or applicant shall, in good faith, consult with YSMN throughout the life of the project.

***Note: Yuhaaviatam of San Manuel Nation realizes that there may be additional tribes claiming cultural affiliation to the area; however, Yuhaaviatam of San Manuel Nation can only speak for itself. The Tribe has no objection if the agency, developer, and/or archaeologist wishes to consult with other tribes in addition to YSMN and if the Lead Agency wishes to revise the conditions to recognize additional tribes.***

Please provide a draft and the final copy of the project/permit/plan conditions so that YSMN may review the included language. If you should have any further questions with regard to this matter, please do not hesitate to contact Tribal Archaeologist, Kristen Tuosto (cc'd), or myself, as we will be your Point of Contacts (POC) for YSMN with respect to this project.

Kind Regards,  
Raylene

**Raylene Borrego**  
Cultural Resources Technician

---

**From:** Kristen Tuosto <[Kristen.Tuosto@sanmanuel-nsn.gov](mailto:Kristen.Tuosto@sanmanuel-nsn.gov)>  
**Sent:** Thursday, July 24, 2025 8:26 AM  
**To:** Ben Roden <[BenR@cvwdwater.com](mailto:BenR@cvwdwater.com)>; Raylene Borrego <[Raylene.Borrego@sanmanuel-nsn.gov](mailto:Raylene.Borrego@sanmanuel-nsn.gov)>  
**Cc:** Tuan Truong <[Tuant@cvwdwater.com](mailto:Tuant@cvwdwater.com)>  
**Subject:** RE: Response to AB52: Reservoir 6 and Almond Street Waterline Replacement Project, City of Rancho Cucamonga, San Bernardino County; [SD-CVWD-2025-1]

Hello Ben,

Thank you for the reports, YSMN has received them, and I will get back to you shortly with our reply.

**From:** [THPO Consulting](#)  
**To:** [Ben Roden](#)  
**Cc:** [General Manager](#); [Eduardo Espinoza](#)  
**Subject:** Tribal Cultural Resources under the California Environmental Quality Act, AB52. Project Name: Reservoir 6 and Almond Street Waterline Replacement Project  
**Date:** Monday, July 28, 2025 2:53:03 PM  
**Attachments:** [image001.png](#)  
[image003.png](#)

---

Greetings,

A records check of the Tribal Historic Preservation Office's cultural registry revealed that this project is not located within the Tribe's Traditional Use Area. Therefore, we defer to the other tribes in the area. This letter shall conclude our consultation efforts.

Thank you,

**Anthony Kline**  
Admin Coordinator THPO  
[akline@aguacaliente.net](mailto:akline@aguacaliente.net)  
C: (760) 413-5836 | D: (760) 883-1139  
5401 Dinah Shore Drive, Palm Springs

**From:** [Tuan Truong](#)  
**To:** [Tony DeLuca](#)  
**Cc:** [Cheryl Tubbs](#)  
**Subject:** FW: CVWD Tribal Consultation Gabrielino Band of Indians  
**Date:** Monday, October 20, 2025 3:11:10 PM  
**Attachments:** [image001.png](#)  
[Reservoir 6 & Almond St Waterline Replacement Project.pdf](#)  
[Mitigation Measures Reservoir 6 & Almond St Waterline Replacement Project.pdf](#)  
[Attn Lead Agencies.pdf](#)

**External Sender** - From: (Tuan Truong  
<Tuant@cvwdwater.com>)

[Learn More](#)

This message came from outside your organization.

Hi Tony,

Attached are the documents the District has received from Gabrielino Band of Mission Indians. It is my understanding that they are proposing mitigation measures and that a response letter is expected. Please review the documents and let me know if you are able to assist in drafting a response to their requests.

