

REPORT TO THE REGIONAL PLANNING COMMISSION

DATE ISSUED:	July 30, 2026	
HEARING DATE:	August 12, 2026	AGENDA ITEM: 12
PROJECT NUMBER:	PRJ2021-004371-(3)	
PERMIT NUMBER(S):	Major Coastal Development Permit RPPL2021012462	
SUPERVISORIAL DISTRICT:	3	
PROJECT LOCATION:	731 Malibu Canyon Road, Calabasas	
OWNER:	Las Virgenes Municipal Water District	
APPLICANT:	Las Virgenes Municipal Water District	
CASE PLANNER:	William Chen, AICP, Senior Planner WChen@planning.lacounty.gov	

RECOMMENDATION

LA County Planning staff ("Staff") recommends **APPROVAL** of Project Number PRJ2021-004371-(3), Major Coastal Development Permit ("MCDP") Number RPPL2021012462, based on the Findings (Exhibit C – Findings) contained within this report and subject to the Draft Conditions of Approval (Exhibit D – Conditions of Approval).

Staff recommends the following motion:

ENTITLEMENT(S):

I MOVE THAT THE REGIONAL PLANNING COMMISSION APPROVE MAJOR COASTAL DEVELOPMENT PERMIT NUMBER RPPL2021012462 SUBJECT TO THE ATTACHED FINDINGS AND CONDITIONS.
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PROJECT DESCRIPTION

A. Entitlement(s) Required

- The MCDP is required for development associated with providing access to appurtenant infrastructure for the distribution of water for an existing water reclamation

facility located in the IT (Institutional) and O-S-P (Open Space Park) Zones pursuant to Los Angeles County Code ("County Code") Sections 22.44.1770 and 22.44.1780. Additionally, a Minor Coastal Development Permit is required because the Project proposes development in H1 or H2 Habitat or within 200 feet of H1 or H2 Habitat; approximately 400 cubic yards of total grading (approximately 200 cubic yards of cut and 200 cubic yards of fill); and the encroachment into the protected zone of 18 protected trees, including 15 coast live oak trees, one black walnut tree, one arroyo willow tree, and one blue elderberry tree pursuant to County Code Sections 22.44.860.B, 22.44.950.A, 22.44.1860.A, and 22.44.1260.C.2. Under County Code Section 22.44.860.C, the Director must identify the permit that requires the highest level of review, and the proposed development is subject to the highest level coastal development permit identified. Here, the Director identified the MCDP and Minor Coastal Development Permit and, given the MCDP is the highest level of review, the Project is subject to an MCDP.

B. Project

A request to construct five new manholes along an existing 24-inch outfall pipeline, which spans approximately 2,250 linear feet from the Tapia Water Reclamation Facility to Malibu Creek ("Project"). The manholes are intended to provide access for inspection of the pipeline to determine where the pipeline repair work will be implemented. The Project will be implemented in two phases; the first phase of which is the construction of the manholes. The second phase will be the repair work identified to the water distribution system following inspection. The anticipated repair work proposes utilizing trenchless rehabilitation methods, which are minimally invasive construction techniques used to repair or replace underground utility infrastructure.

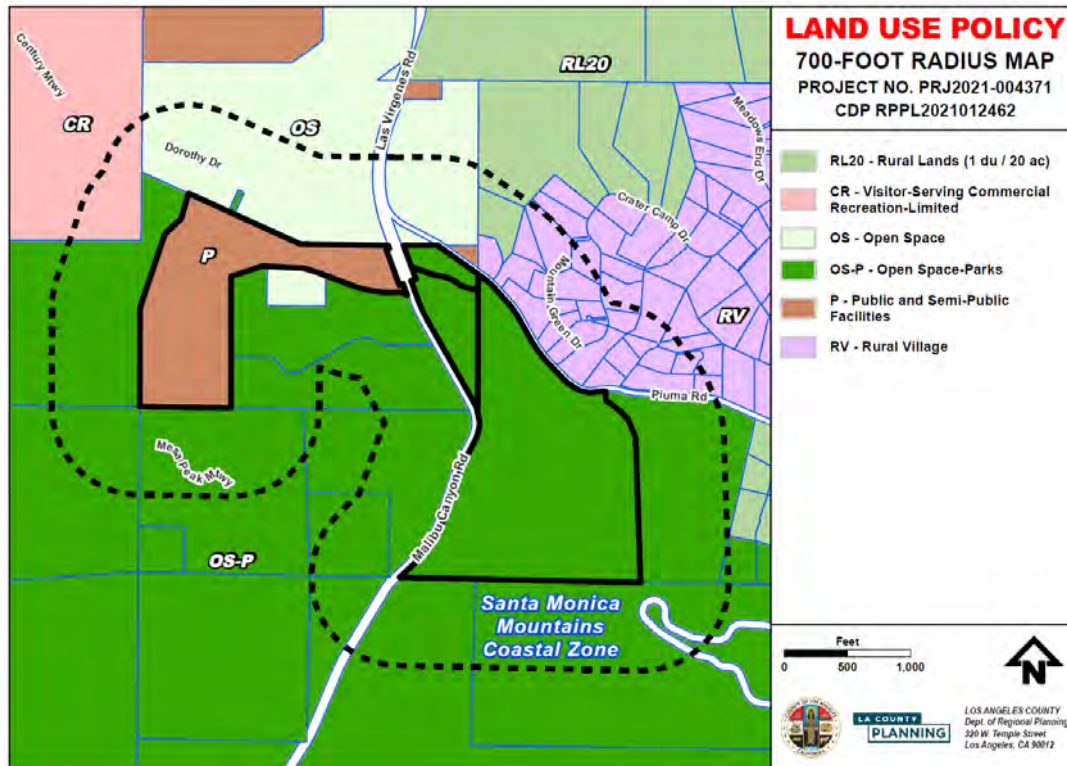
Each manhole is 36-inches in diameter and requires a temporary work area radius ranging from 13 to 25 feet. Each site will entail trench excavation, installation of a precast concrete manhole, and backfilling and compaction of soil. In total across all sites, approximately 200 cubic yards of soil would be excavated then backfilled.

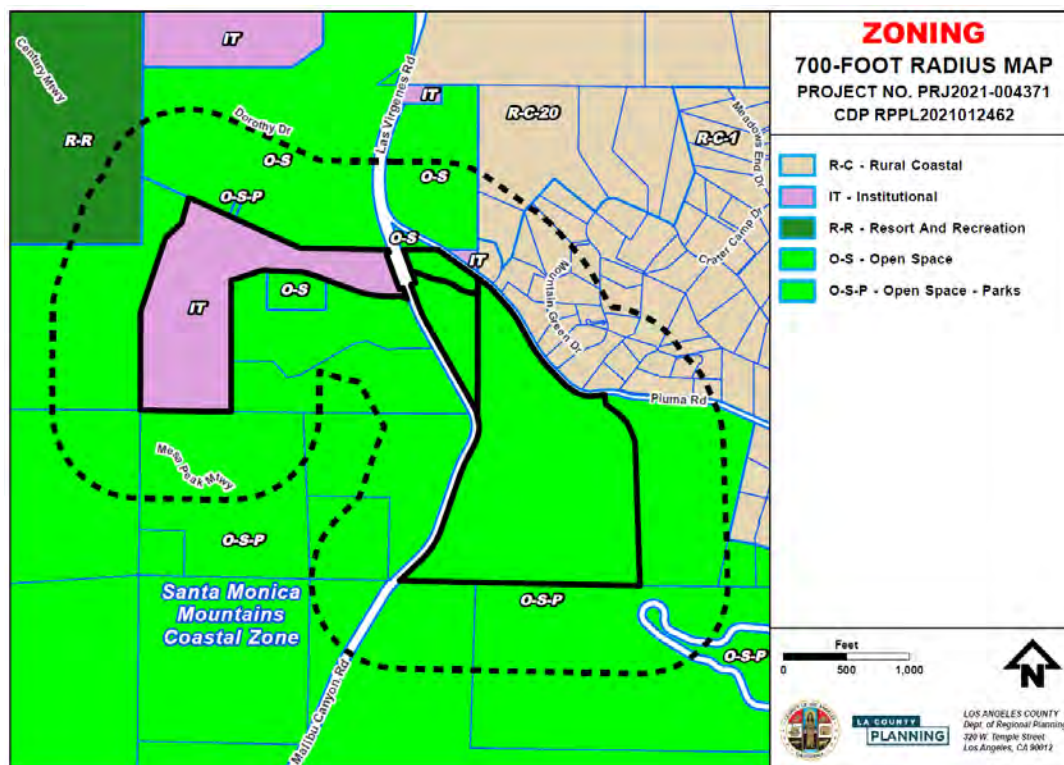
As part of Project implementation, a total of 18 protected trees are proposed to be encroached upon. Five protected trees, including four coast live oak trees and one black walnut tree, are proposed to be encroached upon by less than 10%. 12 protected trees, including 10 coast live oak trees, one arroyo willow tree, and one blue elderberry tree, are proposed to be encroached upon by between 10 and 30%. One protected tree, a coast live oak tree, is proposed to be encroached upon by more than 30%. Appropriate mitigation is proposed.

SUBJECT PROPERTY AND SURROUNDINGS

The following chart provides property data within a 500-foot radius:

LOCATION	SANTA MONICA MOUNTAINS LAND USE PLAN LAND USE POLICY	ZONING	EXISTING USES
SUBJECT PROPERTY	OS-P, P	IT, O-S-P	Water treatment facility
NORTH	OS, OS-P, P, RV	IT, O-S, O-S-P, R-C	Open space, residential
EAST	OS-P	O-S-P	Open space
SOUTH	OS, OS-P	O-S-, O-S-P	Open space
WEST	OS-P	O-S-P	Open space





PROPERTY HISTORY

A. Zoning History

ORDINANCE NO.	ZONING	DATE OF ADOPTION
20140055	IT, O-S-P	October 10, 2014
10754	A-1-1	September 25, 1973
7310	A-1-1	March 11, 1958
7076	M-3	December 26, 1956
1494	M-3	September 12, 1927

B. Previous Cases

CASE NO.	REQUEST	DATE OF ACTION
RPPL2020003294	Water pipeline connection	June 32, 2020

ANALYSIS

A. Land Use Compatibility

The Project is compatible with existing land uses in the surrounding area as the general utility infrastructure is already present (i.e., the 24-inch outfall pipeline running from Tapia Water Reclamation Facility to Malibu Creek) and the proposed work is only necessary to determine appropriate repair needs to that existing infrastructure. The surrounding area is generally undeveloped but for a water treatment facility, which this existing infrastructure

is a part of, and a few single-family residences. All work, once complete, will be on grade and ground disturbances will be restored. Given this, the Project is not expected to negatively affect the surrounding community.

B. Neighborhood Impact (Need/Convenience Assessment)

The neighborhood impact of the Project is minimal, as it would consist of a temporary construction area at five (5) separate locations, each occupying a footprint of up to a maximum of 25 feet in radius. Upon completion of the manholes, the visual impact would be negligible and surrounding habitat would be restored to a natural state. The Project Site is comprised of multiple undeveloped parcels of irregular shape. The Project aligns with existing land uses in the vicinity and minimal impacts to the surrounding neighborhood are proposed. There will be approximately 200 cubic yards of grading, in a defined and finite area, which will not alter the existing landform or topography. No modification of the existing fuel modification is necessary.

C. Design Compatibility

The Project Site is not visible from Las Virgenes Road, a designated major and scenic highway, or from any mapped trails. As a result, while the Project is within a Scenic Resource Area ("SRA") buffer, the Project does not result in any visual impacts as each manhole is 36-inches in diameter and rests flat on grade.

GENERAL PLAN/COMMUNITY PLAN CONSISTENCY

The Project is consistent with applicable goals and policies of the General Plan and the Santa Monica Mountains Land Use Plan. Consistency findings can be found in the attached Findings (Exhibit C – Findings).

ZONING ORDINANCE CONSISTENCY

The Project complies with all applicable zoning requirements. Consistency findings can be found in the attached Findings (Exhibit C – Findings).

BURDEN OF PROOF

The applicant is required to substantiate all facts identified by Sections 22.44.850 and 22.44.950.F of the County Code. The Burden of Proof with applicant's responses is attached (Exhibit E – Applicant's Burden of Proof). Staff is of the opinion that the applicant has met the burden of proof.

ENVIRONMENTAL ANALYSIS

Staff recommends that a Mitigated Negative Declaration is the appropriate environmental documentation under the California Environmental Quality Act ("CEQA") and the County environmental guidelines. On March 3, 2025, the Las Virgenes Municipal Water District, acting as Lead agency for purposes of CEQA, determined the Project would not have a significant effect on the environment. The Initial Study concluded that there are certain potentially significant environmental impacts associated with the project that can be reduced to less than significant with the implementation of the proposed mitigation measures. The

draft Mitigation Monitoring Program is included as an attachment (Exhibit F – Environmental Determination) to this report.

The areas of environmental impact found to be less than significant with project mitigation incorporated include the following:

Special Status Plant Species: Two special status plant species were observed within the Project's site: Fish's milkwort and Southern California black walnut. The Fish's milkwort individuals observed onsite are located outside of areas that would be disturbed during Project construction. Manhole construction would require work within the protected zone ("TPZ") of 18 trees, one of which is a special-status Southern California black walnut tree. The TPZ is defined by the Santa Monica Mountains Local Implementation Program as the tree's dripline plus five feet, or 15 feet from the trunk, whichever is greater. The remaining trees are not special-status species. The Southern California black walnut tree would have less than 10% of its TPZ encroached upon during construction and work activities would not result in the death of this tree. Therefore, the Project would not result in substantial adverse effects to the two special-status plant species observed within the Project site. Should other special-status plant species be encountered within the Project footprint, direct impacts could occur through injury or mortality to individuals by heavy equipment during construction. Indirect impacts to special-status plant species in the Project site could result from habitat modifications, such as by the introduction of invasive plants disseminated from construction equipment, contamination of soils, and habitat degradation due to accidental fuel spills during construction. Potential direct and indirect impacts to special-status plants would be reduced to less than significant through adherence to Measures BIO-1 through BIO-3, BIO-5, and BIO-7, which will reduce the likelihood of special-status plants being impacted. Additionally, implementation of measures BIO-4 and BIO-10 would minimize direct and Indirect impacts to these species and provide compensatory mitigation if special-status plants are impacted. Therefore, impacts to special-status plant species would be less than significant with mitigation incorporated.

Special Status Wildlife Species: The Project may impact special-status wildlife species if they are present onsite during construction or through habitat modification. However, adherence to mitigation measures BIO-1, BIO-2, BIO-5, BIO-7, and BIO-8 would avoid and/or minimize impacts if these species are present, therefore reducing potential direct and indirect effects to these species to a less than significant level. Direct impacts to fully aquatic species such as arroyo chub would not occur as ground disturbance would not occur within the water and would be confined to uplands outside of Malibu Creek, beyond the top of the bank. Potentially significant indirect impacts to water quality could occur due to sedimentation or erosion during construction. These potential impacts would be reduced to a less than significant level through adherence to Measures BIO-1, BIO-2, and BIO-7, which would minimize indirect impacts to Malibu Creek. The Project site contains habitat with the potential to support special-status birds. Although no nests were observed at the Project site, bird nesting habitat is present in the trees and shrubs occurring in and adjacent to the site and raptors could

nest within the taller trees in the area. Accordingly, the Project could also result in direct or indirect impacts to other non-listed special status bird species. Direct impacts may include mortality from vehicle or equipment strikes as foraging birds move through the Project site, and physical impacts to active nests within vegetation in the Project site. Indirect impacts could result from noise, vibration, and dust from construction activities throughout the Project site. Implementation of Measure BIO-6 would minimize potential direct and indirect effects to nesting special-status birds, and implementation of BIO-1, BIO-2, BIO-5, and BIO-7 would ensure impacts are avoided or minimized through the duration of construction activities. With the successful implementation of these mitigation measures, impacts to special-status nesting birds would be less than significant.

Impacts to special-status bat species may occur if individuals are roosting within the Project site during construction activities. Direct Project impacts could include mortality or harassment of bats through noise, light, and dust pollution. Indirect impacts could include a degradation of riparian habitat, which provides foraging opportunities for special-status bat species. These potential direct and indirect impacts would be reduced to a less than significant level through implementation of mitigation measures BIO-1, BIO-2, BIO-7, and BIO-8, which would confirm the presence or absence of bats in the Project site prior to construction and minimize impacts if these species are present. Overall, impacts to special-status wildlife species would be less than significant with implementation of mitigation measures BIO-1 through BIO-10.

Interference with Movement of Native Resident or Migratory Fish or Wildlife Species:

The Project is located in a Natural Landscape Block and an Essential Connectivity Area and the portion of Malibu Creek in the Project site is likely utilized as a local wildlife movement passage under Las Virgenes Road. Wildlife could use the riparian corridor associated with Malibu Creek and the adjacent upland habitats.

No alterations would be made in the creek channel and, once installed, the manholes would not impede wildlife movement. However, wildlife movement may be temporarily disrupted due to construction activities (e.g., noise, light, dust, human presence). In addition, the long-term maintenance of the manholes may necessitate increased human presence in the area, which may negatively impact wildlife movement in the area for species active during daylight hours. Implementation of Measures BIO-1, BIO-2, BIO-8, and BIO-11 will reduce the potential for wildlife to be trapped or otherwise adversely affected, therefore reducing the potential impacts to wildlife movement to a less than significant level.

COMMENTS RECEIVED

A. County Department Comments and Recommendations

1. The Department of Public Health, in a letter dated June 22, 2022, recommended that the project proceed to public hearing with required conditions of approval.

2. The Department of Public Works, in a letter dated June 29, 2022, recommended that the Project proceed to public hearing.
3. The Environmental Review Board, at a meeting held on July 15, 2024, determined that the Project is consistent with the biological standards and policies in the Santa Monica Mountains Local Coastal Program.

B. Public Comments

Staff has not received any comments at the time of report preparation.

Report

Reviewed By:

Rob Glaser

Robert Glaser, Supervising Regional Planner

Report

Approved By:

M. Glaser

for David DeGrazia

David DeGrazia, Deputy Director

LIST OF ATTACHED EXHIBITS

EXHIBIT A	Plans
EXHIBIT B	Project Summary Sheet
EXHIBIT C	Findings
EXHIBIT D	Conditions of Approval
EXHIBIT E	Applicant's Burden of Proof
EXHIBIT F	Environmental Determination (MND and MMRP)
EXHIBIT G	Informational Maps
EXHIBIT H	Photos
EXHIBIT I	Agency Correspondence
EXHIBIT J	Public Correspondence
EXHIBIT K	Oak Tree Report



Know what's below.
Call before you dig.

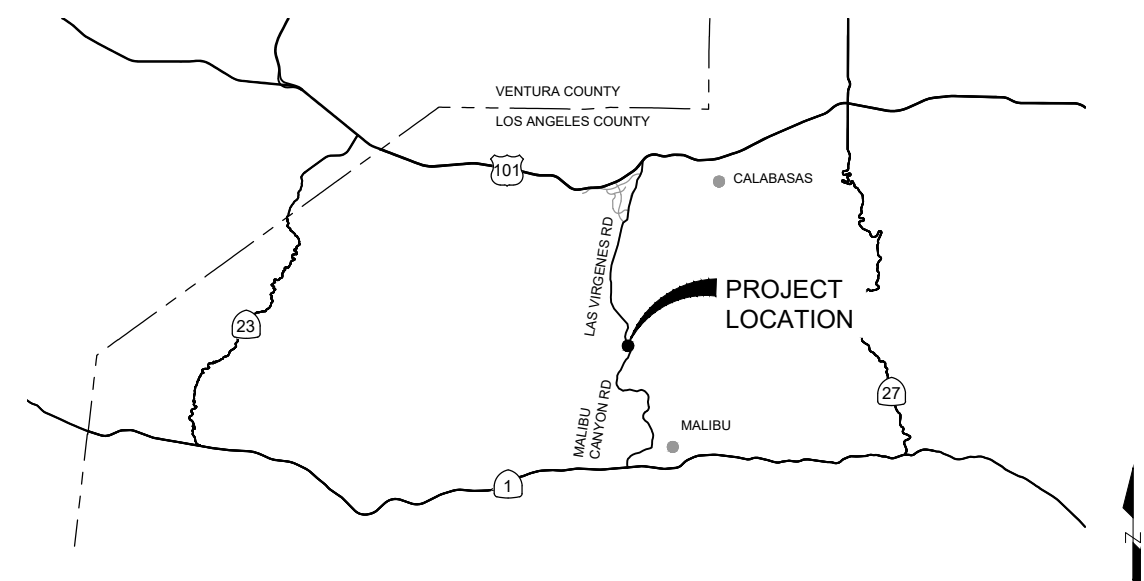
CONSTRUCTION PLANS FOR:

LAS VIRGENES - TRIUNFO JOINT POWERS AUTHORITY

CALABASAS, CALIFORNIA

TAPIA WATER RECLAMATION FACILITY: 003 OUTFALL ACCESS MANHOLE INSTALLATION

AUGUST 2020



VICINITY MAP
NOT TO SCALE

NOTES:

1. LOCATIONS AND DIMENSIONS OF EXISTING VALVE AND APPURTENANCES ARE BASED ON RECORD DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR VERIFYING LOCATION, DIMENSIONS, AND ELEVATIONS OF EXISTING PIPING, AND APPURTENANCES. IF ANY DISCREPANCIES EXIST BETWEEN PLANS AND EXISTING FACILITIES THAT WOULD AFFECT PROPOSED IMPROVEMENTS, CONTRACTOR WILL NOTIFY THE JPA IMMEDIATELY TO DETERMINE HOW TO PROCEED.
2. CONTRACTOR WILL WORK WITH JPA TO IDENTIFY STAGING AREAS WITHIN JPA PROPERTY OR ON ADJACENT PROPERTY EASEMENTS. STAGING AREAS TO BE DETERMINED DURING PRE-CONSTRUCTION MEETING.
3. PLANT SHUTDOWNS OR OPERATIONAL MODIFICATIONS TO BE COORDINATED WITH JPA STAFF PER SPECIFICATIONS.
4. CONTRACTOR TO REMOVE FROM THE SITE ANY MATERIALS DEMOLISHED AS PART OF THIS PROJECT.
5. RESTORE ALL PROPERTY AND INFRASTRUCTURE, INCLUDING UTILITIES DISTURBED BY CONSTRUCTION OPERATIONS TO THE CONDITIONS WHICH EXISTED PRIOR TO CONSTRUCTION. THE COST OF SUCH RESTORATION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE VARIOUS ITEMS OF WORK REQUIRING SUCH RESTORATION.