Thanks,

**Tuan Truong, P.E.**

Engineering Manager

Cucamonga Valley Water District

(909) 987-2591

[TuanT@CVWDwater.com](mailto:TuanT@CVWDwater.com)



**From:** Gabrielino Administration <admin@gabrielenoindians.org>

**Sent:** Monday, October 20, 2025 2:10 PM

**To:** Tuan Truong <Tuant@cvwdwater.com>

**Subject:** Re: CVWD Tribal Consultation Gabrielino Band of Indians

Hello Tuan Truong,

Please find below the substantial evidence submitted by the **Gabrieleño Band of Mission Indians – Kizh Nation** in relation to your project. This documentation fulfills the legal requirement under the **California Government Code** and **Assembly Bill 130 (AB 130)** to establish our Tribe’s cultural and ancestral affiliation to the project area.

In addition, we have attached a document clarifying the legal definition and threshold of “substantial evidence” as required under **AB 130** and the **California Environmental Quality Act (CEQA)**. These statutes govern how Tribes are determined to be eligible for consultation and participation in the protection of cultural resources.

We have also included our **Tribal Mitigation Measures**, which have been developed specifically by and for the Gabrieleño Band of Mission Indians – Kizh Nation. These measures are rooted in our Tribe’s cultural protocols and represent the minimum requirements necessary to protect and preserve what remains of our ancestral heritage and sacred sites. They are tailored exclusively to our Tribe’s unique historical, cultural, and ancestral ties to the project area and are intended to ensure compliance with **AB 130 consultation requirements**.

Please confirm receipt of these attachments.

On Mon, Oct 20, 2025 at 11:51 AM Gabrieleno Administration  
<[admin@gabrielenoindians.org](mailto:admin@gabrielenoindians.org)> wrote:

Thank you for providing the project map

Best regards,  
Brandy Salas

Tribal Administrative Coordinator  
Gabrieleño Band of Mission Indians - Kizh Nation  
PO Box 393  
Covina, CA 91723  
Office: 844-390-0787  
website: [www.gabrielenoindians.org](http://www.gabrielenoindians.org)



GABRIELEÑO BAND OF MISSION INDIANS - KIZH NATION  
Historically known as The San Gabriel Band of Mission Indians recognized by the State of California as the  
aboriginal tribe of the Los Angeles basin

July 14, 2025

Eduardo Espinoza  
Assistant General Manager  
On Behalf of John Bosler, General Manager  
Cucamonga Valley Water District  
benr@cvwdwater.com

Subject: Formal Request for Government-to-Government Consultation – Reservoir 6 and Almond St.  
Waterline Replacement Project

Dear Eduardo Espinoza,

On behalf of the Gabrieleno Band of Mission Indians Kizh Nation, I am formally requesting government-to-government consultation with the City of Rancho Cucamonga pursuant to Assembly Bill 52 (AB 52) and the California Environmental Quality Act (CEQA) regarding the proposed Reservoir 6 and Almond St. Pipeline Replacement Project. Our tribe has ancestral and cultural ties to this area, and we are concerned that the project may impact Tribal Cultural Resources (TCRs) within our traditional territory.

Under AB 52, lead agencies are required to engage in meaningful government-to-government consultation with our tribe who is ancestrally traditionally and culturally affiliated with the project area when the project undergoes CEQA review, in accordance with the law.

We request that formal consultation be initiated within the required timeframe, and we are prepared to meet at your earliest convenience. Please confirm receipt of this request and provide available dates for an initial consultation meeting.

For scheduling or further discussion, please contact me at [gabrielenoindians@gmail.com](mailto:gabrielenoindians@gmail.com) or (844) 390 - 0787. We appreciate your commitment to ensuring compliance with AB 52 and protecting the cultural heritage of our tribal community.

Best regards,

Hereditary Chief Andrew Salas  
Gabrieleno Band of Mission Indians–Kizh Nation

Andrew Salas, Chairman  
Mike Jesus Lemos, Treasurer I

Nadine Salas, Vice-Chairman  
Samantha Lemos, Treasurer II

Dr. Christina Swindall Martinez, Secretary  
Richard Gradias, Chairman of the council of Elders

PO Box 393 Covina, CA 91723 [www.gabrielenoindians.org](http://www.gabrielenoindians.org)  
admin@gabrielenoindians.org



GABRIELEÑO BAND OF MISSION INDIANS - KIZH NATION  
Historically known as The San Gabriel Band of Mission Indians recognized by the State of California  
as the aboriginal tribe of the Los Angeles basin

## Legal Thresholds for “Substantial Evidence” in Tribal Consultation

RE: CEQA and AB 52 Tribal Consultation

Attn: Lead Agency Representative

This letter is submitted by the Gabrieleño Band of Mission Indians – Kizh Nation to clarify the legal definition and threshold of “substantial evidence” as required under the California Environmental Quality Act (CEQA) and Assembly Bill 52 (AB 52). These statutes govern how Tribes are determined to be eligible for consultation and involvement in cultural resource protection.

### I. Legal Definition of “Substantial Evidence”

Pursuant to CEQA Guidelines § 15384(a):

*“Enough relevant information and reasonable inferences from that information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached.”*

In practical terms, “substantial evidence” is fact-based, documented proof, and not merely opinion or unverified narrative. Lead agencies are required to rely on this standard when determining which tribes have legal standing in consultation, mitigation, monitoring, and repatriation processes under CEQA and AB 52.

### Valid examples of substantial evidence include:

- Archaeological records
- Historical documentation
- Spanish/Mexican land grant records and mission-era maps
- Genealogical data showing ancestral ties to the area
- Oral histories (when supported by documentation)
- Expert reports or peer-reviewed scholarly assessments

Andrew Salas, Chairman  
Mike Jesus Lemos, Treasurer I

Nadine Salas, Vice-Chairman  
Samantha Lemos, Treasurer II

Dr. Christina Swindall Martinez, Secretary  
Richard Gradias, Chairman of the council of Elders

PO Box 393 Covina, CA 91723 [www.gabrielenoindians.org](http://www.gabrielenoindians.org)  
admin@gabrielenoindians.org

## II. What Does Not Qualify as Substantial Evidence?

The intent of CEQA and AB 52 is not to create symbolic inclusivity, but to ensure that only those tribes with documented, lineal, cultural, or ancestral affiliation to a project area are consulted. The law is clear: participation must be based on fact-based documentation, not preference, emotion, or assumption.

According to **CEQA Guidelines § 15384**:

*“Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts.”*

Conversely, **§ 15384(b)** states:

*“Argument, speculation, unsubstantiated opinion or narrative, evidence that is clearly inaccurate or erroneous, or evidence that is not credible shall not constitute substantial evidence.”*

### Invalid examples include:

1. Unsubstantiated Opinions – Generalized claims such as “we feel connected to this area” without accompanying documentation.
2. Speculative Assertions – Guesswork or assumptions without factual or historical support.
3. Form Letters or Equity-Based Requests – Requests made “in the spirit of respect” or for equitable inclusion with no specific tie to the site.
4. NAHC List Status Alone – Being listed on the NAHC Consultation Contact List does not establish cultural affiliation or descent. The NAHC has clarified this list is strictly for contact purposes.
5. Unverified or Fabricated Sources – Misrepresented or plagiarized documents, or third-party claims made without evidence.

Allowing participation based on such unsupported assertions undermines the legal foundation of CEQA, violates the rights of lineal descendant tribes, and puts the lead agency at legal risk.

## III. Legal Precedent: [Koi Nation v. City of Clearlake](#) (2020)

This pivotal court case illustrates the legal requirement to honor substantial evidence. The Koi Nation provided maps, Tribal records, and historical evidence of its ancestral ties to a project site in Clearlake. The City dismissed the evidence and issued a Mitigated Negative Declaration (MND) instead of conducting full consultation.