SHEET INDEX

SHEET	DRAWING	DESCRIPTION
1	G-001	TITLE SHEET, LOCATION MAP, GENERAL NOTES
2	C-101	SITE PLAN
3	C-102	DETAILS
4	C-103	DETAILS
5	C-104	DETAILS
6	C-105	DETAILS

CLIENT



LAS VIRGENES - TRIUNFO JOINT POWERS AUTHORITY
4232 LAS VIRGENES ROAD
CALABASAS, CA 91302
(818) 251-2100
WWW.LVMWD.COM

PROJECT

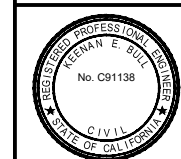
**TAPIA WATER RECLAMATION FACILITY: 003
OUTFALL ACCESS
MANHOLE INSTALLATION**



38 EXECUTIVE PARK, SUITE 320
IRVINE, CA 92614 (714) 213-9758

ENGINEER OF RECORD

KEENAN E. BULL
No. C691138

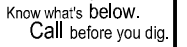


DATE
AUGUST 2020

SHEET
G-001
1 OF X

DWG: C:\Users\mkeenan\Documents\mkn\new\003\003\003\outfall\plan\plan003.dwg USER: mkeenan
DATE: Aug 14, 2020 5:00pm XREFS: KEBM_CALC_TSP-015 IMAGES: G:\M\LVWD\DWG G:\M\LVWD\DWG G:\M\LVWD\DWG G:\M\LVWD\DWG

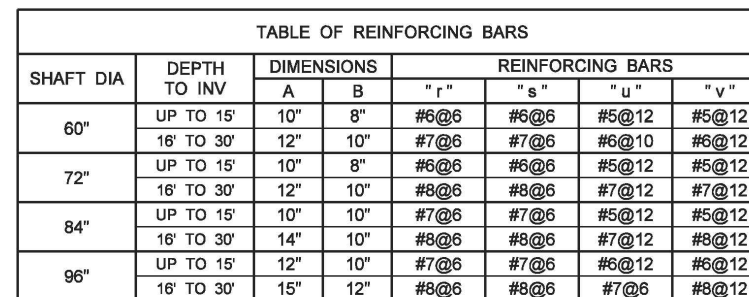
DATE: AUGUST 2020



1. ALL MANHOLES SHALL BE PROVIDED WITH A STANDARD PULL RING IN ACCORDANCE WITH S-A-220. THE PULL RING SHALL BE LOCATED 5" ABOVE THE TOP OF PIPE ON THE UPSTREAM SIDE OF THE MANHOLE AND ALONG THE AXIS OF THE DOWNSTREAM OUTLET.
2. MANHOLE STEPS SHALL BE IN ACCORDANCE WITH S-A-209 AND SHALL BE UNIFORMLY SPACED NOT MORE THAN 16" APART. THE TOP STEP SHALL BE PLACED WITHIN 16" BELOW THE MANHOLE FRAME. THE BOTTOM MANHOLE STEP SHALL BE PLACED WITHIN 16" ABOVE THE SHELF. IN MANHOLE SHAFTS 36" IN DIAMETER AND LARGER, THE MANHOLE STEP SHALL PROJECT 5". THE MANHOLE STEPS SHALL BE PLACED SUCH THAT THEY ARE ADJACENT TO BUT NOT INTERFERING WITH ACCESS TO THE PULL RING.
3. THE MANHOLE SHALL BE PROVIDED WITH PLASTIC LINER WITH LOCKING EXTENSIONS. PLASTIC LINER WITH LOCKING EXTENSIONS SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC) (GREENBOOK) SECTION 210 AND SPECIFICATION SECTION 034210. THE LINER SHALL EXTEND FROM THE BOTTOM OF THE ADJUSTING RINGS TO THE TOP OF THE SHELF UNLESS THE ADJACENT PIPE IS LINED. IF THE ADJACENT PIPE IS LINED, THE LINER SHALL EXTEND TO A POINT IN THE CHANNEL MATCHING THE BOTTOM OF THE LINER IN THE LINED PIPE. LINER RETURNS SHALL BE PROVIDED WHERE THE LINER TERMINATES AT THE ADJUSTING RING AND THE SHELF. THE JOINT BETWEEN THE LINER AND THE STAINLESS STEEL STEPS AND PULL RINGS SHALL BE THOROUGHLY SEALED WITH MASTIC SEAM MATERIAL AS MANUFACTURED BY LINABOND INC., SYLMAR, CALIFORNIA, OR EQUAL. APPLICATION OF THE SEALANT AND PREPARATION OF SURFACES SHALL BE IN STRICT CONFORMANCE WITH THE MANUFACTURER'S DIRECTIONS AND RECOMMENDATIONS.
4. UNLESS OTHERWISE SPECIFIED, ALL CONCRETE SHALL BE 660-B-4000 AND ALL REINFORCING BARS SHALL BE DEFORMED BARS CONFORMING TO ASTM-A706 GRADE 60.
5. A 36" MANHOLE FRAME AND COVER IN ACCORDANCE WITH S-A-215 AND SECTION 034210 SHALL BE PROVIDED.
6. A 12" WIDE BY 12" HIGH CONCRETE RING SHALL BE PROVIDED AROUND THE MANHOLE FRAME. IN UNPAVED AREAS, THE CONCRETE RING SHALL BE PROVIDED WITH #3 REBAR, 20 DIAMETER LAP.
7. EXCEPT AS NOTED HEREON, THE PRECAST UNITS SHALL BE MANUFACTURED AND TESTED IN ACCORDANCE WITH ASTM C478. THE CURING OF THE PRECAST UNITS SHALL CONFORM TO SECTION 207-2.7 OF THE SSPWC. AS AN ALTERNATE, THE UNITS MAY BE CURED USING SATURATED STEAM FOR A MINIMUM OF 12 HOURS FOLLOWED BY 6 DAYS OF WATER CURING OR MEMBRANE CURING. IF THE UNITS ARE CURED BY THE ALTERNATE METHOD, THEY SHALL NOT BE SHIPPED PRIOR TO 8 DAYS AFTER CASTING NOR UNTIL THE CONCRETE HAS ATTAINED A MINIMUM STRENGTH OF 4,000 PSI. THE RISER SECTIONS MAY BE REINFORCED OR UNREINFORCED. REINFORCED SECTIONS, INCLUDING ECCENTRIC CONES, SHALL HAVE A MINIMUM WALL THICKNESS OF 5" AND UNREINFORCED SECTIONS, INCLUDING CONES, SHALL HAVE A MINIMUM WALL THICKNESS OF 6". JOINTS SHALL BE TONGUE AND GROOVE AND SHALL BE ASSEMBLED USING CLASS "B" MORTAR. THE MORTARED JOINTS SHALL BE FLUSH AND TROWELED SMOOTH.
8. UNLESS OTHERWISE INDICATED ON THE DRAWINGS, CASE I OR II MAY BE USED BY THE CONTRACTOR AT HIS OPTION CONSISTENT WITH DIAMETER COVER LIMITATIONS INDICATED HEREON.

CASE I SHALL NOT BE USED FOR COVER ON PIPE LESS THAN 12 FT.
CASE II SHALL NOT BE USED FOR COVER ON PIPE MORE THAN 12 FT.
9. RISER SECTIONS 60" THROUGH 96" I.D. SHALL BE REINFORCED IN ACCORDANCE WITH ASTM C 478 AND SHALL HAVE THE FOLLOWING MINIMUM WALL THICKNESS (T).

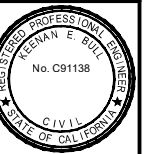
60" I.D. - 5"
10. THE TOP PORTION OF THE PIPES WITHIN THE MANHOLE SHALL BE CUT OUT AS NECESSARY TO PROVIDE A CIRCULAR OPENING BETWEEN THE PIPE ENDS OF AT LEAST 54" IN THE 60" DIAMETER MANHOLE. THE CIRCULAR OPENING SHALL BE CUT PRIOR TO INSTALLATION OF THE RISER SECTIONS.



STANDARD DRAWING
2006 EDITION
S - a - 206
SHEET 2 OF 4

NOTES:

1. BACKFILL AND DENSIFICATION SHALL CONFORM TO SPECIFICATION SECTION 312316.



**TAPIA WATER RECLAMATION FACILITY: 003
OUTFALL ACCESS MANHOLE INSTALLATION**

DETAILS

DESIGNED: KEB

DETAILED: MWT

CHECKED: KEB

APPROVED: _____

0 1/2

IF THIS BAR DOES NOT
APPEAR 1" THEN DRAWING

MEASURE 1" THEN DRAWING
IS NOT TO FULL SCALE

PROJECT NO.

11

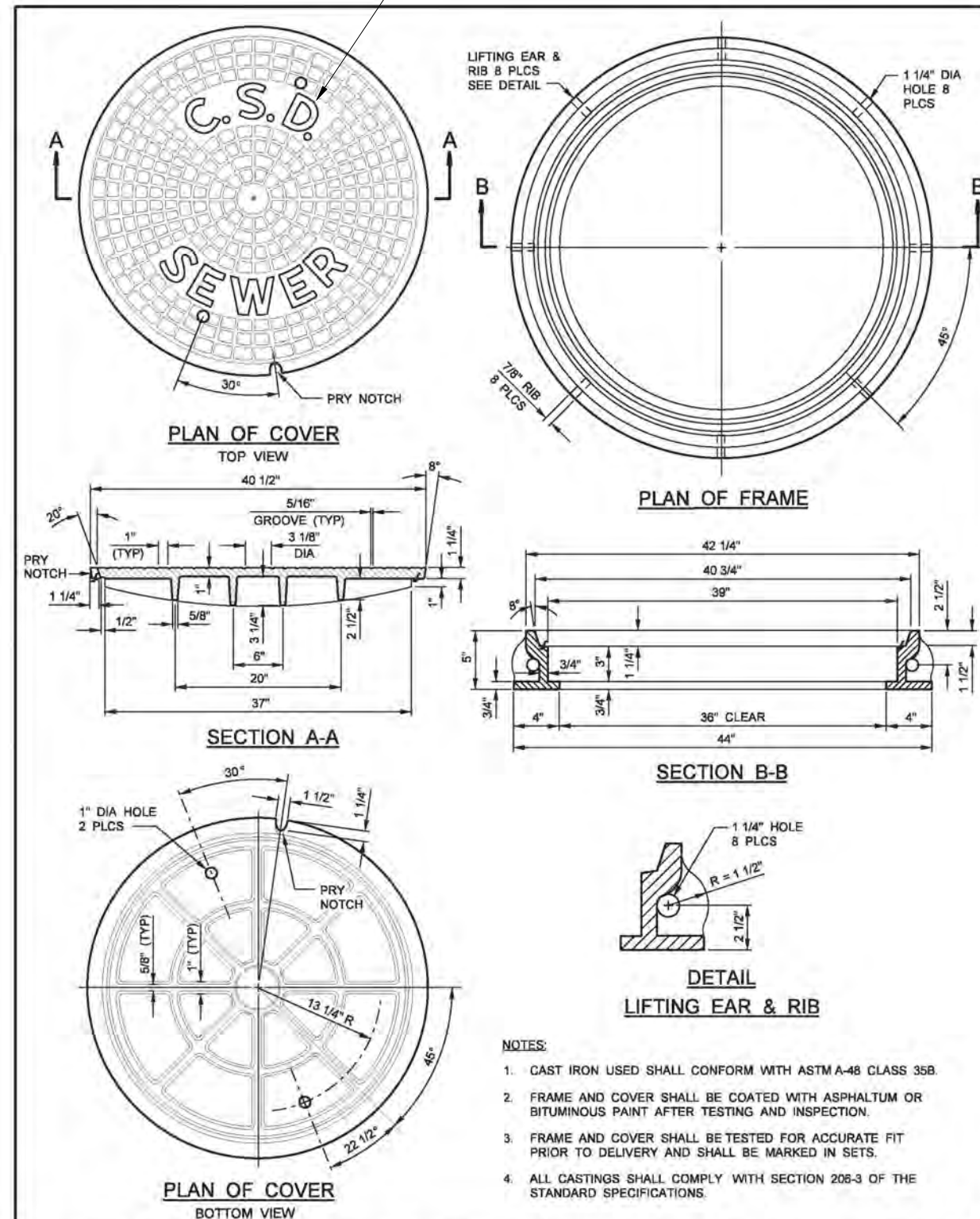
C 105

C-103

SHEET
6 OF 6

0 of 1

— LABEL ONLY "L.V.M.W.D."



NOTES:

1. CAST IRON USED SHALL CONFORM WITH ASTM A-48 CLASS 35B.
2. FRAME AND COVER SHALL BE COATED WITH ASPHALTUM OR BITUMINOUS PAINT AFTER TESTING AND INSPECTION.
3. FRAME AND COVER SHALL BE TESTED FOR ACCURATE FIT PRIOR TO DELIVERY AND SHALL BE MARKED IN SETS.
4. ALL CASTINGS SHALL COMPLY WITH SECTION 208-3 OF THE STANDARD SPECIFICATIONS.

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
OFFICE OF CHIEF ENGINEER

STEPHEN R. MAGUIN
CHIEF ENGINEER

STANDARD 36" MANHOLE FRAME AND COVER

STANDARD DRAWING
2006 EDITION
S - a - 215
SHEET 1 OF 1

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION

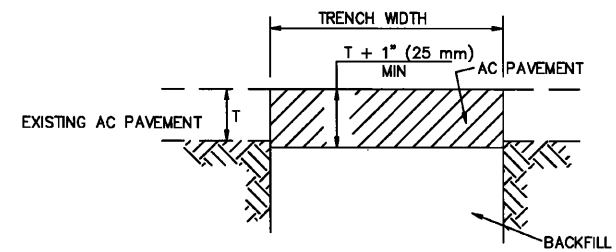
PROMULGATED BY THE
PUBLIC WORKS STANDARDS INC.
GREENBOOK COMMITTEE
1993
REV. 2005, 2009

ASPHALT CONCRETE PAVEMENT REPLACEMENT

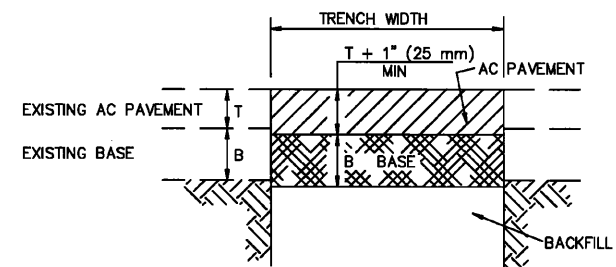
USE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

STANDARD PLAN
133-3

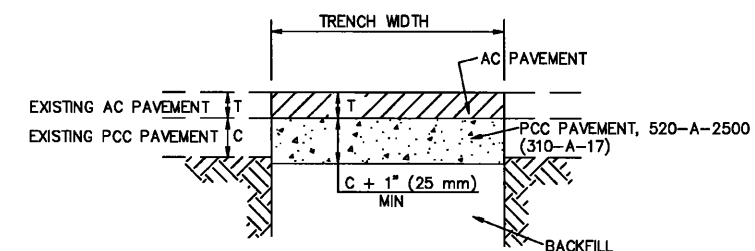
SHEET 1 OF 2



CASE 1 – WITHOUT BASE



CASE II - WITH BASE



CASE III – AC PVMT ON PCC PVMT



PROJECT NUMBER
PRJ2021-004371-(3)

HEARING DATE
August 12, 2026

REQUESTED ENTITLEMENT(S)
Major Coastal Development Permit No.
RPPL2021012462

PROJECT SUMMARY

OWNER / APPLICANT

Las Virgenes Municipal Water District

MAP/EXHIBIT DATE

August 2020

PROJECT OVERVIEW

A request to construct five new manholes along an existing 24-inch outfall pipeline, which spans approximately 2,250 linear feet from the Tapia Water Reclamation Facility to Malibu Creek. The new manholes are necessary to gain access to the existing pipeline to conduct necessary inspections, repairs, and maintenance. This request is subject to a Major Coastal Development Permit (CDP) pursuant to Los Angeles County Code Section 22.44.1770.D, since the use is appurtenant to a pipeline for the distribution of water, including water reclamation facilities located in an Open Space and Institutional Zone.

LOCATION

731 Malibu Canyon Road, Calabasas

ACCESS

Malibu Canyon Road

ASSESSORS PARCEL NUMBER(S)

4462-032-901, 4456-008-900, 4456-008-901, and
4456-008-903

SITE AREA

126 Acres

GENERAL PLAN / LOCAL PLAN

Santa Monica Mountains Land Use Plan

ZONED DISTRICT

The Malibu

PLANNING AREA

Santa Monica Mountains

LAND USE DESIGNATION

P, OS-P

ZONE

IT, O-S-P

PROPOSED UNITS

N/A

MAX DENSITY/UNITS

N/A

APPLICABLE STANDARDS DISTRICT(S)

N/A

ENVIRONMENTAL DETERMINATION (CEQA)

Mitigated Negative Declaration with a Mitigation Monitoring Reporting Program

KEY ISSUES

- Consistency with the Los Angeles County General Plan and Santa Monica Mountains Land Use Plan
 - Satisfaction of the following portions of Title 22 of the Los Angeles County Code:
 - o Section 22.44.810 - Coastal Development Permits - Permit Required
 - o Section 22.44.850 - Coastal Development Permit Burden of Proof
 - o Section 22.44.950.F - Oak Tree Burden of Proof
-

CASE PLANNER:

William Chen, AICP, Senior Planner

PHONE NUMBER:

(213) 974 - 0051

E-MAIL ADDRESS:

WChen@planning.lacounty.gov

LOS ANGELES COUNTY
DEPARTMENT OF REGIONAL PLANNING
FINDINGS OF THE REGIONAL PLANNING COMMISSION
AND ORDER
PROJECT NO. PRJ2021-004371-(3)
MAJOR COASTAL DEVELOPMENT PERMIT NO. RPPL2021012462

RECITALS

1. **HEARING DATE(S).** The Los Angeles County ("County") Regional Planning Commission ("Commission") conducted a duly-noticed public hearing in the matter of Major Coastal Development Permit ("MCDP") No. **RPPL2021012462** on August 12, 2026.
2. **HEARING PROCEEDINGS.** *Reserved.*
3. **ENTITLEMENT(S) REQUESTED.** The applicant, Las Virgenes Municipal Water District ("Permittee"), requests the MCDP to authorize construction of five new manholes along an existing 24-inch outfall pipeline which spans approximately 2,250 linear feet from the Tapia Water Reclamation Facility to Malibu Creek ("Project").
4. **ENTITLEMENT(S) REQUIRED.** The MCDP is required for development associated with providing access to appurtenant infrastructure for the distribution of water for an existing water reclamation facility located in the IT (Institutional) and O-S-P (Open Space Park) Zones pursuant to Los Angeles County Code ("County Code") Sections 22.44.1770 and 22.44.1780. Additionally, a Minor Coastal Development Permit is required because the Project proposes development in H1 or H2 Habitat or within 200 feet of H1 or H2 Habitat; approximately 400 cubic yards of total grading (approximately 200 cubic yards of cut and 200 cubic yards of fill); and the encroachment into the protected zone of 18 protected trees, including 15 coast live oak trees, one black walnut tree, one arroyo willow tree, and one blue elderberry tree pursuant to County Code Sections 22.44.860.B, 22.44.950.A, 22.44.1860.A, and 22.44.1260.C.2. Under County Code Section 22.44.860.C, the Director must identify the permit that requires the highest level of review, and the proposed development is subject to the highest level coastal development permit identified. Here, the Director identified the MCDP and Minor Coastal Development Permit and, given the MCDP is the highest level of review, the Project is subject to an MCDP.
5. **LOCATION.** The Project is located at 731 Malibu Canyon Road, Calabasas (APNs: 4462-032-901, 4456-008-900, 4456-008-901, 4456-008-903) within the Malibu Zoned District and Santa Monica Mountains Planning Area ("Project Site").
6. **LAND USE DESIGNATION.** The Project Site is located within the P (Public and Semi-Public Facilities) and OS-P (Open Space Park) land use categories of the Santa Monica Mountains Land Use Plan ("Land Use Plan") Land Use Policy Map.

7. SURROUNDING LAND USES AND ZONING

LOCATION	SANTA MONICA MOUNTAINS LAND USE PLAN	ZONING	EXISTING USES
NORTH	OS-P, Open Space ("OS"), P, Rural Village ("RV")	O-S-P, O-S, IT, Rural Coastal ("R-C-1")	Open Space, Residential
EAST	OS-P	O-S-P	Open Space
SOUTH	OS, OS-P	O-S, O-S-P	Open Space
WEST	OS-P	O-S-P	Open Space

8. PROJECT AND SITE PLAN DESCRIPTION.**A. Existing Site Conditions**

The Project Site is 126 gross acres in size and consists of four legal lots. The Project Site is irregular in shape with gentle-sloping and flat topography and is developed with a water reclamation facility.

B. Site Access

The Project Site is accessible via Malibu Canyon Road.

C. Site Plan

A request to construct five new manholes along an existing 24-inch outfall pipeline, which spans approximately 2,250 linear feet from the Tapia Water Reclamation Facility to Malibu Creek ("Project"). The manholes are intended to provide access for inspection of the pipeline to determine where the pipeline repair work will be implemented. The Project will be implemented in two phases; the first phase of which is the construction of the manholes. The second phase will be the repair work identified to the water distribution system following inspection. The anticipated repair work proposes utilizing trenchless rehabilitation methods, which are minimally invasive construction techniques used to repair or replace underground utility infrastructure.

Each manhole is 36-inches in diameter and requires a temporary work area radius ranging from 13 to 25 feet. Each site will entail trench excavation, installation of a precast concrete manhole, and backfilling and compaction of soil. In total across all sites, approximately 200 cubic yards of soil would be excavated then backfilled. As part of Project implementation, a total of 18 protected trees are proposed to be encroached upon. Five protected trees, including four coast live oak trees and one black walnut tree, are proposed to be encroached upon by less than 10%. 12 protected trees, including 10 coast live oak trees, one arroyo willow tree, and one blue elderberry tree, are proposed to be encroached upon by between 10 and 30%. One protected tree, a coast live oak tree, is proposed to be encroached upon by more than 30%. Appropriate mitigation is proposed.

9. **CEQA DETERMINATION.** Prior to the Commission's public hearing on the Project, an Initial Study was prepared for the Project in compliance with the California Environmental Quality Act (Public Resources Code section 21000, et seq.) ("CEQA"), the State CEQA Guidelines, and the Environmental Document Reporting Procedures and Guidelines for the County. Based on the Initial Study, the Las Virgenes Municipal Water District, functioning as Lead Agency, determined that a Mitigated Negative Declaration ("MND") was the appropriate environmental document for the Project. On March 3, 2025, the Lead Agency adopted the MND. The mitigation measures necessary to ensure the Project will not have a significant effect on the environment are contained in the Mitigation Monitoring and Reporting Program ("MMRP") prepared for the Project.

The areas of environmental impact found to be less than significant with Project mitigation incorporated include the following:

Special Status Plant Species: Two special status plant species were observed within the Project's site: Fish's milkwort and Southern California black walnut. The Fish's milkwort individuals observed onsite are located outside of areas that would be disturbed during Project construction. Manhole construction would require work within the protected zone ("TPZ") of 18 trees, one of which is a special-status Southern California black walnut tree. The TPZ is defined by the Santa Monica Mountains Local Implementation Program as the tree's dripline plus five feet, or 15 feet from the trunk, whichever is greater. The remaining trees are not special-status species. The Southern California black walnut tree would have less than 10% of its TPZ encroached upon during construction and work activities would not result in the death of this tree. Therefore, the Project would not result in substantial adverse effects to the two special-status plant species observed within the Project site. Should other special-status plant species be encountered within the Project footprint, direct impacts could occur through injury or mortality to individuals by heavy equipment during construction. Indirect impacts to special-status plant species in the Project site could result from habitat modifications, such as by the introduction of invasive plants disseminated from construction equipment, contamination of soils, and habitat degradation due to accidental fuel spills during construction. Potential direct and indirect impacts to special-status plants would be reduced to less than significant through adherence to Measures BIO-1 through BIO-3, BIO-5, and BIO-7, which will reduce the likelihood of special-status plants being impacted. Additionally, implementation of measures BIO-4 and BIO-10 would minimize direct and Indirect impacts to these species and provide compensatory mitigation if special-status plants are impacted. Therefore, impacts to special-status plant species would be less than significant with mitigation incorporated.