The California Court of Appeal ruled in favor of the Koi Nation, concluding that:

- The Tribe met the substantial evidence standard, triggering the requirement for full CEQA review;
- The city violated CEQA by dismissing the evidence and failing to conduct proper consultation;

- The presence of substantial evidence that cultural resources may be affected required the preparation of an EIR.

Lead agencies are legally obligated to consult and coordinate with tribes that present documented, fact-based evidence of cultural affiliation to a project area. This case confirms that agencies may not substitute convenience, preference, or assumptions in place of the legal requirement to engage Tribes who provide substantial evidence of *ancestral* connection.

#### **IV. Why This Matters**

Pursuant to AB 52 and CEQA, consultation must be based on “substantial evidence” demonstrating a tribe’s cultural or ancestral affiliation to the specific project area. Failure to apply the substantial evidence standard results in:

- Invalidation of tribal consultation efforts
- Potential CEQA litigation and project delays
- Legal and ethical harm to culturally affiliated tribes
- Risk of project rejection or reversal

#### **V. The Position of the Kizh Nation**

The Gabrieleño Band of Mission Indians – Kizh Nation maintains and submits substantial archaeological, historical, genealogical, and cultural evidence of our ancestral presence in the Greater Los Angeles Basin and associated project areas. This documented affiliation compels our inclusion in all stages of consultation, monitoring, and cultural resource treatment.

We respectfully urge your agency to uphold CEQA and AB 52’s legal standards and to reject unsupported claims that seek involvement based on speculative or generalized assertions. Inclusion in tribal consultation is a legal matter—not a discretionary one.

Should your agency require further documentation, expert testimony, or legal case references to support this position, we are available to provide additional materials upon request.

Respectfully,



Hereditary Chief Andrew Salas  
Gabrieleño Band of Mission Indians–Kizh Nation

Andrew Salas, Chairman  
Mike Jesus Lemos, Treasurer I

Nadine Salas, Vice-Chairman  
Samantha Lemos, Treasurer II

Dr. Christina Swindall Martinez, Secretary  
Richard Gradias, Chairman of the council of Elders



GABRIELEÑO BAND OF MISSION INDIANS - KIZH NATION  
Historically known as The San Gabriel Band of Mission Indians recognized by the State of California as the  
aboriginal tribe of the Los Angeles basin

Monday, October 20, 2025

Tuan Truong  
Engineering Manager  
Cucamonga Valley Water District  
City of Rancho Cucamonga  
[TuanT@CVWDwater.com](mailto:TuanT@CVWDwater.com)

Dear Tuan Truong,

Please find below the substantial evidence submitted by the Gabrieleño Band of Mission Indians – Kizh Nation in relation to your project. This documentation fulfills the legal requirement under the California Environmental Quality Act (CEQA) and Assembly Bill 130 to establish our Tribe's cultural and ancestral affiliation to the project area.

Before Spanish colonization, the area now known as Rancho Cucamonga was inhabited by the Gabrieleño Band of Mission Indians – Kizh Nation, the original and ancestral people of the Los Angeles Basin, extending into portions of present-day San Bernardino County. The Kizh, known ancestrally as Quiichi, sustained thriving communities through intricate social, ecological, and ceremonial systems.

The Kizh people occupied a network of permanent and seasonal villages along the foothills of the San Gabriel Mountains, including near San Antonio Creek and the Cucamonga alluvial fan. These areas provided abundant resources essential to daily life, including water, acorns, small and large game, fish, and native plants. The Kizh constructed dome-shaped homes (*kiiy*) from tule reeds and willow, practiced land stewardship through controlled burning and seasonal harvesting, and maintained extensive trade routes reaching the Channel Islands and coastal plains.

### **Ancestral Village and Natural Resources**

The project area lies within proximity to the ancestral Kizh village of Wá'aachnga (Wa'aachnga), historically situated near present-day Cucamonga Creek and the San Gabriel foothills. This location provided continuous access to fresh water, fertile soils, and native plant life. The surrounding waterways, including Cucamonga Creek and San Antonio Wash, were vital to the Kizh Nation's sustenance, serving as sources for food, fiber, medicine, and ceremonial use.

The land was rich with oak groves, chia, yucca, sage, elderberry, and toyon, which the Kizh utilized for dietary, medicinal, and material needs. Through sustainable practices, the Kizh maintained ecological balance for thousands of years, ensuring that food and resources would be available for future generations. These natural systems were integral to their cultural and spiritual worldview, linking land, water, and community as one living entity.

### **Spanish and Rancho Period**

With the establishment of Mission San Gabriel Arcángel in 1771, the Kizh Nation was among the first Indigenous people in California to experience missionization. Many Kizh families from the Cucamonga region were forcibly relocated to Mission San Gabriel, where they endured labor exploitation, cultural suppression, and displacement from their ancestral villages.

Andrew Salas, Chairman  
Mike Jesus Lemos, Treasurer I

Nadine Salas, Vice-Chairman  
Samantha Lemos, Treasurer II

Dr. Christina Swindall Martinez, Secretary  
Richard Gradias, Chairman of the council of Elders

PO Box 393 Covina, CA 91723 [www.gabrielenoindians.org](http://www.gabrielenoindians.org)  
[admin@gabrielenoindians.org](mailto:admin@gabrielenoindians.org)

Following the secularization of the missions, the Mexican government granted Rancho Cucamonga to Tiburcio Tapia in 1839. The rancho encompassed approximately 13,000 acres of former Kizh territory, including the lands once inhabited by the people of Wá'aachnga. Despite the drastic social changes imposed during the Rancho era, many Kizh descendants remained in the area, serving as laborers and keepers of the land. They continued to maintain intimate knowledge of local water sources, traditional gathering sites, and sacred places that persisted within the Rancho boundaries.

### **Archaeological and Cultural Resources**

Archaeological investigations conducted within and around Rancho Cucamonga have revealed substantial evidence of continuous Indigenous occupation, confirming the Kizh Nation's deep ancestral presence in this region. Documented archaeological findings include:

- Lithic scatters and bedrock milling stations along Cucamonga Creek and Day Canyon, used for acorn and seed processing.
- Habitation sites and burials located near the San Antonio Wash, corresponding to ancestral village locations.
- Projectile points, shell beads, and ceramic fragments associated with the Late Prehistoric and Early Mission periods, reflecting long-term habitation and adaptation during European contact.

These cultural materials provide direct evidence of the Kizh Nation's historical and spiritual relationship with this landscape, reinforcing the significance of maintaining protection protocols during modern development.

### **Significance and Need for Onsite Tribal Monitoring**

Given the abundant evidence of ancestral occupation and cultural sensitivity in the Rancho Cucamonga region, the Gabrieleño Band of Mission Indians – Kizh Nation maintains its position as the lineal descendants and original stewards of this land. The Tribe respectfully requests that a qualified Kizh Nation tribal monitor be present during all ground-disturbing activities to ensure that any potential tribal cultural resources (TCRs) are protected and properly treated according to tribal cultural protocols and state law.

The Kizh Nation's mitigation measures are designed to protect irreplaceable cultural resources in accordance with Assembly Bill 130 (AB 130) and the California Environmental Quality Act (CEQA). These measures uphold both the integrity of sacred sites and the Tribe's sovereign responsibility to safeguard its ancestral heritage.

### **AB 130 Consultation and Mitigation Measures**

Given the substantial evidence provided and the high sensitivity of these areas, Chairman Andrew Salas of the Gabrieleño Band of Mission Indians – Kizh Nation formally requests that the City of Rancho Cucamonga implement the Tribe's specific mitigation measures to ensure the protection and preservation of any cultural resources that may be discovered during ground disturbances. These measures have been carefully developed to uphold the integrity of sacred sites and ensure compliance with AB 130 consultation requirements.