Special Status Wildlife Species: The Project may impact special-status wildlife species if they are present onsite during construction or through habitat modification. However, adherence to mitigation measures BIO-1, BIO-2, BIO-5, BIO-7, and BIO-8 would avoid and/or minimize impacts if these species are present, therefore reducing potential direct and indirect effects to these species to a less than significant level. Direct impacts to fully aquatic species such as arroyo chub would not occur as ground disturbance would not occur within the water and would be confined to uplands outside of Malibu Creek, beyond the top of the bank. Potentially significant indirect impacts to

water quality could occur due to sedimentation or erosion during construction. These potential impacts would be reduced to a less than significant level through adherence to Measures BIO-1, BIO-2, and BIO-7, which would minimize indirect impacts to Malibu Creek. The Project site contains habitat with the potential to support special-status birds. Although no nests were observed at the Project site, bird nesting habitat is present in the trees and shrubs occurring in and adjacent to the site and raptors could nest within the taller trees in the area. Accordingly, the Project could also result in direct or indirect impacts to other non-listed special status bird species. Direct impacts may include mortality from vehicle or equipment strikes as foraging birds move through the Project site, and physical impacts to active nests within vegetation in the Project site. Indirect impacts could result from noise, vibration, and dust from construction activities throughout the Project site. Implementation of Measure BIO-6 would minimize potential direct and indirect effects to nesting special-status birds, and implementation of BIO-1, BIO-2, BIO-5, and BIO-7 would ensure impacts are avoided or minimized through the duration of construction activities. With the successful implementation of these mitigation measures, impacts to special-status nesting birds would be less than significant.

Impacts to special-status bat species may occur if individuals are roosting within the Project site during construction activities. Direct Project impacts could include mortality or harassment of bats through noise, light, and dust pollution. Indirect impacts could include a degradation of riparian habitat, which provides foraging opportunities for special-status bat species. These potential direct and indirect impacts would be reduced to a less than significant level through implementation of mitigation measures BIO-1, BIO-2, BIO-7, and BIO-8, which would confirm the presence or absence of bats in the Project site prior to construction and minimize impacts if these species are present. Overall, impacts to special-status wildlife species would be less than significant with implementation of mitigation measures BIO-1 through BIO-10.

Interference with Movement of Native Resident or Migratory Fish or Wildlife Species: The Project is located in a Natural Landscape Block and an Essential Connectivity Area and the portion of Malibu Creek in the Project site is likely utilized as a local wildlife movement passage under Las Virgenes Road. Wildlife could use the riparian corridor associated with Malibu Creek and the adjacent upland habitats.

No alterations would be made in the creek channel and, once installed, the manholes would not impede wildlife movement. However, wildlife movement may be temporarily disrupted due to construction activities (e.g., noise, light, dust, human presence). In addition, the long-term maintenance of the manholes may necessitate increased human presence in the area, which may negatively impact wildlife movement in the area for species active during daylight hours. Implementation of Measures BIO-1, BIO-2, BIO-8, and BIO-11 will reduce the potential for wildlife to be trapped or otherwise adversely affected, therefore reducing the potential impacts to wildlife movement to a less than significant level.

10. PUBLIC COMMENTS.

- A. County Department of Public Health: Recommended clearance to public hearing with conditions in a letter dated June 22, 2022.
- B. County Department of Public Works: Recommended clearance to public hearing with no conditions in a letter dated June 29, 2022.
- C. County Environmental Review Board: Determined the Project is consistent with the biological standards and policies in the Santa Monica Mountains Local Coastal Program at a meeting held on July 15, 2024.

11. LEGAL NOTIFICATION. Pursuant to Section 22.44.990 of the County Code, the community was properly notified of the public hearing by mail, newspaper (The Daily Journal), and property posting. Additionally, the Project was noticed and case materials were available on LA County Planning's website. On July 6, 2026, a total of 44 Notices of Public Hearing were mailed to all property owners as identified on the County Assessor's record within a 1,000-foot radius from the Project Site, as well as 19 notices to those on the courtesy mailing list for the Malibu Zoned District and to any additional interested parties.

GENERAL PLAN/COMMUNITY PLAN CONSISTENCY FINDINGS

12. LAND USE POLICY. The Commission finds that the Project is consistent with the goals and policies of the Land Use Plan because the P and OS-P land use categories are intended for facilities appurtenant to public recreation areas and activities conducted by public and quasi-public agencies, categories into which this Project falls.

13. GOALS AND POLICIES. The Commission finds that the Project is consistent with the following goals and policies of the Land Use Plan:

LAND USE AND HOUSING ELEMENT***Policy LU-2:***

Retain the area's natural setting, rural and semi-rural character, and scenic features.

Policy LU-12:

Require that the extension of water, sewer, or utility infrastructure to serve development be located within legally existing roadways and road rights-of-way in a manner that avoids adverse impacts to coastal resources to the maximum extent feasible. Such infrastructure shall be sized and otherwise designed to provide only for the approved development to avoid growth-inducing impacts.

PUBLIC FACILITIES ELEMENT***Goal PF-1:***

Adequate water supplies and water and sewage disposal systems to support existing and future planned land uses.

PF-6 Maximize use of recycled water and thereby reduce the need for exploiting domestic water supplies when potable water is not required.

PF-7 Require the use of recycled water for commercial and public uses and facilities, such as golf courses, landscape irrigation, maintenance of public lands, and other approved purposes where this resource can be feasibly provided.

The Project supports the longevity of existing water reclamation infrastructure through maintenance and reduces the likelihood of more invasive construction projects. The Tapia Water Reclamation Facility provides recycled wastewater for community irrigation use and constitutes about 20% of all the water delivered by the Las Virgenes Municipal Water District.

ZONING CODE CONSISTENCY FINDINGS

14. **PERMITTED USE IN ZONE.** The Commission finds that the Project is consistent with the O-S-P, O-S, and IT Zone classifications as water reclamation facilities are permitted in such zones with an MCDP pursuant to County Code Sections 22.44.1770 (O-S Open-Space Zone) and 22.44.1780 (IT Institutional Zone).
15. **REQUIRED YARDS.** The Commission finds that the Project is consistent with the standards identified in County Code Section 22.44.1375 (Yards). The Project does not generate development which encroaches into required yards.
16. **HEIGHT.** The Commission finds that the Project is consistent with the standard identified in County Code Section 22.44.1250 (Height Limits). The Project does not generate development which would protrude above natural grade.
17. **LIGHTING.** The Commission finds that the Project is consistent with the standards identified in County Code Section 22.44.1920.E (Lighting). The Project does not involve the installation of any permanent lighting or temporary construction lighting.
18. **BIOLOGICAL RESOURCES.** The Commission finds that the Project is consistent with the biological resource requirements of County Code Section 22.44.1800. et. seq. The Project's biological assessment report indicates unavoidable permanent impacts of 7 square feet to H1 Habitat. The Project's biological assessment report also indicates unavoidable temporary impacts of 4,548 square feet of H1 Habitat and 588 square feet of H2 Habitat. Based on this impacts analysis of the total area of H1 and H2 Habitat impacted by the Project, the total Habitat Impact Fee amount required, pursuant to County Code Section 22.44.1950.A.3.f, shall be \$10,017.36 (0.12 acres multiplied by the current In-lieu Fee, which is \$83,478.00 per acre for the approved building site area, access roads, and turnaround areas). The Project has been conditioned to require best management practices, restoration plans, and/or compensation pursuant to a Resource Conservation Program to mitigate temporary and permanent impacts to sensitive environmental resource areas.

Additionally, the Project proposes development in H1 Habitat and within 200 feet of H1 Habitat, which requires compliance with County Code Sections 22.44.1890.C, D, and E. Through discussions with California Coastal Commission staff on May 15, 2024, it was agreed that the Project proposes activities akin to public works projects to repair or protect existing public roads and therefore the Project can be allowed in H1 Habitat, the H1 Buffer, and H1 Quiet Zone.

19. **OAK AND NATIVE TREE PROTECTION.** The Commission finds that the Project is consistent with the standards identified in County Code Sections 22.44.950 and 22.44.1920.K. In total, the Project will result in the encroachment into the protected zone of 18 protected native trees, including oak trees. Of those 18 trees, five (four coast live oak trees and one black walnut tree) will be encroached upon by less than 10%. 12 (10 coast live oak trees, one arroyo willow tree, and one blue elderberry tree) will be encroached upon between 10 and 30%. One (a coast live oak tree) will be encroached upon by more than 30%.

The Project is conditioned to require, in total:

Species	Encroachment Percentage	Mitigation Ratio	Number of Mitigation Trees
Coast Live Oak	2%	Monitoring for a period of 10 years (10:1 if monitored tree dies or suffers worsened health or vigor within 10-year monitoring period) (+2 if offsite mitigation outside the relevant watershed is required)	0 (10) (12)
Coast Live Oak	3%	Monitoring for a period of 10 years (10:1 if monitored tree dies or suffers worsened health or vigor within 10-year monitoring period) (+2 if offsite mitigation outside the relevant watershed is required)	0 (10) (12)
Coast Live Oak	6%	Monitoring for a period of 10 years (10:1 if monitored tree dies or suffers worsened health or vigor within 10-year monitoring period) (+2 if offsite mitigation outside the relevant watershed is required)	0 (10) (12)
California Black Walnut	6%	Monitoring for a period of 10 years (10:1 if monitored tree dies or suffers worsened health or vigor within 10-year monitoring period) (+2 if offsite mitigation outside the relevant watershed is required)	0 (10) (12)

Coast Live Oak	9%	Monitoring for a period of 10 years (10:1 if monitored tree dies or suffers worsened health or vigor within 10-year monitoring period) (+2 if offsite mitigation outside the relevant watershed is required)	0 (10) (12)
Coast Live Oak	14%	5:1 for onsite mitigation inside the relevant watershed (+2 if offsite mitigation outside the relevant watershed is required)	5 (7)
Arroyo Willow	16%	5:1 for onsite mitigation inside the relevant watershed (+2 if offsite mitigation outside the relevant watershed is required)	5 (7)
Blue Elderberry	17%	5:1 for onsite mitigation inside the relevant watershed (+2 if offsite mitigation outside the relevant watershed is required)	5 (7)
Coast Live Oak	18%	5:1 for onsite mitigation inside the relevant watershed (+2 if offsite mitigation outside the relevant watershed is required)	5 (7)
Coast Live Oak	18%	5:1 for onsite mitigation inside the relevant watershed (+2 if offsite mitigation outside the relevant watershed is required)	5 (7)
Coast Live Oak	21%	5:1 for onsite mitigation inside the relevant watershed (+2 if offsite mitigation outside the relevant watershed is required)	5 (7)
Coast Live Oak	22%	5:1 for onsite mitigation inside the relevant watershed (+2 if offsite mitigation outside the relevant watershed is required)	5 (7)
Coast Live Oak	25%	5:1 for onsite mitigation inside the relevant watershed (+2 if offsite mitigation outside the relevant watershed is required)	5 (7)
Coast Live Oak	26%	5:1 for onsite mitigation inside the relevant watershed (+2 if offsite mitigation outside the relevant watershed is required)	5 (7)
Coast Live Oak	26%	5:1 for onsite mitigation inside the relevant watershed (+2 if offsite mitigation outside the relevant watershed is required)	5 (7)

Coast Live Oak	27%	5:1 for onsite mitigation inside the relevant watershed (+2 if offsite mitigation outside the relevant watershed is required)	5 (7)
Coast Live Oak	30%	5:1 for onsite mitigation inside the relevant watershed (+2 if offsite mitigation outside the relevant watershed is required)	5 (7)
Coast Live Oak	32%	10:1 for onsite mitigation inside the relevant watershed (+2 if offsite mitigation outside the relevant watershed is required)	10 (12)
Total:			70-156

The Project is also conditioned to require the submittal and implementation of an oak tree protection plan consistent with County Code Section 22.44.950.O.6.

20. **GRADING REQUIREMENTS.** The Commission finds that the Project is consistent with the applicable grading requirements identified in County Code Section 22.44.1260. The Project proposes approximately 200 cubic yards of total cut to take place as part of excavation activities and approximately 200 cubic yards of fill, which will be backfilled in the excavated area once work is complete. This cut and fill activity will not substantially alter the existing topography as this balancing onsite will work to restore the Project Site back to the general condition it was in before the development was undertaken.

COASTAL DEVELOPMENT PERMIT FINDINGS

21. **The Commission finds that the proposed development is in conformity with the certified local coastal program.** The Project is consistent with the permitted land uses and the proposed development adheres to all development standards. The identified impacts to H1 and H2 Habitats have been appropriately mitigated through these conditions of approval.
22. **The Commission finds that any development, located between the nearest public road and the sea or shoreline of any body of water located within the coastal zone, is in conformity with the public access and public recreation policies of Chapter 3 of Division 20 of the Public Resources Code.** The Project Site is not located within the mentioned area.

23. The Commission finds that a grant term is not necessary for this permit.

COASTAL DEVELOPMENT PERMIT FINDINGS - OAK TREES

25. **The Commission finds that the proposed construction of proposed use will be accomplished without endangering the health of the remaining trees other than those proposed to be removed or encroached upon, that are subject to this section, if any, on the subject property.** The Project is conditioned to require the

implementation of a tree protection program to protect the health of the remaining trees that are not proposed to be encroached upon.

26. **The Commission finds that the encroachment, removal, or relocation of the oak tree(s) proposed will not result in soil erosion through the diversion or increased flow of surface waters which cannot be satisfactorily mitigated.** The Project does not propose the removal or relocation of any trees and no diversion or increased flow of surface waters is contemplated. The Project will not introduce new hardscapes that could result in soil erosion and best management practices are required to be implemented to ensure soil erosion is limited to the greatest extent feasible.
27. **The Commission finds that the proposed removal or encroachment is consistent with the development standards detailed in subsection G of this section and all other applicable LIP standards.** The Project is appropriately conditioned to ensure proposed development within the protected zone of any protected oak tree is undertaken in line with the requirements of the LIP and that mitigation measures are implemented to ensure the planting and monitoring of required mitigation trees.
28. **The Commission finds that where oak tree removal or encroachment is not proposed concurrently with and to accommodate other new development, in addition to the facts above, at least one of the following findings apply: (i) That the oak tree(s) proposed for encroachment, removal, or relocation interferes with utility services or streets and highways, either within or outside of the subject property, and no reasonable alternative to such interference exists other than encroachment or removal of the tree(s); or (ii) That the condition of the oak tree(s) proposed for removal with reference to seriously debilitating disease or danger of falling is such that it cannot be remedied through reasonable preservation procedures and practices and the tree(s) is located in proximity to existing development, or in other areas where falling limbs or trunks would be a danger to public safety.** The Project is proposed concurrently and to accommodate other new development, specifically the construction of five new manholes along an existing 24-inch outfall pipeline which spans approximately 2,250 linear feet from the Tapia Water Reclamation Facility to Malibu Creek.

ENVIRONMENTAL FINDINGS

34. After consideration of the certified MND and MMRP, together with the comments received during the public review process conducted by the Las Virgenes Municipal Water District, the Commission finds on the basis of the whole record before it that there is no substantial evidence that the Project as conditioned will have a significant effect on the environment, and further finds that the MND reflects the independent judgment and analysis of the Commission. The Project was certified by the Permittee, functioning as the lead agency.
35. The Commission finds that the MMRP for the Project is consistent with the conclusions and recommendations of the MND and that the MMRP's requirements are

incorporated into the conditions of approval for the Project. The Project was certified by the Permittee, functioning as the lead agency.

36. The Commission finds that the Permittee is subject to payment of the California Department of Fish and Wildlife fees related to the Project's effect on wildlife resources pursuant to section 711.4 of the California Fish and Game Code. The Project was determined to have a less than significant impact with mitigation incorporated on California Department of Fish and Wildlife jurisdictional areas.

ADMINISTRATIVE FINDINGS

37. **PUBLIC MEETINGS.** The Commission finds that the Project is not subject to SB 330 (The Housing Crisis Act).

38. **LOCATION OF DOCUMENTS.** The location of the documents and other materials constituting the record of proceedings upon which the Commission's decision is based in this matter is at LA County Planning, 13th Floor, Hall of Records, 320 West Temple Street, Los Angeles, California 90012. The custodian of such documents and materials shall be the Section Head of the Coastal Development Services Section, LA County Planning.

BASED ON THE FOREGOING, THE REGIONAL PLANNING COMMISSION CONCLUDES THAT:

- A. The proposed development is in conformity with the certified local coastal program.
- B. Any development located between the nearest public road and the sea or shoreline of any body of water located within the coastal zone, is in conformity with the public access and public recreation policies of Chapter 3 of Division 20 of the Public Resources Code.
- C. The proposed construction of proposed use will be accomplished without endangering the health of the remaining trees other than those proposed to be removed or encroached upon, that are subject to this section, if any, on the subject property.
- D. The encroachment, removal, or relocation of the oak tree(s) proposed will not result in soil erosion through the diversion or increased flow of surface waters which cannot be satisfactorily mitigated.
- E. The proposed removal or encroachment is consistent with the development standards detailed in subsection G of this section and all other applicable LIP standards.
- F. Where oak tree removal or encroachment is not proposed concurrently with and to accommodate other new development, in addition to the facts above, at least one of the following findings apply: (i) That the oak tree(s) proposed for encroachment, removal, or relocation interferes with utility services or streets and highways, either within or outside of the subject property, and no reasonable alternative to such interference

exists other than encroachment or removal of the tree(s); or (ii) That the condition of the oak tree(s) proposed for removal with reference to seriously debilitating disease or danger of falling is such that it cannot be remedied through reasonable preservation procedures and practices and the tree(s) is located in proximity to existing development, or in other areas where falling limbs or trunks would be a danger to public safety.

THEREFORE, THE REGIONAL PLANNING COMMISSION:

1. Certifies that the MND for the Project was completed in compliance with CEQA and the State and County CEQA Guidelines related thereto; certifies that it independently reviewed and considered the MND and that the MND reflects the independent judgment and analysis of the Commission as to the environmental consequences of the Project; certifies that it considered the MMRP, finding that it is adequately designed to ensure compliance with the mitigation measures during Project implementation; determined that on the basis of the whole record before the Commission that there is no substantial evidence that the Project will have a significant effect on the environment; adopts the MND and finds that the MMRP is adequately designed to ensure compliance with the mitigation measures during Project implementation; and
2. Approves **MAJOR COASTAL DEVELOPMENT PERMIT NO. RPPL2021012462**, subject to the attached conditions.

ACTION DATE: [Month Day, Year]

VOTE:

Concurring:

Dissenting:

Abstaining:

Absent:

RG:NMM:wcc

July 30, 2026

c: Each Commissioner, Zoning Enforcement, Building and Safety

LOS ANGELES COUNTY
DEPARTMENT OF REGIONAL PLANNING

DRAFT CONDITIONS OF APPROVAL
PROJECT NO. PRJ2021-004371-(3)
MAJOR COASTAL DEVELOPMENT PERMIT NO. RPPL2021012462

PROJECT DESCRIPTION

The project authorizes the construction of five new manholes along an existing 24-inch outfall pipeline, which spans approximately 2,250 linear feet from Tapia Water Reclamation Facility to Malibu Creek subject to the following conditions of approval:

GENERAL CONDITIONS

1. **Permittee.** Unless otherwise apparent from the context, the term “Permittee” shall include the applicant, owner of the property, and any other person, corporation, or other entity making use of this grant.
2. **Affidavit of Acceptance.** This grant shall not be effective for any purpose until the Permittee, and the owner of the subject property if other than the Permittee, have filed at the office of the Los Angeles County ("County") Department of Regional Planning (“LA County Planning”) their affidavit stating that they are aware of and agree to accept all of the conditions of this grant, and until all required monies have been paid pursuant to Condition Nos. 10, 11 and 14. Notwithstanding the foregoing, this Condition No. 2 and Condition Nos. 4, 5, 9, 11, and 14 shall be effective pursuant to County Code Section 22.222.230 (Effective Date of Decision and Appeals).
3. **Date of Final Approval.** Unless otherwise apparent from the context, the term “date of final approval” shall mean the date the County’s action becomes effective pursuant to County Code Section 22.222.230 (Effective Date of Decision and Appeals).
4. **Indemnification.** The Permittee shall defend, indemnify, and hold harmless the County, its agents, officers, and employees from any claim, action, or proceeding against the County or its agents, officers, or employees to attack, set aside, void, or annul this permit approval, which action is brought within the applicable time period of Government Code section 65009 or any other applicable limitations period. The County shall promptly notify the Permittee of any claim, action, or proceeding and the County shall reasonably cooperate in the defense. If the County fails to promptly notify the Permittee of any claim, action, or proceeding, or if the County fails to cooperate reasonably in the defense, the Permittee shall not thereafter be responsible to defend, indemnify, or hold harmless the County.
5. **Litigation Deposit.** In the event that any claim, action, or proceeding as described above is filed against the County, the Permittee shall within ten days of the filing make an initial deposit with LA County Planning in the amount of up to \$5,000.00, from which actual costs and expenses shall be billed and deducted for the purpose of defraying the costs or expenses involved in LA County Planning's cooperation in the defense, including but not limited to, depositions, testimony, and other assistance provided to Permittee or Permittee's counsel.

If during the litigation process, actual costs or expenses incurred reach 80 percent of the amount on deposit, the Permittee shall deposit additional funds sufficient to bring the balance up to the amount of \$5,000.00. There is no limit to the number of supplemental deposits that may be required prior to completion of the litigation.

At the sole discretion of the Permittee, the amount of an initial or any supplemental deposit may exceed the minimum amounts defined herein. Additionally, the cost for collection and duplication of records and other related documents shall be paid by the Permittee according to County Code Section 2.170.010 (Fees for Providing County Records).

6. **Invalidation.** If any material provision of this grant is held or declared to be invalid by a court of competent jurisdiction, the permit shall be void and the privileges granted hereunder shall lapse.
7. **Recordation.** Upon any transfer or lease of the property during the term of this grant, the Permittee, or the owner of the subject property if other than the Permittee, shall promptly provide a copy of the grant and its conditions to the transferee or lessee of the subject property.
8. **Grant Term. This grant shall have no termination date.** In the event that the Permittee seeks to discontinue or otherwise change the use, notice is hereby given that the use of such property may require additional or different permits and would be subject to the then-applicable regulations.
9. **Expiration.** This grant shall expire unless used within two (2) years from the date of decision for this grant. A single one-year time extension may be requested in writing and with the payment of the applicable fee prior to such expiration date.
10. **Inspections.** The subject property shall be maintained and operated in full compliance with the conditions of this grant and any law, statute, ordinance, or other regulation applicable to any development or activity on the subject property. Failure of the Permittee to cease any development or activity not in full compliance shall be a violation of these conditions. No provision of any easement of or any other encumbrance on the property shall exempt the Permittee and/or property owner from compliance with these conditions and applicable regulations. Inspections shall be made to ensure compliance with the conditions of this grant as well as to ensure that any development undertaken on the subject property is in accordance with the approved site plan on file. The Permittee shall deposit with the County the sum **\$2,350.00**, which shall be placed in a performance fund and be used exclusively to reimburse LA County Planning for all expenses incurred while inspecting the premises to determine the Permittee's compliance with the conditions of this grant. The fund provides for **five (5)** inspections.

Inspections may be unannounced. Inspections may be conducted utilizing any available technologies, including, but not limited to, unmanned aircraft systems (UAS). Use of a UAS requires the consent of the Permittee pursuant to LA County Planning's UAS policy, which may be updated from time to time, and which shall be provided to the Permittee upon request.

If additional inspections are required to ensure compliance with the conditions of this grant, or if any inspection discloses that the subject property is being used in violation of any one of the conditions of this grant, the Permittee shall be financially responsible and shall reimburse LA County Planning for all additional enforcement efforts necessary to bring the subject property into compliance. The amount charged for additional inspections shall be **\$470.00** per inspection, or the current recovery cost established by LA County Planning at the time any additional inspections are required, whichever is greater.

11. **Fish and Wildlife Fees.** Unless a Certificate of Exemption is issued by the California Fish and Game Code, the Permittee shall pay the fees in effect at the time of the filing of the Notice of Determination, as provided for in Section 711.4 of the Fish and Game Code, currently **\$3,043.75**. No land use project subject to this requirement is final, vested, or operative until the fee is paid.
12. **Mitigation Monitoring and Reporting Program.** The Permittee shall comply with all mitigation measures identified in the Mitigation Monitoring and Reporting Program ("MMRP"), which are incorporated by this reference as if set forth fully herein.
13. **Covenant and Agreement.** Within thirty (30) days of the date of final approval of the grant by the County, the Permittee shall record a covenant and agreement, which attaches the MMRP and agrees to comply with the mitigation measures imposed by the Mitigated Negative Declaration for this project, in the Recorder's Office. Prior to recordation of the covenant, the Permittee shall submit a draft copy of the covenant and agreement to LA County Planning for review and approval. As a means of ensuring the effectiveness of the mitigation measures, the Permittee shall submit annual mitigation monitoring reports to LA County Planning for approval or as required. The reports shall describe the status of the Permittee's compliance with the required mitigation measures.
14. **Mitigation Monitoring and Reporting Program Deposit.** The Permittee shall deposit an initial sum of **\$6,000.00** with LA County Planning within thirty (30) days of the date of final approval of this grant in order to defray the cost of reviewing and verifying the information contained in the reports required by the MMRP. The Permittee shall replenish the mitigation monitoring account if necessary until all mitigation measures have been implemented and completed.
15. **Revocation.** Notice is hereby given that any person violating a provision of this grant is guilty of a misdemeanor. Notice is further given that the Regional Planning Commission ("Commission") or a Hearing Officer may, after conducting a public hearing, revoke or modify this grant, if the Commission or Hearing Officer finds that these conditions have been violated or that this grant has been exercised so as to be detrimental to the public's health or safety or so as to be a nuisance, or as otherwise authorized pursuant to County Code Chapter 22.238 (Modifications and Revocations). Failure of the Permittee to cease any development or activity not in full compliance shall be a violation of these conditions and may result in revocation.

16. **County Fire Code.** All development pursuant to this grant shall comply with the requirements of Title 32 (Fire Code) of the County Code to the satisfaction of the County Fire Department.
17. **County Public Works Requirements.** All development pursuant to this grant shall comply with the requirements of the County Department of Public Works to the satisfaction of said department.
18. **Exhibit "A."** All development pursuant to this grant shall comply with the requirements of Title 22 (Planning and Zoning) of the County Code and of the specific zoning of the subject property, unless specifically modified by this grant, as set forth in these conditions, including the approved Exhibit "A," or a revised Exhibit "A" approved by the Director of LA County Planning ("Director").
19. **Maintenance.** The Permittee shall maintain the subject property in a neat and orderly fashion. The Permittee shall maintain free of litter all areas of the premises over which the Permittee has control.
20. **Graffiti.** All structures, walls and fences open to public view shall remain free of graffiti or other extraneous markings, drawings, or signage that was not approved by LA County Planning. These shall include any of the above that do not directly relate to the business being operated on the premises or that do not provide pertinent information about said premises. The only exceptions shall be seasonal decorations or signage provided under the auspices of a civic or non-profit organization.

In the event of graffiti or other extraneous markings occurring, the Permittee shall remove or cover said markings, drawings, or signage within 48 hours, weather permitting. Paint utilized in covering such markings shall be of a color that matches, as closely as possible, the color of the adjacent surfaces.

21. **Revisions to the Exhibit "A".** The subject property shall be developed and maintained in substantial conformance with the plans marked Exhibit "A." If changes to any of the plans marked Exhibit "A" are required as a result of instruction given at the public hearing, **an electronic copy of a modified Exhibit "A"** shall be submitted to LA County Planning by **[Decision Date + 60 days]**.
22. **Subsequent Revisions to the Exhibit "A."** In the event that subsequent revisions to the approved Exhibit "A" are submitted, the Permittee shall submit **an electronic copy of** the proposed plans to the Director for review and approval. All revised plans must substantially conform to the originally approved Exhibit "A". All revised plans must be accompanied by the written authorization of the property owner(s) and applicable fee for such revision.

PERMIT-SPECIFIC CONDITIONS – COASTAL DEVELOPMENT PERMIT

23. **Protected Tree Encroachments and Mitigation.** This grant authorizes the encroachment into the protected zone of 18 protected trees. Of those 18 trees, five (four coast live oak trees and one black walnut tree) will be encroached upon by less than 10%. 12 (10 coast live oak trees, one arroyo willow tree, and one blue elderberry

tree) will be encroached upon between 10 and 30%. One (a coast live oak tree) will be encroached upon by more than 30%.

These impacts shall be mitigated through monitoring and/or the planting of replacement trees of a suitable type, size, number, location, and date of planting in accordance with the following: (1) For protected trees that will be encroached upon by less than 10%, no mitigation is necessary but the affected trees shall be monitored annually for a period of 10 years. An annual monitoring report shall be submitted to the Director for review by the County for each of the 10 years. Should any of these trees be lost or suffer worsened health or vigor as a result of the approved development, the Permittee shall mitigate the impacts at a ratio of 10:1; (2) For protected tree that will be encroached upon between 10 and 30%, the Permittee shall mitigate the impacts to those trees at a ratio of 5:1; and (3) For protected trees that will be encroached upon by more than 30%, the Permittee shall mitigate the impacts to those trees at a ratio of 10:1.

Replacement trees shall be planted and maintained on the subject property and, if feasible, in the same general area where the trees were removed. The process of replacement of trees shall be supervised in the field by a person who, in the opinion of the County Forester and Fire Warden, has expertise in the planting, care, and maintenance of native trees. Where onsite mitigation through planting replacement trees is not feasible, offsite mitigation through planting of replacement trees shall be required at a suitable site in the Santa Monica Mountains Coastal Zone that is restricted from development or is public parkland. The offsite mitigation site shall be located within the same watershed as the encroached trees where feasible. Any offsite mitigation not located within a site that is in the same watershed shall require an additional two mitigation trees per encroached tree, above those mitigation plantings required earlier in this condition.

In total, the Permittee shall annually monitor the four coast live oak trees and one black walnut tree that will be encroached upon by less than 10% for a period of 10 years. An annual monitoring report shall be submitted to the Director for review by the County for each of the 10 years. Should any of these trees be lost or suffer worsened health or vigor as a result of the approved development, the Permittee shall mitigate the impacts at a ratio of 10:1.

The Permittee shall plant a total of between 50 and 70 coast live oak trees, five to seven arroyo willow trees, and five to seven blue elderberry trees depending on whether onsite mitigation is feasible and/or whether offsite mitigation outside the relevant watershed is required.

The Permittee shall plant a total of between 10 and 12 coast live oak trees depending on whether onsite mitigation is feasible and/or whether offsite mitigation outside the relevant watershed is required.

Species	Encroachment Percentage	Mitigation Ratio	Number of Mitigation Trees
Coast Live Oak	2%	Monitoring for a period of 10 years (10:1 if monitored tree dies or suffers worsened health or vigor within 10-year monitoring period) (+2 if offsite mitigation outside the relevant watershed is required)	0 (10) (12)
Coast Live Oak	3%	Monitoring for a period of 10 years (10:1 if monitored tree dies or suffers worsened health or vigor within 10-year monitoring period) (+2 if offsite mitigation outside the relevant watershed is required)	0 (10) (12)
Coast Live Oak	6%	Monitoring for a period of 10 years (10:1 if monitored tree dies or suffers worsened health or vigor within 10-year monitoring period) (+2 if offsite mitigation outside the relevant watershed is required)	0 (10) (12)
California Black Walnut	6%	Monitoring for a period of 10 years (10:1 if monitored tree dies or suffers worsened health or vigor within 10-year monitoring period) (+2 if offsite mitigation outside the relevant watershed is required)	0 (10) (12)
Coast Live Oak	9%	Monitoring for a period of 10 years (10:1 if monitored tree dies or suffers worsened health or vigor within 10-year monitoring period) (+2 if offsite mitigation outside the relevant watershed is required)	0 (10) (12)
Coast Live Oak	14%	5:1 for onsite mitigation inside the relevant watershed (+2 if offsite mitigation outside the relevant watershed is required)	5 (7)
Arroyo Willow	16%	5:1 for onsite mitigation inside the relevant watershed (+2 if offsite mitigation outside the relevant watershed is required)	5 (7)
Blue Elderberry	17%	5:1 for onsite mitigation inside the relevant watershed (+2 if offsite mitigation outside the relevant watershed is required)	5 (7)
Coast Live Oak	18%	5:1 for onsite mitigation inside the relevant watershed (+2 if offsite	5 (7)

		mitigation outside the relevant watershed is required)	
Coast Live Oak	18%	5:1 for onsite mitigation inside the relevant watershed (+2 if offsite mitigation outside the relevant watershed is required)	5 (7)
Coast Live Oak	21%	5:1 for onsite mitigation inside the relevant watershed (+2 if offsite mitigation outside the relevant watershed is required)	5 (7)
Coast Live Oak	22%	5:1 for onsite mitigation inside the relevant watershed (+2 if offsite mitigation outside the relevant watershed is required)	5 (7)
Coast Live Oak	25%	5:1 for onsite mitigation inside the relevant watershed (+2 if offsite mitigation outside the relevant watershed is required)	5 (7)
Coast Live Oak	26%	5:1 for onsite mitigation inside the relevant watershed (+2 if offsite mitigation outside the relevant watershed is required)	5 (7)
Coast Live Oak	26%	5:1 for onsite mitigation inside the relevant watershed (+2 if offsite mitigation outside the relevant watershed is required)	5 (7)
Coast Live Oak	27%	5:1 for onsite mitigation inside the relevant watershed (+2 if offsite mitigation outside the relevant watershed is required)	5 (7)
Coast Live Oak	30%	5:1 for onsite mitigation inside the relevant watershed (+2 if offsite mitigation outside the relevant watershed is required)	5 (7)
Coast Live Oak	32%	10:1 for onsite mitigation inside the relevant watershed (+2 if offsite mitigation outside the relevant watershed is required)	10 (12)
Total:			70-156

The Permittee shall submit a protected tree replacement planting program, prepared by a qualified biologist, arborist, or other resource specialist, which specifies replacement tree locations, tree or seedling size, planting specifications, and a monitoring program to ensure the replacement planting program is successful, including performance standards for determining whether replacement trees are healthy and growing normally, and procedures for periodic monitoring and implementation of corrective measures in the event that the health of replacement trees declines.

Required replacement trees shall consist exclusively of indigenous trees of the same type removed and shall be in the ratios required earlier in this condition. Where feasible, replacement trees shall consist exclusively of indigenous trees and certified as being grown from a seed source collected in Los Angeles or Ventura Counties. Each replacement tree shall be at least a one-gallon specimen and measure at least one inch in diameter one foot above the base. For replacement oak trees, an acorn sourced from the Santa Monica Mountains shall be planted in the watering zone of all replacement trees and planting of acorns shall be verified by the County Forester. The Regional Planning Commission may, in lieu of this requirement, require the substitution of one larger container specimen for each tree to be replaced, where, in its opinion, the substitution is feasible and conditions warrant such greater substitution.

Replacement trees shall be properly cared for and maintained for a period of seven years and replaced by the Permittee if mortality occurs within that period.

24. **Oak Tree Protection Plan.** The Permittee shall submit and implement a plan for protecting oak trees on the subject property during and after development. The plan shall include, but may not be limited to, the following requirements: (1) The installation of chain link fencing not less than four feet in height around the protected zone of trees shown on the site plan. Said fencing shall remain in place throughout the entire period of development and shall not be removed without written authorization from the Director or the Forester and Fire Warden; (2) Where grading or any other similar activity is specifically approved within the protected zone, the Permittee shall provide an individual with species expertise (independent biological consultant or arborist) acceptable to the Director to supervise all excavation or grading proposed within the protected zones and to further supervise, monitor, and certify to the County Forester and Fire Warden the implementation of all conditions imposed in connection with this approval. Public agencies may utilize their own staff who have the appropriate classification. If any breach in the protective fencing occurs, all work shall be suspended until the fence is repaired or replaced; (3) Any excavation or grading allowed within the protected zone or within 15 feet of the trunk of a tree, whichever distance is greater, be limited to hand tools or small hand-powered equipment; (4) Trees on other portions of the subject property not included within the site plan also be protected with chain link fencing thus restricting storage, machinery storage or access, during construction; (5) The trees on the site plan be physically identified by number on a tag affixed to the north side of the tree in a manner preserving the health and viability of the tree. The tag shall be composed of a noncorrosive all-weather material and shall be permanently affixed to the tree. The tree shall similarly designated on the site plan in a manner acceptable to the Director; (6) Corrective measures for trees noted on the protected tree report as requiring remedial action be taken, including pest control, pruning, fertilizing, and similar actions; (7) To the extent feasible as determined by the Director, utility trenching shall avoid encroaching into the protected zone on its path to and from any structure; and (8) At the start of grading operations and throughout the entire period of development, no person shall perform any work for which a Coastal Development Permit – Oak Tree (“CDP – OT”) is required unless a copy of the protected tree report, location map, fencing plans, and approved CDP-OT and conditions are in the possession of a responsible person and also available at the site.

25. **Nesting Birds.** All vegetation removal, thinning, and mowing required for new development shall avoid disturbance of wildlife and special-status species, including nesting birds. Where vegetation removal and/or construction is proposed in potentially suitable habitat areas for nesting birds during bird nesting season (typically late February through August), nesting bird surveys shall be conducted 30 days prior to construction to detect any active bird nests in the vegetation to be removed and any other such habitat within 500 feet of the construction area to avoid take of a nesting bird, as required under State and federal law. The last survey shall be conducted three days prior to the initiation of clearance/construction. If an active songbird nest is located, clearing/construction within 300 feet shall be postponed until the nest(s) is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting. If an active raptor, rare, threatened, endangered, or species of concern nest is found, clearing/construction within 500 feet shall be postponed until the nest(s) is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting. Limits of construction to avoid a nest shall be established in the field with flagging and stakes or construction fencing. Construction personnel shall be instructed on the sensitivity of the area. The project biologist shall record the results of the protective measures described above to document compliance with applicable State and federal laws pertaining to protection of nesting birds.
26. **Grading.** Grading shall be prohibited during the rainy season, defined as October 15 of any year through April 15 of the subsequent year, unless: (1) the Director permits grading to continue upon a determination that completion of grading would be more protective of sensitive environmental resources and would minimize erosion and sedimentation, and best management practice designed to minimize or prevent erosion, sedimentation, and polluted runoff are being implemented to a degree that would prevent significant water quality impacts or any significant disruption of habitat values within H1 or H2 Habitats; or (2) Grading is necessary to remediate hazardous geologic conditions that endanger public health and safety.

The temporary storage of construction materials on road shoulders, including the temporary storage of cut material, shall be managed using the most current best management practices to eliminate erosion into adjacent drainage courses, to protect air and water quality, and to minimize the spread of invasive plant species.

27. **Mitigation.** Prior to the issuance of any grading and/or building permit, if one is needed, or prior to the commencement of any construction and/or physical development activities, if no grading and/or building permits are needed, unavoidable impacts to H1 and H2 Habitats shall be compensated pursuant to a Resource Conservation Program ("RCP") or through restoration as mitigation instead of reliance of the RCP.

If the Permittee chooses to compensate pursuant to an RCP, the required Habitat Impact Fee shall be \$10,017.36, which represents 0.12 acres of unavoidable impacts to H1 and H2 Habitats multiplied by the current In-lieu Fee of \$83,478.00 per acre. The payment of the Habitat Impact Fee shall be paid into the "Habitat Impact Fund - Santa Monica Mountains Coastal Zone" administered by the County to purchase and

permanently preserve properties that contain substantial areas of H1 Habitat and/or H2 Habitat in the Santa Monica Mountains Coastal Zone.

If the Permittee chooses to mitigate for unavoidable impacts to H1 and H2 Habitats, the Permittee shall be required to mitigate all permanent impacts to H2 Habitat and all temporary impacts to H1 and H2 Habitats at a one-to-one mitigation ratio. Given the Project proposes to temporarily impact 4,548 square feet of H1 Habitat and 588 square feet of H2 Habitat, the Permittee would be required to mitigate, through restoration, 5,136 square feet for those impacts. Additionally, the Permittee shall be required to mitigate all permanent impacts to non-wetland H1 Habitat at a three-to-one mitigation ratio. Given the Project proposes to permanently impact 7 square feet of H1 Habitat, the Permittee would be required to mitigate, through restoration, 21 square feet for those impacts. In total, if the Permittee chooses to mitigate, through restoration, the Permittee shall restore a total of 4,569 square feet of H1 Habitat and 588 square feet of H2 Habitat. Priority shall be given to onsite restoration or enhancement, unless there is not sufficient area of disturbed habitat on the Project Site, in which case offsite mitigation may be allowed. If the restoration site is offsite, written evidence that the property owner has irrevocably agreed to allow the restoration work, maintenance, and monitoring required by this condition and not to disturb any native vegetation in the restoration area. The area of habitat to be restored shall be permanently preserved through the recordation of an open space deed restriction that applies to the entire restored area. The open space deed restriction shall be recorded free of prior encumbrances other than tax liens, prior to the issuance of the coastal development permit.

Habitat restoration or enhancement shall be carried out in compliance with Condition 27 and must be conducted prior to or concurrently with construction of the Project.

28. **Restoration.** The Permittee shall prepare and implement a detailed habitat restoration/enhancement plan that, at a minimum, includes the following: (1) A detailed restoration or enhancement plan and the habitat restoration areas shall be delineated on a detailed site plan, to scale, that illustrates parcel boundaries, topography, existing habitat types, species, size, and location of all native plant materials to be planted. The habitat restoration plan shall be prepared by a qualified resource specialist or biologist familiar with the ecology of the Coastal Zone and shall be designed to restore the area in question for habitat function, species diversity, and vegetation cover appropriate for the type of habitat in question. The restoration plan shall include an evaluation of existing habitat quality, statement of goals and performance standards, revegetation and restoration methodology, and maintenance and monitoring provisions; and (2) The habitat restoration/enhancement plan shall specify that habitat restoration and/or enhancement shall be monitored for a period of no less than five years following completion. Specific restoration objectives and performance standards shall be designed to measure the success of the restoration and/or enhancement. Mid-course corrections shall be implemented if necessary. Monitoring reports shall be provided to the County annually and at the conclusion of the five-year monitoring period that document the success or failure of the restoration. If performance standards are not met by the end of five years, the monitoring period shall be

extended until the standards are met. The restoration will be considered successful after the success criteria have been met for a period of at least two years without any maintenance or remedial activities other than exotic species control. At the County's discretion, final performance monitoring will be conducted by an independent monitor or County staff with the appropriate classification, supervised by the staff biologist and paid for by the Permittee. If success criteria are not met within 10 years, the Permittee shall submit an amendment proposing alternative restoration.

29. **Future Maintenance.** Maintenance work for the existing outfall pipeline shall be identified and permitted according to those regulations applicable at the time maintenance work is proposed. Required permits shall be obtained prior to the initiation of maintenance activities. If the proposed maintenance does not result in new development as that term is defined in the Santa Monica Mountains Local Implementation Program, a Revised Exhibit "A" application may be filed for LA County Planning review. Any proposed maintenance that will result in development as that term is defined in the Santa Monica Mountains Local Implementation Program must obtain approval under the Santa Monica Mountains Local Coastal Program.

PROJECT SITE-SPECIFIC CONDITIONS

30. **Scope of Approval.** This grant shall authorize the construction of five new manholes along an existing 24-inch outfall pipeline, which spans approximately 2,250 linear feet from the Tapia Water Reclamation Facility to Malibu Creek.
31. **County Public Health Requirements.** The Permittee shall comply with all conditions set forth in the attached County Public Health Department letter dated June 22, 2022.

Attachments:

- Exhibit D-1 Public Health Department Letter dated June 22, 2022
Exhibit D-2 Public Works Department Letter dated June 29, 2022
Exhibit D-3 Environmental Review Board recommendations in minutes for meeting held July 15, 2024
Exhibit D-4 Mitigation Monitoring Program
Exhibit D-5 Oak Trees: Care and Maintenance Guide
Exhibit D-6 Nesting Birds: Guide to Bird-Friendly Tree and Shrub Trimming and Removal



BARBARA FERRER, Ph.D., M.P.H., M.Ed.
Director

MUNTU DAVIS, M.D., M.P.H.
County Health Officer

MEGAN McCLAIRE, M.S.P.H.
Chief Deputy Director

LIZA FRIAS, REHS
Director of Environmental Health

BRENDA LOPEZ, REHS
Assistant Director of Environmental Health

5050 Commerce Drive
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www.publichealth.lacounty.gov/eh/



BOARD OF SUPERVISORS

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Kathryn Barger
Fifth District

June 22, 2022

TO: Robert Glaser
Supervising Regional Planner
Department of Regional Planning

Attention: William Chen

FROM: Charlene Contreras 
Director, Toxicology & Environmental Assessment Branch
Department of Public Health

**SUBJECT: COASTAL DEVELOPMENT PERMIT (CDP) REQUEST - MAJOR
CASE: RPPL2021012462
PROJCET: PRJ2021-004371 LVMWD MANHOLES
731 NORTH MALIBU CANYON ROAD CALABASAS, CA 91302**

Thank you for the opportunity to review the subject project for a Coastal Development Permit. This project proposes to install five (5) new manholes along the existing pipeline alignment extending from the Tapia Water Reclamation Facility (WRF), located at 731 Malibu Canyon Road in Calabasas, to Malibu Creek. The project is located within the Santa Monica Mountains (SMM) Local Coastal Program (LCP) area. The project proposes the restoration and improvements to the trail, stream, and habitat with no infrastructure for potable water or sewer usage. The applicant shall abide by the requirements contained in Title 12, Section 12.08, Noise Control Ordinance for the County of Los Angeles. During grading or excavation activities if applicable, application of dust control measures to minimize fugitive dust is recommended. Adhere to applicable air quality Air Quality Management District regulations.