The measures are specific to the Kizh Nation, reflecting the Tribe's unique historical, cultural, and ancestral ties to these lands. We respectfully request confirmation of receipt of this letter and a timely response outlining the implementation of the proposed mitigation measures. The Tribe looks forward to collaborating with the City of Rancho Cucamonga to ensure responsible stewardship of these culturally significant areas.

Respectfully,



Hereditary Chief Andrew Salas  
Gabrieleño Band of Mission Indians–Kizh Nation

Andrew Salas, Chairman  
Mike Jesus Lemos, Treasurer I

Nadine Salas, Vice-Chairman  
Samantha Lemos, Treasurer II

Dr. Christina Swindall Martinez, Secretary  
Richard Gradias, Chairman of the council of Elders



# GABRIELEÑO BAND OF MISSION INDIANS - KIZH NATION

California State Recognized Aboriginal Tribe of the Los Angeles Basin  
(Historically known as the Gabrieleño Tribal Council - San Gabriel Band of Mission Indians)



## GABRIELENO BAND OF MISSION INDIANS – KIZH NATION - PROPOSED TCR CONDITIONS OF APPROVAL

### **Reservoir 6 & Almond St Waterline Replacement Project**

#### TCR-1: Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities

- A. The project applicant/lead agency shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any “ground-disturbing activity” for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). “Ground-disturbing activity” shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.
- B. A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier of the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.
- C. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or “TCR”), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the project applicant/lead agency upon written request to the Tribe.
- D. On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to the project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs.

TCR-2: Unanticipated Discovery of Tribal Cultural Resource Objects (Non-Funerary/Non-Ceremonial)

- A. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes.

TCR-3: Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects

- A. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.
- B. If Native American human remains and/or grave goods are discovered or recognized on the project site, then Public Resource Code 5097.9 as well as Health and Safety Code Section 7050.5 shall be followed.
- C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2).
- D. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods.
- E. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

***PLEASE NOTE THE FOLLOWING:***

Any/all revisions to the Kizh's proposed TCR Conditions of Approval set forth above must be requested in writing, and not more than ten (30) calendar days from the date that we consulted on the subject Project so that we can conclude consultation. Requested revisions shall be delivered to the Kizh via email at [admin@gabrielenoindians.org](mailto:admin@gabrielenoindians.org), and in a Word document, redline format. Please include as the email subject: "REQUEST FOR MITIGATION REVISIONS," and identify the project name and location/address. If revisions are not requested within 10 calendar days of consultation, the Kizh's proposed Conditions of Approval are presumed accepted as proposed (i.e., as set forth above).

***The laws preserving the confidentiality of Native American documents and records prohibits the inclusion of any information about the location of Native American artifacts, sites, sacred lands, or any other information that is exempt from public disclosure pursuant to the Public Records Act. (Cal. Code Regs. § 15120(d) Rocklin (2011) 197 Cal.App.4th 200, at p. 220. Please be advised that these protective Conditions***

*of Approval are property of the KIZH Nation Tribal government and no other entity or Tribal government nor should they be utilized for any other Tribal government or entity and are protected under the AB52 confidentiality act During AB 52/AB 130/SB 18 consultation, the Gabrieleño Band of Mission Indians – Kizh Nation provided substantial evidence: (1) confirming their direct ancestral connection to and cultural affiliation with the geographic area that encompasses the subject project; and (2) establishing their expertise of known and undiscovered tribal cultural resources located in the project’s geographic area. Therefore, the parties acknowledge and agree that the project’s impacts to tribal cultural resources will be mitigated by and through the Kizh Nation’s tribal monitoring for all ground-disturbing project-related activities. To ensure fulfillment and compliance with the law and policy contemplated by CEQA, NEPA, CERCLA, and other relevant state and federal legislation, the parties further agree that the Kizh Nation’s expertise of the tribal cultural resources located in the project’s geographic area shall not be implemented by another entity without the prior written consent of the Kizh Nation.*

Thank you for your anticipated cooperation.