Robert Glaser

June 22, 2022

Page 2 of 2

- ☒ Public Health recommends the approval of the aforementioned project with the following conditions to be fulfilled at the permitting stage before the installation of any interactive water features.
- ☐ Public Health requires that the conditions or information requested below are addressed prior to agency approval; therefore, the Department **DOES NOT** recommend clearance of this project until the following conditions are met:

If you have any other questions or require additional information, please contact Makkaphoeum Em of Public Health, Environmental Hygiene Program at (626) 430-5201 or mem@ph.lacounty.gov.

CC:me

DPH_CLEARED_731 N MALIBU CANYON RD CALABASAS, CA 91302_ RPPL2021012462_06.22.2022



MARK PESTRELLA, Director

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
<http://dpw.lacounty.gov>

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

June 29, 2022

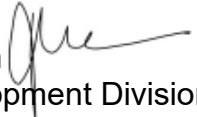
IN REPLY PLEASE

REFER TO FILE:

LD-4

TO: Rob Glaser
Coastal Development Services
Department of Regional Planning

Attention William Chen

FROM: James Chon 
Land Development Division

CDP – SMMLCP – MAJOR (RPPL2021012462)
731 NORTH MALIBU CANYON ROAD
ASSESSOR'S MAP BOOK 4462, PAGE 32, PARCEL 901
UNINCORPORATED SANTA MONICA MOUNTAINS

As requested, Public Works reviewed the zoning permit application and site plan for the proposed project. The project would install five new manholes, along the existing Las Virgenes Municipal Water District pipeline alignment, to provide access for inspection of the pipeline which, in turn, will determine where repairs will be implemented.

☒ Public Works has no comments, and this memo will serve as clearance for our review.

☐ Public Works has comments on the submitted documents; therefore, a Public Hearing shall **NOT** be scheduled until the comments have been addressed.

If you have any questions or require additional information, please contact Ed Gerlits of Public Works, Land Development Division, at (626) 458-4953 or egerlits@pw.lacounty.gov.

DK:la

P:\dpub\SUBPCHECK\Plan Checking Files\CUP\RPPL2021012462 - 731 N Malibu Canyon Road\2022-06-14 Submittal\DPW_Cleared_2022-06-23_RPPL2021012462.docx

MINUTES OF THE ENVIRONMENTAL REVIEW BOARD (ERB)
Unincorporated Coastal Zone, Santa Monica Mountains, Los Angeles County
In-Person Meeting of July 15, 2024

Present:

ERB Members

Katherine Pease
Daniel Cooper
Richard Ibarra
Margot Griswold
Danielle LeFer

Regional Planning Staff

Joseph Decruyenaere, Senior Biologist
William Chen, Principal Planner
Iris Chi, ERB Coordinator

PART I: PRELIMINARY BUSINESS

1. Roll call.
2. Coordinator's Report – ERB meetings will be held at the LA County Regional Planning – Calabasas/Malibu Field Office moving forward.

PART II: APPROVAL OF MINUTES

3. December 18, 2023 ERB meeting minute approval. Motion to approve by Margot/seconded by Ibarra. Vote: Unanimous consent to approve the minutes.
4. ERB requests future meetings to discuss minimum mapping units and incorporate findings in future ERB recommendations.

PART III: OLD BUSINESS

PART IV: NEW BUSINESS

5. **Project No.:** PRJ2021-004371-(3)
Permit No.: Major CDP RPPL2021012462

ERB Comments:

- ERB request the location of the temporary impacts area be confined to the construction area and the perimeter area around the construction area. In addition, ERB requests to use fencing around trees to protect trees from temporary impacts.
- ERB request to reduce the use of all construction materials and equipment to minimize impacts to trees.
- ERB requests to reduce the width of the access road and widen and clear the trail in an as needed basis to minimize vegetation removal and compaction.
- Requested clarification over where the replacement oak trees will be planted. Replacement oak trees may be planted on-site of State Park land with State Park approval of appropriate planting site. However, the applicant will mitigate by paying the in-leu fee.
- There will be a separate State Parks discussion regarding the scope of each manhole cover. State Parks will request the use of the most minimally invasive equipment for each manhole to minimizing impacts to the work area. State Parks will also request a more complete restoration plan. This discussion will be required before State Parks approves a permit.
- ERB request the Las Virgenes Maintenance Plan require a future review and plan.

ERB Motion:

- With the provisions in the biologists report for oak tree mitigation for the provisions in the Rincon's mitigation monitor recommendations that the project is compatible with the Coastal Development permit and all ERB recommendations would be included.

Motion/Second by Griswold/Cooper, Vote – Ayes: Unanimous

PART V: PUBLIC COMMENT

6. Public comment pursuant to Section 54954.3 of the Government Code. No request for public comments.

PART VI: ADJOURNMENT : Adjournment to 1:00 pm, August 19, 2024.

Mitigation Monitoring and Reporting Program

This document constitutes the Mitigation Monitoring and Reporting Program (MMRP) for the Tapia Water Reclamation Facility 003 Outfall Rehabilitation project (hereinafter referred to as the “project” or “proposed project”). CEQA requires that a reporting or monitoring program be adopted for the conditions of project approval that are necessary to mitigate or avoid significant effects on the environment (Public Resources Code 21081.6). This MMRP is intended to track and ensure compliance with adopted mitigation measures during the project implementation phase. For each mitigation measure recommended in the Initial Study – Mitigated Negative Declaration (IS-MND), specifications are made herein that identify the action required, the monitoring that must occur, and the agency or department responsible for oversight.

Las Virgenes Municipal Water District-Trunfo Joint Powers Authority
Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
Biological Resources							
Mitigation Measure BIO-1 Worker Environmental Awareness Program							
Prior to initiation of all construction activities (including staging and mobilization), all personnel associated with project construction shall attend a Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist, to assist workers in recognizing special-status biological resources with the potential to occur in the project site. This training will include information about all special-status species determined to be present or to have a moderate or high potential to occur on-site. Training will also address protected nesting birds, special-status plants, sensitive natural communities, SRRAs, resources protected by local policies, as well as other special-status species potentially occurring on the project site.	Require all construction personnel to attend WEAP training developed and led by a qualified biologist.	Prior to and during construction if new personnel are added.	Once prior to initiation of construction activities, and as needed as new personnel are added to the project site	Las Virgenes Municipal Water District-Trunfo Joint Powers Authority			
The species of this program will include identification of special-status species and sensitive communities, a description of the regulatory status and general ecological characteristics of special-status resources, and review of the limits of construction and measures required to avoid and minimize impacts to biological resources within the project site. A fact sheet conveying this information will also be prepared for distribution to all contractors, their employees, and other personnel involved with construction of the project. All employees will sign a form provided by the trainer documenting they attended the WEAP training and understand the information presented. The crew foreman will be responsible for ensuring crew members adhere to the guidelines and restrictions designed to avoid impacts to special-status species. If new construction personnel are added to the project, the crew foreman will ensure the new personnel receive the WEAP training before starting work.							
Mitigation Measure BIO-2 General Best Management Practices							
General requirements which shall be followed by construction personnel are listed below.	Implement general best management practices prior to the start of and during construction.	During construction.	As needed.	Las Virgenes Municipal Water District-Trunfo Joint Powers Authority			
- No project construction, activities, and equipment staging shall occur within the bed and banks of the stream channel. Any work, including operation of loaders, dozers, drilling rigs, cranes, and vehicles, that occurs within 30 feet from the top of stream banks will be minimized to the extent practicable to reduce impacts to special-status wildlife species that may occur within the riparian habitat. Only work that is required to occur within this buffer (e.g., construction of manholes) may be performed. Fencing and signage shall be installed 30 feet from the stream banks to exclude entry into the stream channel for the duration of the project. Fencing and signage shall not be removed (except to facilitate work that is required to occur within 30 feet of the stream banks) and must be maintained for the duration of the project. The contractor shall advise all workers of the intent of the protection measures prior to the start of project construction and activities. No living native vegetation shall be removed from the channel, bed, or banks of Malibu Creek. - Project-related vehicles shall observe a 5-mile-per-hour speed limit within the unpaved limits of construction. - All open trenches shall be fenced and sloped to prevent entrapment of wildlife species. - All hollow posts and pipes shall be capped, and metal fence stakes shall be plugged with bolts or other plugging materials to prevent wildlife entrapment and mortality. - All food-related trash items such as wrappers, cans, bottles, and food scraps generated during proposed project construction shall be disposed of in closed containers and removed daily from the project site. - No deliberate feeding of wildlife shall be allowed. - No pets shall be allowed on the project site. - No firearms shall be allowed on the project site. - If vehicle or equipment maintenance is necessary, it shall be performed in the designated staging areas. - During construction, heavy equipment shall be operated in accordance with standard Best Management Practices (BMPs). All equipment used on-site shall be properly maintained to avoid leaks of oil, fuel, or residues. The contractor shall prevent oil, petroleum products, or any other pollutants from contaminating the soil or entering a watercourse (dry or otherwise). When vehicles or equipment are stationary, mats or drip pans shall be placed below vehicles to contain fluid leaks. Provisions shall be in place to remediate any accidental spills. - No changing of oil or other fluids or discarding of any trash or other construction waste materials shall occur on the project site. Vehicles carrying supplies, such as concrete, shall not be allowed to empty, clean out, or otherwise place materials into natural areas on or immediately adjacent to the site. - Refueling of any equipment shall only occur in designated staging areas. Designated areas shall not be located near any storm drain inlets, drainage swales, or surface waterways. When refueling gas powered equipment or mixing herbicide, workers shall refuel or mix over drip pan which is appropriately sized to catch any spillage. The designated refueling area shall be inspected frequently to ensure no spill of hazardous materials have occurred and could contaminate the ground or water. The Contractor shall advise workers to clean and report spills immediately. - Materials shall be stored on impervious surfaces or plastic ground covers to prevent any spills or leakage and shall be at least 50 feet from drainage features. Construction materials and spoils shall be protected from stormwater runoff using temporary perimeter sediment barriers such as berms, silt fences, fiber rolls, covers, sand/gravel bags, and straw bale barriers, as appropriate. - While encounters with special-status species are not anticipated, any worker who inadvertently injures or kills a special-status species or finds one dead, injured, or entrapped shall immediately report the incident to the construction foreman or biological monitor. The construction foreman or biological monitor shall immediately notify the JPA. The JPA shall follow up with written notification to LACDRP, USFWS and/or CDFW within five working days of the incident, as appropriate. All observations of special-status species shall be recorded on California Natural Diversity Database (CNDDB) field sheets and sent to CDFW by the JPA or the biological monitor. - Before starting or moving construction vehicles, especially after a few days of nonoperation, operators shall inspect under all vehicles to avoid impacts to any wildlife that may have sought refuge under equipment. All large building materials and pieces (e.g., sections of the bridge) with crevices where wildlife can potentially hide shall be inspected before moving. If wildlife is detected, a qualified biologist shall move wildlife out of harm's way or temporarily stop activities until the animal leaves the area.							

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
- The construction contractor shall install temporary erosion control measures to reduce impacts to and protect on site drainages from excess sedimentation, slation, and erosion. These measures shall consist of minimization of existing vegetation removal, the use of temporary soil covers, such as hydroseeding with native species, mulch/binder and erosion control blankets to protect exposed soil from wind and rain erosion; and/ or the installation of silt fencing, berms, and dikes to protect storm drain inlets and drainages. - Gas-powered vehicles and equipment shall not be left idling or operated beyond periods needed to accomplish approved tasks. - Standard dust control measures of the South Coast Air Quality Management District shall be implemented to reduce impacts on nearby plants and wildlife. This includes a variety of options to reduce dust including replacing ground cover in disturbed areas as quickly as possible, watering active sites regularly, and suspending all excavating and grading operations during periods of high winds. - Upon completion of construction, the contractor shall be held responsible for restoring any access roads or staging areas that are outside of approved grading limits. This restoration shall be done in consultation with the project biologist.							
Mitigation Measure BIO-3 Blooming Season Protocol Rare Plant Survey Blooming season protocol rare plant surveys shall be conducted for Plummer's mariposa lily (May-July) and Lyon's pentstemon (March-August) to determine the presence/absence of these species. The rare plant survey shall also target Malibu baccharis (August), Plummer's baccharis (May-October), Catalina mariposa lily (March-June). Reference sites must be visited to document if target species are detectable prior to site surveys. Valid botanical surveys will be considered current for up to five years; if construction has not commenced within three years of the most recent survey, botanical surveys must be repeated. Plants that are not within the immediate disturbance footprint but are located within 50 feet of disturbance limits will be flagged and fenced off by a qualified biologist before construction activities start, to avoid impacts. If avoidance is not feasible, impacts must be offset through implementation of a restoration plan.	Conduct protocol rare plant surveys for specified species during blooming seasons. Flag and fence off identified special-status species. If avoidance is not feasible, prepare and implement a restoration plan.	Survey May – July for Plummer's mariposa lily Survey March – August for Lyon's pentstemon Survey August for Malibu baccharis Survey May – October for Plummer's baccharis Survey March – June for Catalina mariposa lily Prior to construction for flagging/fencing Restoration as needed (see below)	Implement protocol surveys once prior to start of construction during specified plant blooming seasons If construction has not commenced within three years of the most recent survey, botanical surveys are to be repeated Implement fencing and restoration as needed.	Las Virgenes Municipal Water District-Triunfo Joint Powers Authority			
Mitigation Measure BIO-4 Special-Status Plant Species and Sensitive Community Restoration Plan Permanent removal of H1 habitat (California sycamore – coast live oak woodlands, California sycamore – arroyo willow woodlands, coast live oak woodland and forest, black cottonwood forest and woodland, and creeping ryegrass tuffs) shall be mitigated in accordance with LCP current in-leu fee schedule for restoration. A restoration plan consistent with County Local Implementation Plan (LIP) requirements shall be prepared to mitigate impacts to special-status plant species and sensitive communities. The LIP (County 2018b) states that: - Mitigation for unavoidable permanent impacts to H1 Habitat for one of the non-resource dependent uses allowed by this LCP shall be provided, at a minimum, through the restoration and/or enhancement of like habitat type, at the ratio of 4:1 (acres of restored habitat to each acre of impacted H1 Habitat) for wetland habitat, or the ratio of 3:1 (acres of restored habitat to each acre of impacted H1 Habitat) for all other H1 Habitat types. Priority shall be given to on-site restoration or enhancement, unless there is not sufficient area of disturbed habitat on the project site, in which case off-site mitigation may be allowed. The County shall coordinate with other public agencies and/or qualified non-profit land preservation organizations to establish priorities for offsite restoration and enhancement efforts, where appropriate, for proposed development projects lacking adequate on-site mitigation opportunities. - If the restoration site is off-site, written evidence that the property owner has irrevocably agreed to allow the restoration work, maintenance and monitoring required by this condition and not to disturb any native vegetation in the restoration area. The area of habitat to be restored shall be permanently preserved through the recordation of an open space deed restriction that applies to the entire restored area. The open space deed restriction shall be recorded free of prior encumbrances other than tax liens, prior to issuance of a Coastal Development Permit (CDP). To minimize impacts to special-status plants and sensitive communities that may occur in the temporary impact areas, the project should implement topsoil and native vegetation salvage, recontour the land to existing conditions after construction, and re-vegetate using native seeds, as described below. <i>Removal of Non-Native Species</i> Areas of temporary disturbance shall be treated to remove non-native plant species, including invasive plant species, and limit their seed production prior to initiating any earthmoving activity. This shall be completed with the objectives of (1) preventing invasive species from spreading from the disturbance area, and (2) removing weed sources from the salvaged topsoil. The treatment will be completed in advance of the earthmoving for this mitigation to have its intended effect (e.g., the treatment would need to occur prior to target species setting seed). Non-native plants shall be removed primarily using hand removal methods, e.g., hand-held weed whips, hoppers, and hoes. If hand removal is not feasible due to the characteristics of the species, such as resistance to hand removal methods, the size of the plants, or the number of plants, perennial invasive non-native species may be treated with herbicides. Herbicide application shall be limited to the smallest extent possible while maintaining effectiveness. Only individual plants shall be treated; no blanket spraying efforts shall be allowed. If herbicide is applied, it shall be applied during dry and low wind conditions when no rain is predicted within a week to prevent conveyance of herbicide into drainages or other sensitive areas. Herbicide application must be performed by a licensed applicator that can identify the species to be treated and is experienced in the handling and application of herbicides. Herbicides must only be allowed under permit and property conditions. Herbicide use may require notification to the JPA or resource agencies. Only	Prepare and implement special-status plant species and sensitive community restoration with County LIP requirements.	Prior to, during and after construction activities.	As needed.	Las Virgenes Municipal Water District-Triunfo Joint Powers Authority			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
herbicides approved for use near or in water, such as AquaMaster TM or equivalent, shall be used if necessary. Large vegetation with potential to contain bird nests shall not be removed during the breeding bird season (February 1 to September 15) unless a qualified biologist determines that it does not contain active bird nests.							
Salvage of Native Vegetation After removal of non-native species, the temporary impact areas shall be cleared of vegetation using a bulldozer or scraper as necessary. Tree canopies shall be avoided to the extent practicable. Native plant material shall be crushed and stockpiled for later use in re-vegetation. Plant material shall not be segregated based on plant community. The stockpile(s) shall be covered to prevent loss due to erosion and invasion by non-native plants. Stockpile coverings shall be a natural permeable material such as barkloap or jute netting to protect the plant material without solarizing or otherwise damaging the seedbank and propagules. Alternatively, the stockpile(s) may be stored indoors within a warehouse.							
Salvage of Topsoil In areas where soil will be disturbed by project activities, the topsoil shall be salvaged and then replaced after disturbance activities are complete. Salvage, storage, and replacement of the topsoil shall be the responsibility of the Contractor, under supervision of a biological monitor. Topsoil salvage may be accomplished using two lifts, the first to remove the upper layer of soil containing the seed bank, and the second to remove the lower layer containing soil biota in the root zone. The depth of topsoil removed shall be determined by the biological monitor based on local soil and vegetation characteristics; however, it is estimated that approximately 6 to 12 inches may be salvaged in two lifts. The two soil layers shall be stockpiled in two areas inside the temporary disturbance footprint and labeled to identify it as containing either the upper or lower layer of topsoil. Stockpiles shall be covered to prevent loss of soil, plant propagules, etc. due to erosion and invasion by non-native plants. Stockpile coverings shall be a natural permeable material such as barkloap or jute netting to protect the soil without solarizing or otherwise damaging the seedbank.							
Source of Seeds Plant seeds shall be collected by a qualified native nursery contractor, with oversight by a Restoration Specialist. To preserve the integrity of local gene pools, ensure adaptation to site-specific conditions, and avoid inadvertent introduction of inappropriate species or pathogens, seeds used for revegetation shall be collected primarily from the study area, or within the Cold Creek/Malibu Creek Subwatershed. If sufficient seeds cannot be collected from these areas alone, plant stock from within the Malibu Creek Watershed may also be acceptable. All plant species to be installed within potentially jurisdictional riparian communities shall be California native plants and under no circumstances shall non-native plants be installed. All seeds obtained from the native plant nursery shall be free of any pests or pathogens. More specific areas for collection of native plant materials will be defined in the field, considering the following: - Ecological similarity of the area to the study area - Proximity to the study area - Land ownership - Accessibility - Abundance and availability of target species - Need to ensure genetic diversity of source material (i.e., seed shall be collected from a diverse sample of the parent plants within the collection zone) See Table 6 in the ISMND for a proposed planting palette. Species found within the Study Area, or species native to the region that are characteristic of the vegetation community, but are not included on the plant palette below, may also be used as substitutes as determined by the Restoration Specialist. The final mix will be determined by source availability.							
Post-Project Restoration Topsoil will be replaced in the proper layers after final reconfiguration of disturbed areas. The soil will be replaced in a manner that replicates the original contours of the land and does not block or divert the flow of water from its pre-existing flow paths. The salvaged and stockpiled native vegetative mulch will be spread within the disturbed area to allow seeds and propagules to become established naturally. No soil amendments will be applied. Mulch will be incorporated into the top six inches of soil with hand tools to improve the integration of mulch and native plant propagules into the soil. Seeds will be installed via hand-seeding in the temporarily impacted areas. Each seeded area will be immediately watered by hand with a water truck or similar set up as conditions allow. The Restoration Specialist shall oversee the contractor during site installation activities. Long-term irrigation and weeding will not be required.							

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
Mitigation Measure BIO-5 Pre-Activity Surveys							
No more than three days prior to initiation of each phase of ground disturbance and vegetation removal, a qualified biologist shall conduct a pre-construction survey for potential rare, listed, or other special-status wildlife species. The pre-construction surveys shall incorporate appropriate methods and timing to detect these species, including individuals that could be concealed in burrows, beneath leaf litter, or in loose soil. Should a special-status species be located on the project site during pre-activity surveys all individuals shall be documented and locations of presence recorded. If a non-listed special-status species is found, the qualified biologist shall contact CDFW, and the species shall be passively ushered out of harm's way to an area containing suitable habitat that is unaffected by the project. If the project requires special-status species to be removed, disturbed, or otherwise handled, the qualified biologist shall obtain all appropriate handling permits from regulatory agencies (e.g., CDFW, United States Fish and Wildlife Service [USFWS]) and prepare a species-specific relocation plan for review and approval by the appropriate regulatory agencies. The relocation plan shall be implemented prior to project construction activities that may affect the species. All observations of special-status species shall be recorded on CNDDB field sheets and sent to CDFW by the District or qualified biologist. Additionally, pre-activity surveys shall include focused surveys for western pond turtle during the species' active periods (May to September) to determine presence/absence of the species within the project site. The surveys shall be conducted by a qualified biologist familiar with the species' behavior and life history. The surveys shall be conducted within suitable habitat and adhere to the Visual Encounter Survey Protocol for Western Pond Turtles (ODIG 2020). The qualified biologist shall survey the proposed impact areas and a 50-foot buffer. If the species is detected within or adjacent to the project site, nesting surveys shall be conducted to identify nest sites and a western pond turtle avoidance plan shall be developed to fully avoid direct or indirect impacts to the species. The western pond turtle avoidance plan shall be approved by USFWS and/or CDFW prior to ground disturbance within western pond turtle suitable habitat. If Croch's bumble bee remains a candidate for listing under the California ESA (CESA) or has been listed as threatened or endangered under CESA at the time project construction commences, the following avoidance, minimization, and compensation measures for Croch's bumble bee shall be implemented. Focused Croch's bumble bee surveys for foraging bees and nests shall be conducted in the active season prior to construction (during the Colony Active Period [April 1 through August 31]) within suitable habitat per the Survey Considerations for CESA Candidate Bumble Bee Species (CDFW 2023). At least three surveys spaced two to four weeks apart will be conducted by a qualified biologist with a Memorandum of Understanding from CDFW and familiar with the species' behavior and life history of the species to determine presence/absence of this species and active colonies within the project site. If this species is detected foraging or nesting within or immediately adjacent to the project site and may be impacted by project implementation, the following measures shall be implemented: ▪ A qualified biologist shall identify the location of all nests in or adjacent to the project area to the extent feasible. Adjacent areas containing suitable habitat that are inaccessible shall be surveyed from the nearest vantage point from within the project site or public property. If a nest is identified, a minimum 50-foot no disturbance buffer zone shall be established around the nest to avoid disturbance or accidental take. If project activities may result in disturbance or potential take, the qualified biologist, in coordination with CDFW, should expand the buffer zone as necessary to prevent disturbance or take. ▪ A Croch's bumble bee avoidance plan shall be developed prior to the start of construction to fully avoid direct and indirect impacts to this species. If "take" or adverse impacts to Croch's bumble bee cannot be avoided either during project activities or over the life of the project, the project proponent shall obtain appropriate take authorization from CDFW pursuant to Fish and Game Code section 2081 subdivision (b). ▪ If avoidance is not possible and an Incidental Take Permit (ITP) is needed, mitigation for direct impacts to Croch's bumblebees shall be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the project, or as otherwise determined through the ITP process. A Croch's bumble bee habitat restoration plan shall be prepared and implemented over a minimum three-year period. The habitat restoration plan shall include, but not limited to the location of restoration, performance standards and success criteria, responsible parties, monitoring and reporting requirements (and schedule), and adaptive management.	Retain a qualified biologist to complete pre-activity surveys for special status species. If a special-status species is located, document the special-status species and contact CDFW. If special-status species must be removed, disturbed, or otherwise handled, obtain all appropriate handling permits from regulatory agencies and prepare a species-specific relocation plan for review and approval by the appropriate regulatory agencies. Record all observations of special-status species on CNDDB field sheets and submit to CDFW. Retain a qualified biologist to conduct pre-activity surveys for western pond turtle in the proposed impact areas plus a 50-foot buffer. If western pond turtle are identified within or adjacent to the project site, conduct nesting surveys and prepare a western pond turtle avoidance plan for approval by CDFW and/or USFWS. If required, retain a qualified biologist with a Memorandum of Understanding from CDFW to conduct Croch's bumble bee surveys.	No more than three days prior to initiation of each phase of ground disturbance and vegetation removal. Prior to project construction activities that may affect the species. As needed. As observations occur. During the species' active periods (May to September). Prior to ground disturbance within western pond turtle suitable habitat. During the Colony Active Period (April 1 through August 31).	Prior to any ground or plant disrupting activities. As needed. Once. Once. Once. At least three surveys spaced two to four weeks apart.	Las Virgenes Municipal Water District-Triunfo Joint Powers Authority			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
	If Crotch's bumble bee is detected within or adjacent to the project site, identify all nests to the extent feasible and establish a minimum 50-foot buffer zone. Expand the buffer zone as necessary to prevent disturbance or take. Develop a Crotch's bumble bee avoidance plan.	As nests are identified.	As needed.				
	If avoidance of Crotch's bumble bee is not possible and an ITP is required, fulfill compensatory mitigation and prepare a Crotch's bumble bee habitat restoration plan.	Obtain ITP prior to ground disturbance activities that may impact Crotch's bumble bee. Restoration plan shall be implemented over a three year period.	Until restoration plan is fully implemented.				
Mitigation Measure BIO-6 Nesting Bird Surveys							
If feasible, removal of vegetation within suitable nesting bird habitats will be scheduled to occur in the fall and winter (between February 1 to September 15), after fledging and before the initiation of the nesting season. If construction activities must occur during the nesting season (generally February 1 to September 15), surveys for nesting birds covered by the CFCG and the Migratory Bird Treaty Act (MBPTA) shall be conducted by a qualified biologist no more than 14 days prior to vegetation removal for each phase of the project. The surveys shall include the disturbance area plus a 500-foot buffer around the site, or to the topographic divide where substantial topography is present in the buffer. If active nests are located, all construction work shall be conducted outside a buffer zone from the nest to be determined by a qualified biologist. The buffer shall be a minimum of 50 feet for non-raptor bird species and at least 300 feet for raptor species. Larger buffers may be required depending upon the status of the nest and the construction activities occurring in the vicinity of the nest. The buffer area(s) shall be closed to construction personnel and equipment until the adults and young are no longer reliant on the nest-site. A qualified biologist shall confirm that brooding/nesting is completed, and young have fledged the nest prior to removal of the buffer. If buffer zones are determined to be infeasible, a full-time qualified biological monitor must be onsite to monitor construction within the buffer zones to ensure active nests and nesting birds are not impacted. All observations of special-status species shall be recorded on CNDDB field sheets and sent to CDFW by the applicant or qualified biologist.	Schedule construction activities to commence outside the general bird nesting season (September 16 to January 31) if feasible.	Prior to construction.	Once.	Las Virgenes Municipal Water District-Triunfo Joint Powers Authority			
Active nests shall be monitored at a minimum of once per week until it has been determined that the nest is no longer being used by either the young or adults. If project activities must occur within the buffer, they shall be conducted at the discretion of a qualified biologist. If no nesting birds are observed during pre-construction surveys, no further actions would be necessary. If least bell's vireo or other listed species are identified in the work area, work must be halted and USFWS and/or CDFW must be contacted for additional avoidance and minimization measure guidance. Pre-construction nesting bird and raptor surveys should be conducted during the time of day when birds are active and should be of sufficient duration to reliably conclude presence/absence of nesting birds and raptors onsite and within the designated vicinity.	If project construction commences within the general bird nesting season (February 1 to September 15), retain a qualified biologist to conduct a pre-construction nesting bird survey and establish buffer areas, if necessary.	No more than 14 days prior to site disturbance.	As needed along the project site alignment, and as needed if work pauses for more than 14 days.				
In addition, if construction must occur within the bird breeding season, low-noise construction equipment shall be used whenever possible to reduce the amount of noise generated during construction activities within 100 feet from the limits of riparian habitat. Low-noise equipment would reduce noise to less than 60dB hourly average or to ambient noise levels. If sound levels exceed 60dB hourly average or ambient noise levels, sound mitigation measures such as sound shields, blankets around smaller equipment, use of mufflers, and minimizing the use of back-up alarms shall be employed (as feasible). If these sound mitigation measures do not reduce noise levels, work activities shall cease and shall not recommence until either new sound mitigation can be employed or young have fledged the nest.	Verify compliance with avoidance requirements.	During construction.	As needed.				
Mitigation Measure BIO-7 Construction Monitor							
A biologist shall be retained by the JPA as a construction monitor to ensure that incidental construction impacts on retained biological resources are avoided or minimized. Responsibilities of the construction monitor shall include the following:	Retain a qualified biologist to attend pre-construction meetings and perform construction monitoring.	Prior to construction, and periodically and routinely during construction.	As needed.	Las Virgenes Municipal Water District-Triunfo Joint Powers Authority			
- Attend all pre-grading meetings to ensure that the timing and location of construction activities do not conflict with mitigation requirements. - Conduct meetings with the contractor and other key construction personnel, describing the importance of restricting work to within the project boundaries and outside of the preserved areas. The monitor shall also work with the contractor to determine the most appropriate staging/storage areas for equipment and materials. - Guide the contractor in marking/flagging the construction area limits, in accordance with the final approved grading plan. - Periodically and routinely visit the site during construction to coordinate and monitor compliance with the above provisions.							

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
Mitigation Measure BIO-8 Bat Surveys and Protection							
The presence or absence of any bat roosts shall be confirmed prior to the initiation of project activities. A qualified bat specialist shall conduct bat surveys within the project site and within a 100-foot buffer to identify potential habitat that could provide daytime and/or nighttime roost sites, and any maternity roosts. Acoustic recognition technology shall be used to maximize detection of bats. Night roosts are typically utilized from the approach of sunset until sunrise. Maternity colonies, composed of adult females and their young, typically occur from spring through fall. If bats are not detected, but the bat specialist determines that roosting bats may be present at any time of year and could roost in trees, trees planned for removal shall be pushed down using heavy machinery rather than felling it with a chainsaw. To optimize the warning for any roosting bats that may still be present, trees shall be pushed lightly two to three times, with a pause of approximately 30 seconds between each nudge to allow bats to become active. The tree shall be initially pushed slowly to allow roosting bats to escape. After a suitable bat roosting tree is felled, it shall remain in place until it is inspected by a bat specialist. Trees that are confirmed to be bat roosts shall not be bucked or mulched immediately, instead, a period of at least 24 hours, and preferably 48 hours, shall elapse prior to such operations to allow bats to escape. If presence of a bat roost is confirmed in a tree that has been felled, the tree shall remain in place until the bat specialist has determined that individual bats have left the roost. The bat specialist shall document all trees containing bat roosts and prepare a summary report to the District upon completion of project activities. All observations of special-status species shall be recorded on CNDDB field sheets and sent to CDFW by the applicant or qualified biologist. If maternity roosts are found, work that has a potential to impact the roosts (as determined by a qualified biologist), such as, removal of a tree with an active bat roost, shall be scheduled between October 1 and February 28, outside of the maternity roosting season when young bats are present but are not yet ready to fly out of the roost (March 1 to September 30). If maternity roosts are found and trees must be removed during the maternity season, a qualified bat specialist shall conduct a preconstruction survey to identify those trees proposed for disturbance that could provide hibernacula or nursery colony roosting habitat. Acoustic recognition technology shall be used to maximize detection of bats. Each tree identified as potentially supporting an active maternity roost shall be closely inspected by the bat specialist no more than seven days prior to tree disturbance to determine the presence or absence of roosting bats more precisely. If maternity roosts are detected, trees determined to be maternity roosts shall be left in place until the end of the maternity season. Work shall not occur within 100 feet of an active roost and construction shall not occur between 30 minutes before sunset and 30 minutes after sunrise.	Retain a qualified biologist to perform pre-construction bat surveys with acoustic recognition technology.	Prior to the initiation of project activities.	Once.	Las Virgenes Municipal Water District-Fuente Joint Powers Authority			
	Push down trees which bats may be present in, instead of felling with a chainsaw.	During tree removal.	As needed.				
	Inspect felled trees which may contain suitable bat roosting habitat prior to mulching.	During tree removal.	As needed.				
Mitigation Measure BIO-9: Sensitive Community Avoidance							
California sycamore – coast live oak woodlands, California sycamore – arroyo willow woodlands, and cecepingo ryegrass turfs shall be avoided to the extent feasible. CDFW sensitive natural communities not within the immediate disturbance footprint but located within 50 feet of disturbance limits shall be flagged and fenced off by a qualified biologist before construction activities start, to avoid impacts. Where avoidance is not feasible, impacts shall be offset through implementation of a restoration plan (BIO-4).	Flag and fence off sensitive communities located within 50 feet of the disturbance footprint.	Prior to start of construction activities.	Once.	Las Virgenes Municipal Water District-Fuente Joint Powers Authority			
Mitigation Measure BIO-10: Protection Against Spread of Non-Native Seeds and Pathogens							
Prior to entering the project site, workers shall inspect their clothing, including shoes, all vehicles, and equipment for invasive plant seeds or plant parts. The undercarriage and tires of loaders, dozers, drilling rigs, cranes, and vehicles, power tools, and other equipment, shall be power washed and clean from any seeds, pathogens, and mud before entering the project site for the first time. All soil and fill material shall be inspected and determined free of any invasive plant seed prior to leaving the facility where the material is coming from. Any straw, wood, or other mulch shall be purchased from a certified weed-free vendor. Excavated soil containing non-native plants shall be stored in a previously disturbed area or staging area at least 50 feet from potentially jurisdictional features. Any soil contaminated by non-native species shall be placed at the bottom of the trench or spoils pile to reduce the spread of non-native species. Pruning and power tools shall be cleaned and disinfected before use on site to prevent introducing pathogens, and after use to prevent spread of pathogens to new areas.	Verify inspection of construction workers, vehicles and equipment, and soil and fill material.	Continuous.	Continuous.	Las Virgenes Municipal Water District-Fuente Joint Powers Authority			
	Store excavated soil containing non-native plants in a previously disturbed area 50 feet from potentially jurisdictional features.	Continuous.	Continuous.				
Mitigation Measure BIO-11: Protection Against Impacts to Wildlife Movement							
- Work shall be limited to daylight hours. The project shall avoid non-essential lighting and artificial lighting. Any artificial lighting shall be of the lowest illumination, be selectively placed, and shielded and directed downward to minimize light spillage into the adjacent natural habitats. - Gates, walls, fences, barriers, or other structures that prevent the movement of wildlife through developed areas to access adjacent open space resources shall be avoided, as feasible. - If gates are necessary, the gates shall be wildlife-permeable and shall only be constructed on roads or driveways that provide access to the development on the parcel. - Development shall avoid all known wildlife movement corridors, as feasible. - If development must occur in known wildlife movement corridors, the development shall not block wildlife 'chokepoints' (within Malibu Creek) and shall allow wildlife to pass through these areas. - Roads, vehicle access routes, and fencing shall avoid impacts to wildlife movement corridors, if feasible. If road, vehicle access routes, and fencing must occur in wildlife movement corridors, the development footprint shall be minimized to the smallest extent feasible and the development shall avoid blocking 'chokepoints' within wildlife movement corridors.	Verify work is limited to daylight hours, and artificial lighting is shielded and directed downward.	Continuous.	Continuous.	Las Virgenes Municipal Water District-Fuente Joint Powers Authority			
	Avoid use of obstructions to wildlife movement as feasible. Verify gates are wildlife-permeable.	Continuous.	Continuous.				
	Verify construction avoids wildlife movement corridors as feasible.	Continuous.	Continuous.				

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
Mitigation Measure BIO-12: Minimize Impacts to Protected Trees							
The following tree protection measures adhere to section 22.44.1920 of the County Code of Ordinances:							
- Protective fencing shall be used around the outermost limits of the protected zones of the native trees within or adjacent to the construction area that may be disturbed during construction or grading activities. Before the commencement of any clearing, grading, or other construction activities, protective fencing shall be placed around each applicable tree. Fencing shall be maintained in place for the duration of all construction. No construction, grading, staking, or materials storage shall be allowed within the fenced exclusion areas, or within the protected zones of any on site native trees - Any approved development, including grading or excavation, that encroaches into the protected zone of a native tree shall be constructed using only hand-held tools - The JPA shall retain the services of a qualified independent biological consultant or arborist, approved by the Director to monitor native trees that are within or adjacent to the construction area. Public agencies may utilize their own staff who have the appropriate classification. If any breach in the protective fencing occurs, all work shall be suspended until the fence is repaired or replaced In addition, the following tree protection guidelines adhere to current International Society of Arboriculture (ISA) standards for tree preservation during construction activities:							
- Tree protection shall be established at the TPZ or at the greatest distance feasible from all protected trees not proposed for removal - The limits of the TPZ should be staked in the field prior to commencement of construction activities - Any brush clearing or pruning required within the TPZ should be accomplished with hand-operated equipment - All trimming, pruning or removal of protected trees should be performed by or directly monitored by an ISA Certified Arborist in accordance with current ISA Standards - No materials, equipment, spoil, waste or washout water should be deposited, stored or parked within the TPZ - Construction activities should be completed using the smallest equipment feasible and shall operate outside the TPZ - If equipment placement within the TPZ is necessary for construction activities, ground protection should be placed (2 inches of mulch, plywood) to prevent soil compaction - Any roots of a protected tree over 1 inch in diameter exposed during construction activities should be exposed to sound tissue and cut cleanly with a saw - For any single native protected tree, no more than 20% of five foliage should be removed or greater than 20% of the ground under a tree be disturbed during the extent of construction activities for this project							
Mitigation Measure BIO-13: Oak Tree Replacement and Monitoring							
In accordance with Section 22.44.950, Section O, of the SMM LIP, if any of the protected trees impacted are lost or suffer worsened health and vigor as a result of proposed development, a 10:1 ratio with seedling-sized trees shall be planted. Where on-site mitigation is not feasible, off-site mitigation shall be provided at a suitable site restricted from development or is public parkland. The project has significant encroachment impacts exceeding 10% to one protected coast live oak tree, which requires a replacement ratio of 10:1 with seedlings that are less than one-year (10 indigenous oak trees as mitigation for the one encroached). Ten (10) trees should be planted on site, or if not feasible, off site within the same watershed. According to the LIP, any off-site mitigation that is in the same watershed shall require an additional two mitigation trees per removed or encroached tree. To maintain compliance, where feasible, the replacement trees shall be indigenous oaks sourced from seeds collected in Los Angeles or Ventura Counties, unless replacement trees come from acorns from the existing oak trees within the project site. In addition, an acorn derived from a local Santa Monica Mountains of the same species that is impacted shall be planted within the watering zone of the replacement trees.							
In accordance with SMM LIP Section 22.44.950, Section O, when development encroaches less than 30 percent of the TPZ of native trees, each affected tree shall be monitored annually for a period of no less than 10 years, and an annual monitoring report shall be submitted for review by the County for each of the 10 years. The precise location of trees to be installed on-site shall be determined by a qualified restoration specialist and will address existing groundcover species, level of soil disturbance, and other factors that may influence tree growth. If considered necessary by the restoration specialist, soil may be decompacted using hand tools to encourage root growth.							
If the project site is unsuitable for planting one or more of the replacement trees, the County Forester may approve other options as follows:							
- Planting replacement oak trees within the same watershed as the removed or encroached trees, where feasible. Any off-site mitigation not located within a site that was previously specified shall require an additional two mitigation trees per removed or encroached tree. - Payment into the Oak Forests Special Fund in the amount equivalent to the oak resource value as calculated by the applicant and approved by the County Forester in alignment with the International Society of Arboriculture's "Guide to Establishing Values for Trees and Shrubs."							
The project is located on public lands, owned by the State of California through the Department of Parks and Recreation; therefore, on-site oak and native tree mitigation is not feasible. As stated in subsection O.4 of the SMM LIP, where on-site tree mitigation is not feasible, the CDP shall be conditioned to require off-site mitigation in accordance with subsections O.1 and O.3 of the SMM LIP, and the location shall be provided at a suitable site in the Santa Monica Mountains coastal zone that is restricted from development or is public parkland. Off-site mitigation shall be located within the same watershed as the removed or encroached trees, where feasible. Any off-site mitigation that is in the same watershed shall require an additional two mitigation trees per removed or encroached tree; therefore, a total of 30 replacement trees should be planted off-site. Payment for offsite mitigation will include 96 mitigation oak/native trees for the 15 oak/native trees that will be encroached by 10 percent or more from the proposed project activities.							

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
Cultural Resources							
CR-1: Unanticipated Discovery of Cultural Resources							
In the event archaeological resources are unexpectedly encountered during ground-disturbing activities, work within 50 feet of the find shall halt and the qualified archaeologist shall be contacted immediately to evaluate the resource. If the resource is determined by the qualified archaeologist and/or Native American representative determines it to be appropriate, archaeological testing for CHIR eligibility shall be completed. If the resource proves to be eligible for the CHIR and significant impacts to the resource cannot be avoided via project redesign, a qualified archaeologist shall prepare a data recovery plan tailored to the physical nature and characteristics of the resource, per the requirements of CEQA Guidelines Section 15126.4(b)(3)(C). The data recovery plan shall identify data recovery excavation methods, measurable objectives, and data thresholds to reduce any significant impacts to cultural resources related to the resource. Pursuant to the data recovery plan, the qualified archaeologist and Native American representative, as appropriate, shall recover and document the scientifically consequential information that justifies the resource's significance. Las Virgenes-Trunfo JPA shall review and approve the treatment plan and archaeological testing as appropriate, and the resulting documentation shall be submitted to the regional repository of the CHIRIS, per CEQA Guidelines Section 15126.4(b)(3)(C).	Retain an archaeologist meeting the Secretary of Interior's Professional Qualifications Standards for archaeology to evaluate unanticipated finds, if encountered.	During construction.	As needed.	Las Virgenes Municipal Water District-Trunfo Joint Powers Authority			

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OAK TREES: Care and Maintenance

This Oak Tree Care and Maintenance Guide offers basic information and practical guidelines aimed at the preservation and continued health and survival of oak trees in the residential landscape.

Increasing pressure for development is changing the oak woodland of Los Angeles County. Heritage oaks which once survived in open rolling hills are now being preserved or replanted and incorporated into the community.

How do we protect these trees during the planning and development process, and ensure their survival once they are in the home garden?

The Oak Tree

Oak Trees in the residential landscape often suffer decline and early death due to conditions that are easily preventable. Damage can often take years to become evident, and by the time the trees show obvious signs of disease it is usually too late to help.

Improper watering, especially during the hot summer months, and disturbance to critical root areas are most often the causes. This booklet will provide guidelines on where these critical areas lie and ways to avoid disturbing them, as well as information on long-term care and maintenance of both natural and planted oaks. Lists of additional resources for more information and demonstration areas to visit are also included.

The Oak Tree Ordinance

The Los Angeles County Oak Tree Ordinance has been established to recognize oak trees as significant historical, aesthetic, and ecological resources. The goal of the ordinance is to create favorable conditions for the preservation and propagation of this unique and threatened plant heritage. By making this part of the development process, healthy oak trees will be preserved and maintained.

The Los Angeles County Oak Tree Ordinance applies to all unincorporated areas of the County. Individual cities may have their own ordinances, and their requirements may be different.

Permit Requirements:

Under the Los Angeles County Ordinance, a person shall not cut, destroy, remove, relocate, inflict damage, or encroach into the *protected zone* (see text) of any ordinance sized tree of the oak tree genus without first obtaining a permit.

Damage includes but is not limited to :

- Burning
- Application of toxic substances
- Pruning or cutting
- Trenching
- Excavating
- Paving
- Operation of machinery or equipment
- Changing the natural grade

Chapter 22.56.2050: Oak Tree Permit Regulations, Los Angeles County, Adopted: August 20, 1982. Amended: September 13, 1988.

For more information about the County Oak Tree Ordinance, visit the Forestry Division's website at:

http://lacofd.org/Forestry_folder/otordin.htm

Or contact:

Department of Regional Planning
320 W. Temple Street, 13th floor
Los Angeles, CA 90012-3284
(213) 974-6411
TDD: (213) 617-2292
<http://planning.co.la.ca.us>

Types of oaks commonly found in Los Angeles County:

Many kinds of oak trees are native to Los Angeles County. A few of the more common ones are shown below, but *all* oak trees are covered by the Oak Tree Ordinance.

Older oaks which have thrived under the natural rainfall patterns of dry summers and wet winters often can't handle the extra water of a garden setting. These trees must be treated with special care if they are to survive.

Those oaks that have been planted into the landscape or sprouted naturally tend to be more tolerant of watered landscapes. These vigorous young trees may grow 1½ to 4 feet a year in height under good conditions. Once established these trees would benefit from the same special care outlined in this guide.



Valley Oak
QUERCUS LOBATA

LARGE DECIDUOUS TREE 60'-75' HIGH, BROADLY SPREADING 50'-80' WIDE.

LEAVES: DEEP GREEN, 3"-4" LONG: PAPER-LIKE TEXTURE WITH DEEP ROUNDED LOBES ON THE LEAF EDGE.

TENDS TO FAVOR VALLEY BOTTOMS: FOR THIS REASON THE VALLEY OAK HAS DISAPPEARED FROM THE LANDSCAPE MORE RAPIDLY, IMPACTED SEVERELY BY AGRICULTURE AND URBAN DEVELOPMENT.



Coast Live Oak
QUERCUS AGRIFOLIA

LARGE EVERGREEN TREE WITH A BROAD, ROUND SHAPE AND LARGE LIMBS. 30'-70' HIGH, 35'-80' WIDE.

LEAVES: GLOSSY GREEN, 1"-3" LONG: SPINY, ROUNDED, AND HOLLY-LIKE, BUT DISTINCTLY CUPPED OR CURLED UNDER AT THE EDGES.



Interior Live Oak
QUERCUS WIGLIZENII

EVERGREEN TREE 30'-75' HIGH OR A SHRUB 8'-10' HIGH IN CHAPARRAL AREAS. HAS A FULL, DENSE ROUNDED SHAPE, NOT BROAD OR WITH LARGE LIMBS LIKE A COAST LIVE OAK. THEY TEND TO GROW IN CLUMPS RATHER THAN AS A SINGLE TREE.

LEAVES: DARK GREEN, 1"-4" LONG. EDGES EITHER SMOOTH OR SPINY, BUT ALWAYS FLAT— NOT CURLED UNDER.

OTHER COMMON OAKS:

CALIFORNIA BLACK OAK: *QUERCUS KELLOGGII*
CANYON LIVE OAK: *QUERCUS CHRYSOLEPIS*
ENGELMANN OAK: *QUERCUS ENGELMANNII*

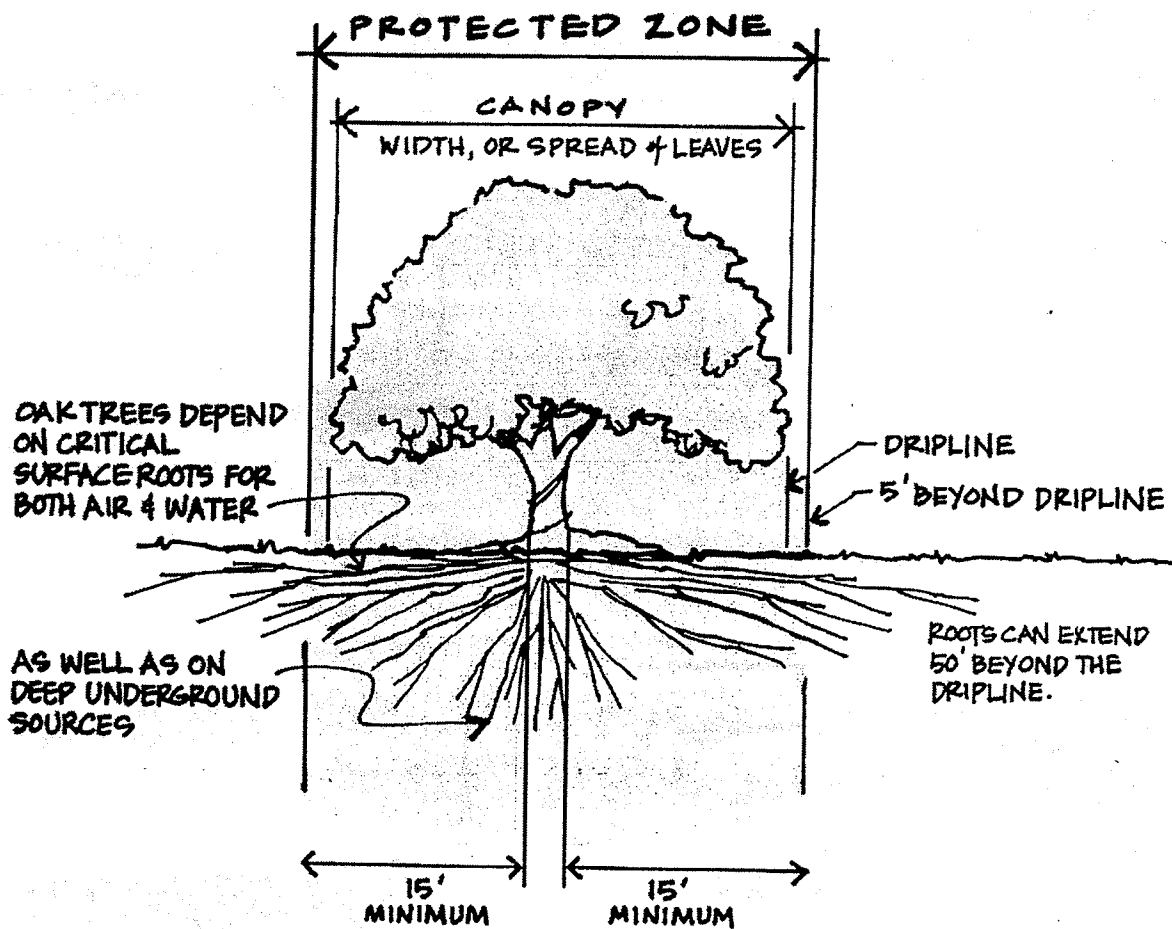
THE PROTECTED ZONE

The **protected zone** defines the area most critical to the health and continued survival of an oak tree. Oaks are easily damaged and very sensitive to disturbances that occur to the tree or in the surrounding environment.

The root system is extensive but surprisingly shallow, sometimes radiating out as much as 50 feet beyond the spread of the tree leaves, or canopy. The ground area at the outside edge of the canopy, referred to as the *dripline*, is especially important: the tree obtains most of its surface water and nutrients here, and conducts an important exchange of air and other gases.

The protected zone is defined in the Oak Tree Ordinance as follows:

"The Protected Zone shall mean that area within the dripline of an oak tree and extending there from to a point at least 5 feet outside the dripline or 15 feet from the trunk, whichever distance is greater."



CONSTRUCTION ACTIVITY WITHIN THE PROTECTED ZONE

Changes in Grade

Any change in the level of soil around an oak tree can have a negative impact. The most critical area lies within 6' to 10' of the trunk: no soil should be added or scraped away. Water should drain away from this area and not be allowed to pond so that soil remains wet at the base.

Retaining walls designed to hold back soil above or below an existing tree should be avoided if at all possible, especially within the protected zone. These types of structures cause critical areas at the dripline to be buried, or require that major roots be severed. Water trapped at the base of the tree could lead to root rot or other impacts, and to the decline and premature death of a highly valued landscape tree.

Construction activities outside the protected zone can have damaging impacts on existing trees. Underground water sources can be cut off due to falling water tables, or drainage may be disrupted.

Trenching

Digging of trenches in the root zone should be avoided. Roots may be cut or severely damaged, and the tree can be killed.

If trenches must be placed within the protected zone, utilities can be placed in a conduit, which has been bored through the soil, reducing damage to the roots. Insist that as many utilities as allowed be placed in a single trench, instead of the common practice of digging a separate trench for each individual line.

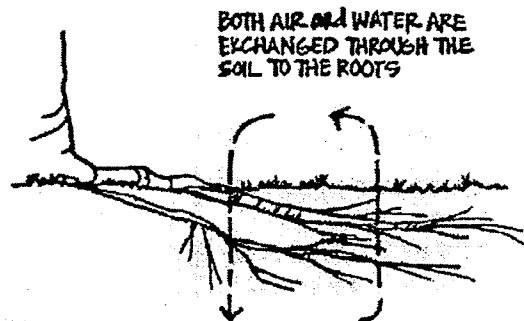
Trenching can also be accomplished using hand tools or small hand held power equipment to avoid cutting roots. Any roots exposed during this work should be covered with wet burlap and kept moist until the soil can be replaced.

Soil Compaction and Paving

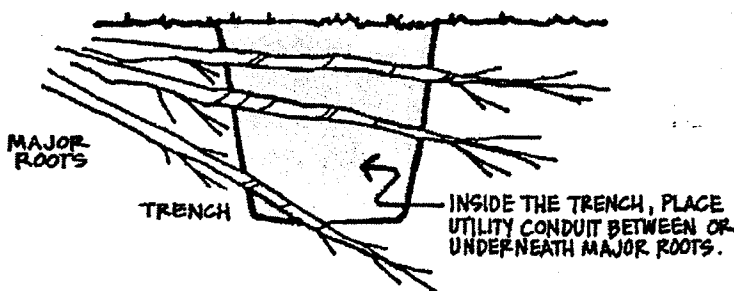
The roots depend upon an important exchange of both water and air through the soil within the protected zone. Any kind of activity that compacts the soil in this area blocks this exchange and can have serious long-term negative effects on the tree.

If paving material must be used, some recommended surfaces include brick paving with sand joints, or ground coverings such as wood chips (note the advantages of natural materials for providing nutrients under *mulching*).

SOIL COMPACTION



TRENCHING



MAINTENANCE

Watering

The key is prevention – **do not over water**. Improper watering is often overlooked as the cause of tree death because it can take years for the damage to show. Once the tree shows obvious signs of decline, it is often too late to correct the problem.

The seasonal weather pattern for this region is one of dry summers and winter rain. Oak trees are naturally drought tolerant and adapted to this cycle. If the tree is vigorous and thriving it should not require **any** additional water.

If the natural source of surface or underground water has been altered, some supplemental water may be necessary, but proceed with caution. The goal of any watering schedule for oak trees should be to supplement natural rainfall and it should occur only when the tree would normally receive moisture. This might be in the winter, if rains are unusually late, or in spring if rainfall has been below normal levels.

Over watering, especially during the summer months, causes a number of problems which can lead to decline and eventual death of the tree. It creates ideal conditions for attacks of Oak Root Fungus by allowing the fungus to breed all year. In addition, both evergreen and deciduous oaks grow vigorously in the spring and naturally go dormant in the summer. Extra water only encourages new tip growth which is subject to mildew. Oaks need this period of rest.

Newly planted oaks may need supplemental watering during their first few summers. After they become established water should be applied according to the previous guidelines.

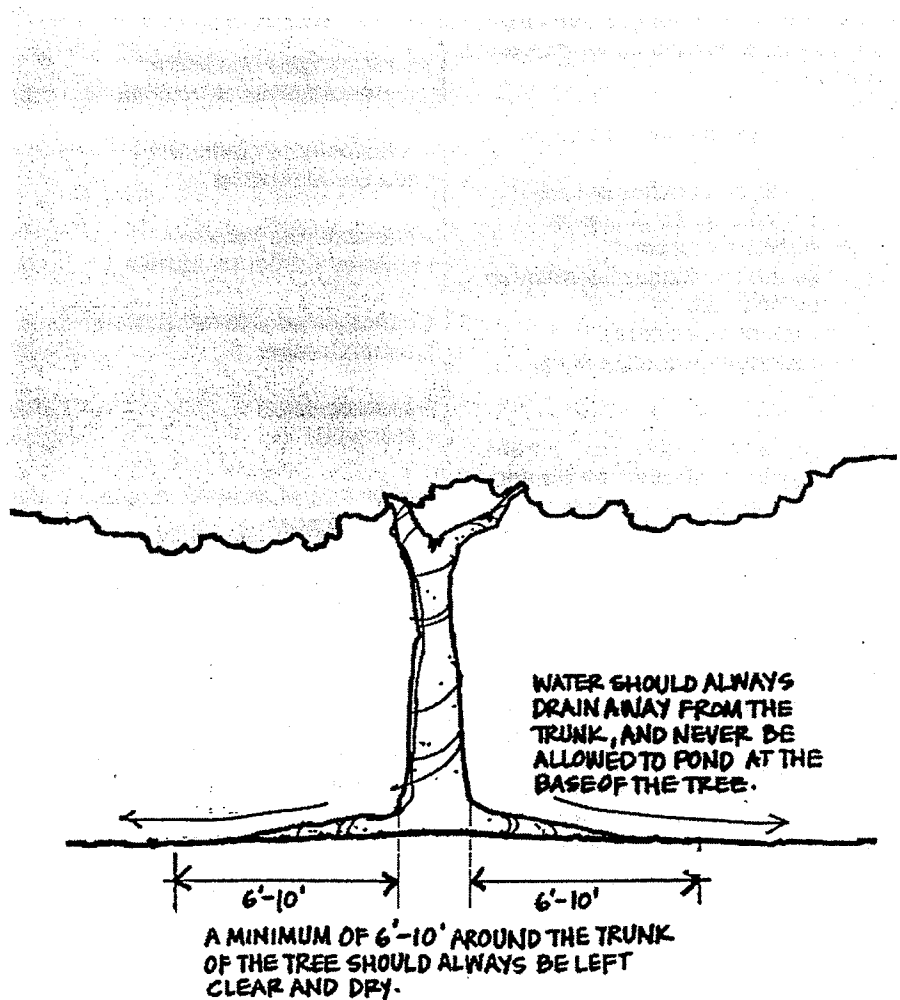
Pruning

For oak trees the periodic removal of dead wood during periods of tree dormancy should be the only pruning needed. Any cutting of green wood opens scars that could allow the entry of organisms or disease.

Before pruning obtain the advice of a certified arborist or other professional and consult the local city or county where the tree is located to find out what regulations apply. Pruning of both live and dead wood can sometimes require a permit.

Mulching

Leaf litter from the tree is the best mulch and should be allowed to remain on the ground within the protected zone. Crushed walnut shells or wood chips can be used, but the oak leaves that drop naturally provide the tree with a source of nutrients. Avoid the use of packaged or commercial oak leaf mulch which could contain Oak Root Fungus. Redwood chips should not be used due to certain chemicals present in the wood.



Disease and Pests

Trees that are stressed, especially because of improper watering practices, are prone to certain diseases and attacks by pests.

The most damaging of these diseases is the Oak Root Fungus *Armillaria mellea*. Occurring naturally in the soil, the fungus thrives under wet conditions and dies back in the summer when soils dry out. This is why summer watering of oaks can be a deadly practice. As noted in the watering guidelines, wet soil in the summer allows the fungus to grow all year. As the population grows, their natural food sources are depleted and they begin feeding on oak tree roots. The fungus does not require an open wound in the tree to gain entry.

Indications of the fungus include:

- die back of branches or tips.
- honey colored fungus at or near the root crown.
- white fan-like fungus between wood and bark.
- the presence of black, shoestring-like growths in the soil.

Once the tree begins to show obvious signs of infection treatment is generally ineffective. The best treatment is to *avoid* the conditions that lead to Oak Root Fungus infections.

Pit Scale, Oak Moth, and other pests: any significant changes in leaf color, branch die back, presence of black sooty materials on leaves or other changes should be noted. Seek the advice of a professional forester, arborist, farm advisor or other expert before the application of any pesticides on an oak tree.

Planting Underneath Oaks

The natural leaf litter is by far the best ground cover within the protected zone. If plants must be placed, the following guidelines should be followed:

There should be no planting within a minimum 6 to 10 feet of the trunk.

Avoid plants that require any supplemental water once established.

Choose plants suited for "dry shade." Those listed in the box below offer some good choices. To see some examples of how these plants have been used under oaks refer to the Additional Resources section on the following page.

PLANTS TO CONSIDER:

Plant Name	Description
<i>Arctostaphylos densiflora</i> 'Howard McMinn' Manzanita	3' high, 6' wide. Toughest of available forms. Whitish-pink flowers.
<i>Arctostaphylos edmundsii</i> Little Sur Manzanita	1-2' high, 4-5' wide. Tolerant of full shade.
<i>Arctostaphylos hookeri</i> Monterey Carpet Manzanita	1-2' high, spreading to 12' wide by rooting branches. White to pink flowers.
<i>Ceanothus griseus horizontalis</i> Carmel Creeper	Less than 2 1/2' tall, low & creeping. Clusters of small blue flowers.
<i>Heuchera</i> spp. Coral Bells	2-4' mound. Flowers on an upright stem 2-3" high and spotted with red or pink.
<i>Mahonia aquifolium compacta</i> Oregon Grape	2-4' high, spreading by underground roots. Bright yellow flower clusters.
<i>Ribes viburnifolium</i> Evergreen or Catalina Currant	2-3' high, spreading to 12' wide. Flowers pink to red in small clusters.

NOTES:

Before deciding on plants, check a source such as the Sunset Western Garden Book to determine which plants will grow in your area.

When choosing shade tolerant plants, consider that the ground under the south side of the tree will get more sunlight while the northern side will tend to remain more deeply shaded.

ADDITIONAL RESOURCES and Places to Visit

Public Agencies

County of Los Angeles Fire Department
Prevention Bureau, Forestry Division
5823 Rickenbacker Road, Rm #123
Commerce, CA 90040-3027
(323) 890-4330
<http://lacofd.org/forestry.htm>

University of California
Integrated Hardwood Range Management Program
163 Mulford Hall, Berkeley, CA 94720-3114
<http://danr.ucop.edu/ihrmp>

Private Organizations

The Theodore Payne Foundation
10459 Tuxford Street
Sun Valley, CA 91352-2126
(818) 768-1802
www.theodorepayne.org

California Native Plant Society
1722 J Street, Suite 17
Sacramento, CA 95814-3033
(916) 447-2677
www.cnps.org

The California Oak Foundation
1212 Broadway, Suite 810
Oakland, CA 94612-1810
(510) 763-0282
www.californiaoaks.org

Arboretums and Botanic Gardens

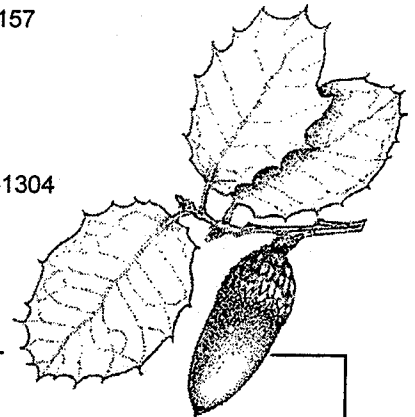
Los Angeles County Arboreta and Botanic Gardens
301 N. Baldwin Ave.
Arcadia, CA 91007-2697
(626) 821-3222
www.arboretum.org

Los Angeles County South Coast Botanic Garden
26300 Crenshaw Blvd.
Palos Verdes Peninsula, CA 90274-2515
(310) 544-6815
www.southcoastbotanicgarden.org

Los Angeles County Descanso Gardens
1418 Descanso Drive
La Canada-Flintridge, CA 91011-3102
(818) 949-4200
www.descansogardens.org

Rancho Santa Ana Botanic Garden
1500 North College
Claremont, CA 91711-3157
(909) 625-8767
www.rsabg.org

The Lummis Home
200 E. Avenue 43
Los Angeles, CA 90031-1304
(213) 222-0546



Publications

Compatible Plants Under and Around Oaks. Bruce W. Hagen... [et al]. The California Oak Foundation. 2000.

Growing California Native Plants. Marjorie G. Schmidt, Univ. California Press. 1981.

Illustrated Guide to the Oaks of the Southern Californian Floristic Province. Fred M. Roberts. FM Roberts Publications. 1996.

Living Among the Oaks: A Management Guide for Landowners. University of California Integrated Range Management Program. 1995.

Oaks of California. Bruce M. Pavlik... [et al]. Cachuma Press & the California Oak Foundation. 1995.

Proceedings of the Fifth Symposium on Oak Woodlands: Oaks in California's Changing Landscape. GTR PSW-GTR-184. Forest Service, U.S. Department of Agriculture. 2001.
Available from the University of California Integrated Hardwood Range Management Program.

Regenerating Rangeland Oaks in California. University of California Integrated Range Management Program. 2001.



County of Los Angeles Fire Department Forestry Division

County of Los Angeles Board of Supervisors

Gloria Molina, First District
Yvonne Brathwaite Burke, Second District
Zev Yaroslavsky, Third District
Don Knabe, Fourth District
Michael D. Antonovich, Fifth District

County of Los Angeles Fire Department

P. Michael Freeman, Fire Chief

Brush Clearance Unit
605 N. Angeleno Avenue
Azusa, CA 91702-2904
(626) 969-2375

Camp 17
6555 Stephens Ranch Road
La Verne, CA 91750-1144
(909) 593-7147

Environmental Review Unit
12605 Osborne Street
Pacoima, CA 91331-2129
(818) 890-5719

Fire Plan/Interpretive Unit
12605 Osborne Street
Pacoima, CA 91331-2129
(818) 890-5783

Fuel Modification Unit
605 N. Angeleno Avenue
Azusa, CA 91702-2904
(626) 969-5205

Henninger Flats Forestry Unit
2260 Pinecrest Drive
Altadena, CA 91001-2123
(626) 794-0675

Lake Hughes Forestry Unit
42150 N. Lake Hughes Road
Lake Hughes, CA 93532-9706
(661) 724-1810

Malibu Forestry Unit
942 N. Las Virgenes Road
Calabasas, CA 91302-2137
(818) 222-1108

San Dimas Forestry Unit
1910 N. Sycamore Canyon Road
San Dimas, CA 91773-1220
(909) 599-4615

Saugus Forestry Unit
28760 N. Bouquet Canyon Road
Saugus, CA 91390-1220
(661) 296-8558

Vegetation Management Unit
12605 Osborne Street
Pacoima, CA 91331-2129
(818) 890-5720



Los Angeles Audubon Society
PO Box 931057
Los Angeles, California 90093-1057

Telephone: 323-876-0202
Fax: 323-876-7609
www.laaudubon.org

Guide to Bird-Friendly Tree and Shrub Trimming and Removal



*This booklet has been reviewed by the
California Department of Fish and Game*



**Printed on
Recycled Paper Using Soy Inks**

March 2009

*When one tugs at a single thing in nature, he finds it
attached to the rest of the world. -- John Muir*



BIRDS BUILD HOMES TO RAISE YOUNG MUCH LIKE PEOPLE DO

Birds build homes in which to raise their young just as humans do, although their site selections are more varied and often in obscure, hidden places. It is common to think of nests being in tree branches. But some birds build nests on the ground, in bushes and cavities; some build on the sides and eaves of houses, as well as on other man-made structures. They use natural substances and materials to do the job: mud, saliva, spider webs, caterpillar silk, leaf mold, twigs, grasses, and certain other plant fibers. The nest protects the bird's eggs from adverse weather and predators, and keeps eggs and nestlings warm.

THE BIRDS OF LOS ANGELES COUNTY: MORE THAN MEETS THE EYE!

What comes to mind when most people think about city birds are pigeons, mockingbirds, crows, and sparrows. Yet these birds are but a small portion of the more than 120 species that reside in Los Angeles County year round. Annual migration brings in additional species to the area, including more than 60 other breeding species (such as orioles and kingbirds). In total, 350+ species live, nest, or pass through the Los Angeles Basin during any one year. Most of them rely on trees, shrubs, and brush for food, cover, nesting, and rest.

Birds generally choose lush locations, such as city parks, schools, business parks, and neighborhoods with high tree density; however, nothing „typical“ should be assumed.

During the spring and summer, many birds, including some migrants, nest in Los Angeles County. Unfortunately this is also the time of year that cities and residents tend to trim trees, prune shrubs, and clear brush. Severely cutting, trimming, and topping trees and other greenery in the spring and summer can destroy nests and may eliminate valuable nest sites.

There are laws that protect birds, their nests, eggs, and young from being removed, destroyed or harassed. A summary of these laws are contained in this booklet. It is worthwhile mentioning that violating any of these laws may result in fines and imprisonment.

Los Angeles Audubon has created these guidelines to inform city authorities, tree trimming contractors, and the general public about the impact on birds by trimming during the times of the year when they are nesting. With your help, great numbers of birds may be spared the destruction of their nests and young each year. In turn, our birds can achieve healthy populations, and continue to provide ecological and aesthetic benefits to humans. More importantly, it will ensure that future generations will be able to enjoy the bounty of birds that call Los Angeles County home.

IMPORTANT PHONE NUMBERS

To report bird harassment, killing, and/or destruction of bird nests:

CALIFORNIA DEPARTMENT OF FISH AND GAME: 888-334-2258

For nesting surveys: 858-467-4201

For advice on nesting birds or referrals for nest surveys:

LOS ANGELES AUDUBON: 323-876-0202

Monday – Thursday, 10 AM – 4 PM

**To report bird harassment, killing, and/or destruction of bird nests in
county parks:**

L. A. COUNTY PARKS & RECREATION: 213-738-2961

Emergency After Hours: 213-974-1234

**To report nest disturbance, inappropriate trimming in the City of Los
Angeles:**

L. A. URBAN FORESTRY DIVISION: EMERGENCY: 311

To report nest disturbance, inappropriate trimming in the coastal zone:

CALIFORNIA COASTAL COMMISSION

Enforcement officer: 562-590-5223

LAWS PROTECTING BIRDS



Los Angeles County Municipal Code:

Sec. 53.48. SONG BIRDS – KILLING

No person shall kill any song bird or destroy or rob the nest of any such bird.

California State Code:

3503. It is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto.

3503.5. It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds of prey) or to take, possess or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.

Title 14, Chapter 1, Section 251.1. Harassment of Animals

Except as otherwise authorized in these regulations or in the Fish and Game Code, no person shall harass, herd or

drive any game or non-game bird or mammal or furbearing mammal. For the purposes of this section, harass is defined as an intentional act which disrupts an animal's normal behavior patterns, which includes, but is not limited to, breeding, feeding or sheltering. This section does not apply to a landowner or tenant who drives or herds birds or mammals for the purpose of preventing damage to private or public property, including aquaculture and agriculture crops.

Federal Migratory Bird Treaty Act

703. Taking, killing, or possessing migratory birds unlawful.

“...it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, offer for sale, sell, offer to barter, offer to purchase, deliver for shipment, ship, export, import, cause to be shipped, exported, or imported, deliver for transportation, transport or cause to be transported, carry or cause to be carried, or receive for shipment, transportation, carriage, or export, any migratory bird, any part, nest, or eggs of any such bird, or any product, whether or not manufactured, which consists, or is composed in whole or part, of any such bird or any part, nest, or egg thereof...”



IMPORTANT FACTS ABOUT NESTING BIRDS



The Time of Year that Birds Typically Nest

Many species nest between March 1 and August 31. California Department of Fish and Game often requires surveys for raptors from January 15 to September 15. But nesting birds, especially hummingbirds, hawks and owls, may be found at any time of year, depending on the species. However there are several species that court and nest outside this time frame, for example, some herons and egrets, many raptors (birds of prey), and most hummingbirds. See Appendix B for guidance on safe times for trimming near heron and egret nests. Consult an independent qualified biologist for safe trimming times upon discovering any large nest.*

***NOTE:** *Certain species such as hawks, owls, herons, egrets, crows, and ravens also often re-use nests. If a large nest made of twigs is encountered, even if unoccupied, assume that it belongs to one of these birds and do not disturb it.*

Types of Birds that Nest in Los Angeles County

There are a great variety of species that call Los Angeles County home. The following is a brief list of species, but ***please note that it is not all-inclusive:***

- herons, egrets, cormorants*
- hawks, falcons, owls
- pigeons, doves
- hummingbirds, swallows
- woodpeckers
- crows, ravens, jays
- wrens, bushtits, mockingbirds, orioles, sparrows, finches

***NOTE:** SEE APPENDIX B FOR SPECIAL CONSIDERATIONS FOR HERONS, EGRETS AND CORMORANTS.

What To Do Before Trimming

It is best to avoid the nesting season altogether and do your tree trimming between September and February. At any time the area should be carefully inspected before you begin your operation. For larger areas and sensitive habitats such as areas of native plants, dense brush, stream sides and stands of trees, it is best to hire a trained biologist to conduct the survey.* Laypersons may attempt to conduct their own nest survey; however in most cases this is not possible or practical. Most birds conceal their nests carefully and will not be visible to the average observer; but they do give obvious clues of their whereabouts. There are several ways to detect bird nests: 1) look on the ground for concentrations of white-colored droppings, then check the vegetation above; 2) as you walk through an area, look for birds flying out of vegetation close to you and intensely scolding you; they may have a nest nearby; 3) sit quietly and watch for birds that may be bringing nest material or food repeatedly to one place. Birds tend to place their nests just on the undersides of the tree canopy and where branches join together.

***See Appendix A for detailed nest descriptions**

When an Active Nest is Found – STOP TRIMMING!

All work that has the potential to disturb or destroy the nest should cease in the immediate vicinity (50 ft is a good rule of thumb for songbirds, 500 ft for raptors). The nest should not be touched or moved. A qualified biologist or the California Department of Fish and Game can assist in making determinations on how far away to remain from the nest and other measures to avoid disturbing or destroying it. Ideally the nest should remain undisturbed until the young have fledged (left the nest on their own) or the nest is abandoned.

Advice on Finding Nests: Professional Nest Surveys

If you are not comfortable or able to perform a nest survey prior to your project, qualified biological consultants can be found online, or the California Department of Fish and Game may be able to assist you. Either one can perform a nest survey of the trees, shrubs, brush, or other vegetation in question. As stated previously, nests are not easy to spot or to identify. Special care needs to be taken to survey the project area if it includes trees, abandoned buildings, brush, vacant lots, and deadfall.

How Finding Nests May Affect a Project

If the nest contains unhatched eggs or young, work within 50 feet or more of the nest may need to be delayed depending on the species involved. When the species is identified California Department of Fish and Game or Los Angeles Audubon may be able to provide the amount of time until the eggs hatch and nestlings fledge. If the nest is voluntarily abandoned or depredated (and again depending on species) work probably can be continued. However, a precise determination can only be made by an expert such as a consulting biologist or the California Department of Fish and Game.

Why Nests Can't be Disturbed or Moved to Another Location

The parents choose the nest location for specific reasons: proximity to food and water sources; protection from predators and the elements. Birds may abandon their nest (which may already include eggs or young) if it is disturbed or if the parents are harassed. Moving a nest requires special permission from the U.S. Fish and Wildlife Service and is usually only granted for human health and safety reasons.

What You Can Do If You Witness Tree Trimmers Disturbing or Destroying Nests

Ask them to stop, and make them aware it is against the law. Then a call should be placed to the California Department of Fish and Game. [See "Important Phone Numbers"] *Be prepared to provide the exact location of the activity. Specifically note address and cross streets as well as a vehicle license plate number or name of the company doing the trimming.*

Why We Should Care About Protecting Birds' Nests

First and foremost, it is the law. Second, birds provide numerous beneficial activities, such as eating many thousands of insect pests, which may eliminate some of the need for toxic pesticides. They also disperse seeds over wide areas, ensuring plant health and biodiversity. Finally, many bird populations nationwide are plummeting primarily due to the impact of human activities. Birds are creatures of the earth, a family of animals with which we share this planet and its limited resources. Our positive, cumulative actions can make the difference in ensuring their long-term survival.

IMPORTANT FACTS TO CONSIDER WHEN PLANNING A PROJECT

- Trimming or removal of trees can only be conducted safely outside of the breeding seasons for the bird species inhabiting the area. A qualified independent biologist or the California Department of Fish and Game should be retained by the City and/or project manager to conduct focused nest surveys prior to any work.
- All persons under contract should be made fully aware of the laws protecting birds and the proper protocols when encountering active nests.
- Hire an arborist that is ISA (International Society of Arborists) certified, a licensed landscaper, or a qualified tree trimmer who knows and cares about a tree's health. Avoid hiring „bargain“ tree trimmers or handymen, as they are generally inexperienced and may cause more harm than good to the trees.
- Most trees in Southern California are trimmed excessively and inappropriately, especially around apartment complexes and condominiums. This is not only to the detriment of the trees, but it leaves fewer habitats for birds to thrive in. Examples of unnecessary tree trimming are:
 - Thinning out pine trees and conifers to the point that you can see through them;
 - Sycamore trees—they do not need pruning because they don't drop limbs;
 - Removing dead palm fronds that drape down around the trunks of palm trees, which provide valuable nest sites for orioles and kingbirds.
- Choose tree varieties wisely. Put the right tree in the right place to prevent the need to severely trim or remove trees because they are too big, no longer „work,“ or are causing problems for plumbing, uprooting sidewalks, growing into electrical lines, etc.
- Please Remember: Trees are not ornaments; they are living organisms and will naturally become a host for other living things.

APPENDIX A

TYPES OF BIRD NESTS

- Birds as small as hummingbirds and as large as herons nest on tree branches; so do hawks, owls, and crows. The nests may be found at every level of the tree, from the crown to the under-story; they may be near the crotch, between branch and trunk, or out toward the end of a branch. Birds may use maples, pines, junipers, oaks, sycamore, and palm trees for nesting.
- Some birds, such as some species of sparrow, use grassland and brushy areas, making the nest on the ground.
- Species such as wrens, juncos, and finches may build their nests in bushes and shrubs with dense, compact foliage, or on the ground below them.
- Some swallows and flycatchers build mud nests attached to the sides of buildings, under culverts, and the eaves of houses.
- Woodpeckers, wrens, some species of owls, sapsuckers, and swallows use cavities that they either excavate themselves or use after another has abandoned it. They will use holes found in live and dead trees, stumps, cacti, and sides of old buildings.

The types of nests that birds construct are as varied as the birds themselves. A few of the major examples are:

- **Scrape nests** are simple depressions in the ground (sometimes with a few stones or leaves added), or in the leaf litter. Such nests are used by shorebirds, gulls, terns, nighthawks, vultures, and other species.
- **Burrow nests** are very effective at protecting eggs and young from predators and maintaining an appropriate microclimate for eggs and young. Some birds, like Bank Swallows and Belted Kingfishers, usually construct their own burrows, while others, such as Burrowing Owls, may use the burrows constructed by other species.

- **Cavity nests** are used by numerous passerines, woodpeckers, owls, parrots, and some waterfowl. Woodpeckers construct their own cavity nests and are referred to as primary cavity nesters. Species that use natural cavities or cavities constructed by primary cavity nesters are called secondary cavity nesters.
- **Platform nests** are relatively flat nests that may be located on the ground, in a tree, or on the tops of rooted vegetation or debris in shallow water.
- **Cupped nests** are, of course, cup shaped. Such nests may be constructed of various materials and in a variety of locations. Noted ornithologist Olin Sewall Pettingill subcategorized cup nests as follows:
 - **Supported cupped nests:** nests located in the crotches and branches of trees and shrubs, supported mainly from below. Many passerines and hummingbirds build such nests.
 - **Suspended cupped nests:** nests not supported from below but from the rims, sides or both:
 - **Pensile:** nests suspended from the rims and sides; rather stiff (e.g. those of kinglets and vireos).
 - **Adherent nests:** cupped nests whose sides are attached by an adhesive substance (e.g. mud or saliva) to a vertical surface, like those of swifts and some swallows.
 - **Ground nests:** cupped nests on the ground; sides are sometimes extended upward and arched over the top making a domed structure. Several passerines, particularly those that occupy open habitats like grasslands and tundra, build ground nests.

[Information on nests courtesy of Prof. Gary Ritchison, Ornithologist, Dept. of Biological Sciences Eastern Kentucky University
[\[http://people.eku.edu/ritchisong/birdnests.html\]](http://people.eku.edu/ritchisong/birdnests.html)

APPENDIX B

SPECIAL CONSIDERATION: HERONS & EGRETS

(Species includes Great Blue Heron, Great Egret, Snowy Egret, Green Heron and Black-crowned Night Heron)

Heronries or nesting colonies of herons are frequently located in areas isolated from human disturbance, such as riparian corridors, marshes, and groves of trees adjacent to water bodies or on islands. However, some herons have adapted minimally to human activity and may build their nests in trees near apartment and condo complexes, ports, and harbors that have large trees planted in their greenscape.

Heronries are especially vulnerable to human disturbance and habitat destruction during pair formation and the breeding season (mid-November to September of the following year) when large numbers of birds are concentrated in a rather confined area. Herons are delicate and tend to desert nests and entire colonies if disturbed during periods of pair forming (starting mid-November), nest construction (starting in January) or early egg laying (as early as January). Herons continue to be sensitive to disturbance after hatching and up until the young fledge (up to late-September). In some cases, colonies have even been deserted after destruction or alteration of their habitat during the non-nesting season. Even if herons relocate after deserting a colony, consequences of disturbance include fragmentation of breeding populations, total reproductive failure in colonies, reduced number of breeding pairs, and reduced reproductive output per pair. Ultimately this can affect the stability of the entire regional population (Bowman & Siderius, 1984).

Heronries are unpredictable in their response to disruption of a colony and the severity of the response does not always correspond to the magnitude of the disturbance (seemingly innocuous activities can produce serious results). The most important factors to consider when evaluating these effects are the timing of the disturbance in relation to critical periods of the nesting season and the degree to which the birds are able to adjust to human activities (degree of exposure-induced habituation). Herons are sensitive to humans and mammals moving around under their nesting trees.

When conducting surveys or inventories, individuals should take caution to avoid walking into heronries, especially under nesting trees (indicated by the ring of white guano around the base of the tree). Should they find themselves within a heronry, one should quietly and quickly leave by the same route they entered.

Density of vegetation within and surrounding the colony can influence the impact of disturbances. The removal of vegetation near a colony can open paths into the heronry that would not only enable intrusion by humans and predators, but would result in an increased number of exposed nests. Maintaining the vegetation, including trees and shrubs, around a colony provides alternate nest sites and a buffer against disturbance. **Furthermore, tree trimming should generally not remove more than the minimum of foliage necessary for human health and safety, and should be done, where it is permitted, in a manner that does not unnecessarily discourage herons and egrets from returning to their altered (trimmed) habitat during the next breeding cycle.**

HERON & EGRET BREEDING ACTIVITY:

Great Blue Heron: Mid-November to end of September*

Great Egret: Late February to end of August*

Snowy Egret: Early April to late July*

Green Heron: Early April to early August*

Black-crowned Night Heron: Mid-January to end of September*

SPECIAL CONSIDERATION: CORMORANTS

The Double-crested Cormorant, another colonial nesting species, occupies similar habitat and nesting areas as herons. They also need the protection of buffer zones while nesting, but they appear to be less sensitive to human disturbance than herons.

CORMORANT BREEDING ACTIVITY:

Late March to mid-October (especially in Marina del Rey) *

*Information on breeding activity from *Los Angeles County Breeding Bird Atlas and from breeding bird atlas records from San Diego, Orange Counties, and the Salton Sea.*

[PLEASE NOTE: Some of the information on herons and cormorants is adapted from "Special Management Practices for Herons," courtesy of the government of Nova Scotia. Although the information below was provided by biologists in Nova Scotia, it is relevant to these species in most locales. **For purposes of these guidelines, local biologists and ornithologists were consulted and relevant dates modified to fit conditions in Los Angeles County.**

The PDF document in its entirety can be found at:

[\[http://www.gov.ns.ca/natr/wildlife/Thp/heronsmp.pdf\]](http://www.gov.ns.ca/natr/wildlife/Thp/heronsmp.pdf)



Los Angeles County
Department of Regional Planning



Planning for the Challenges Ahead

**SANTA MONICA MOUNTAINS
COASTAL DEVELOPMENT PERMIT
FINDINGS**

Pursuant to Section 22.44.850, the applicant shall substantiate the following:

(Do not repeat the statement or provide Yes/No responses. If necessary, attach additional pages.)

A. That the proposed development is in conformity with the certified local coastal program.

See Attachment

B. That any development located between the nearest public road and the sea or shoreline of any body of water located within the Coastal Zone, is also in conformity with the public access and public recreation policies of Chapter 3 of Division 20 of the Public Resources Code.

The proposed project consists of an approximately 2,250-foot linear pipeline alignment extending from the Tapia WRF, located at 731 Malibu Canyon Road in Calabasas, to Malibu Creek. The project site is not located between a public road and sea or shoreline of any body of water. the nearest public road to the Pacific Ocean is Malibu Colony Road, located approximately 3.4 miles south of the project site.

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Attachment to Santa Monica Mountains Coastal Development Permit Findings for the Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project

A. That the proposed development is in conformity with the certified local coastal program.

The proposed project consists of the installation of five manholes along an existing pipeline alignment for the inspection/repair of the existing pipeline and therefore, is not considered a new development as it would not install new infrastructure or expand the existing pipeline. The project would be in accordance with Local Coastal Program Section 22.44.1340, Subsection A, *Stream/Drainage Course Protection*, Item 3b as the project is considered a public works project that involves necessary repair and maintenance of drainage devices within H1 habitat; however, the purpose of the project is not to protect existing public roads, but rather to restore the integrity of the existing pipeline so that it can continue providing discharge from the Tapia Water Reclamation Facility to Malibu Creek in accordance with National Pollutant Discharge Elimination System Permit No. CA0056014.



Los Angeles County
Department of Regional Planning



Planning for the Challenges Ahead

**SANTA MONICA MOUNTAINS COASTAL DEVELOPMENT
PERMIT-OAK TREE FINDINGS**

Pursuant to Zoning Code Section 22.44.950.F, the applicant shall substantiate the following:

(Do not repeat the statement or provide Yes/No responses. If necessary, attach additional pages.)

- A. That the proposed construction of proposed use will be accomplished without endangering the health of the remaining trees other than those proposed to be removed or encroached upon, that are subject to this section, if any, on the subject property;

See Attachment

- B. That the encroachment, removal, or relocation of the oak tree(s) proposed will not result in soil erosion through the diversion or increased flow of surface waters which cannot be satisfactorily mitigated;

See Attachment

- C. That the proposed removal or encroachment is consistent with the development standards detailed in subsection G of this section and all other applicable LIP standards; and

See Attachment

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D. That where oak tree removal or encroachment is not proposed concurrently with and to accommodate other new development, in addition to the above facts, at least one of the following findings apply:

1. That the oak tree(s) proposed for encroachment, removal, or relocation interferes with utility services or streets and highways, either within or outside of the subject property, and no reasonable alternative to such interference exists other than encroachment or removal of the tree(s); or
2. That the condition of the oak tree(s) proposed for removal with reference to seriously debilitating disease or danger or falling is such that it cannot be remedied through reasonable preservation procedures and practices and the tree(s) is located in proximity to existing development, or in other areas where falling limbs or trunks would be a danger to public safety.

See Attachment

E. For purposes of interpreting this section, it shall be specified that while relocation is not prohibited by this section, it is a voluntary alternative offering sufficient potential danger to the health of a tree as to require the same findings as for removal of an oak tree.

No trees will be removed or encroached upon by greater than 30 percent (the point at which a tree may not survive).

**Attachment to Santa Monica Mountains Oak Tree Findings for the Tapia Water Reclamation Facility
003 Outfall Rehabilitation Project**

A. That the proposed construction of proposed use will be accomplished without endangering the health of the remaining trees other than those proposed to be removed or encroached upon, that are subject to this section, if any, on the subject property

The project will implement a tree protection program to protect the health of remaining trees. Additionally, minimal impacts to protected trees are anticipated to be limited to trimming of branches in the crown, severing of root tips during manhole construction and/or insignificant compaction from vehicle access for maintenance of the pipeline.

B. That the encroachment, removal, or relocation of the oak tree(s) proposed will not result in soil erosion through the diversion or increased flow of surface waters which cannot be satisfactorily mitigated

The project will not result in the diversion or increases flow of surface waters. The project will not introduce new hardscapes that would substance impact water flow on the project site. In addition, general best management practices will be implemented to reduce soil erosion to less than significant.

C. That the proposed removal or encroachment is consistent with the development standards detailed in subsection G of this section and all other applicable LIP standards

Adherence to the mitigation measures in the Oak and Native Tree Replacement would minimize impacts to protected trees that are present on site and help prevent impacts to trees that are outside of the project site. If proposed project impacts to protected tree exceeds 10 percent, mitigation is required according to the SMM LIP. Where development encroaches less than 30 percent of the TPZ of native trees, an annual monitoring report shall be submitted to the Director for review by the County for each of the 10 years. If any of those trees are lost or suffer a decrease in vigor as a result of proposed development, the applicant shall mitigate the impacts at a 10:1 ratio.

D. That where oak tree removal or encroachment is not proposed concurrently with and to accommodate other new development, in addition to the above facts, at least one of the following findings apply:

1. That the oak tree(s) proposed for encroachment, removal, or relocation interferes with utility services or streets and highways, either within or outside of the subject property, and no reasonable alternative to such interference exists other than encroachment or removal of the tree(s); or
2. That the condition of the oak tree(s) proposed for removal with reference to seriously debilitating disease or danger or falling is such that it cannot be remedied through reasonable preservation procedures and practices and the tree(s) is located in proximity to existing development, or in other areas where falling limbs or trunks would be a danger to public safety.

The project satisfies the first finding. The project consists of installing manholes along an existing 24-inch ocean outfall pipeline and is such.



Los Angeles County
Department of Regional Planning



Planning for the Challenges Ahead

**SANTA MONICA MOUNTAINS COASTAL DEVELOPMENT
PERMIT IN BIOLOGICAL RESOURCE AREAS
FINDINGS**

Pursuant to Zoning Code Section 22.44.1850.I.3.a, the applicant shall substantiate the following:

(Do not repeat the statement or provide Yes/No responses. If necessary, attach additional pages.)

A. That the requested development is sited and designed to avoid H1 Habitat and areas within 100 feet of H1 Habitat except as permitted by Sections 22.44.1800 through 22.44.1950; and

See Attachment

B. That the requested development is sited and designed to avoid the 100-foot Quiet Zone except as set forth herein; and

See Attachment

C. That the requested development is sited and designed to avoid H2 "High Scrutiny" and H2 Habitat to the maximum extent feasible. Where avoidance is not feasible and it is necessary to allow the owner a reasonable economic use of the property, the requested development is sited and designed to minimize and mitigate significant adverse impacts in conformance with the policies and provisions of the LCP; and

Based on the Biological Resource Assessment report prepared by Rincon Consultants, Inc.,

the approximate percent area of H2 habitat is 0 percent within the proposed project site.

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D. That the requested development is sited and designed to avoid wildlife movement corridors (migratory paths) to the maximum extent feasible to ensure these areas are left in an undisturbed and natural state. Where avoidance is not feasible and it is necessary to allow the owner a reasonable economic use of the property, the requested development is sited and designed to minimize significant adverse impacts in conformance with the policies and provisions of the LCP; and

See Attachment

E. That roads and utilities serving the proposed development are located and designed so as to avoid H1 Habitat, H1 buffer, and to avoid or minimize significant adverse impacts to H2 "High Scrutiny," and H2 Habitat, and migratory paths.

See Attachment

Attachment to Santa Monica Mountains *Biological Resource Findings* for the Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project

- A. Pursuant to Los Angeles County Code Section 22.44.1850.I.3.a, new development shall provide a buffer of 100 feet from H1 habitat where no development is allowed except resource-dependent uses and limited circumstances. The proposed project is not considered “development” as it would not install new infrastructure and would not alter or expand the existing pipeline; rather, the project is considered necessary and will involve the installation of manholes at key points along the existing pipeline alignment to better facilitate maintenance and repair of existing infrastructure and would have no effect on the capacity or condition of the existing pipeline or roadways within which the pipeline to be inspected and repaired is located. In addition, permanent removal of H1 habitat shall be mitigated in accordance with LCP current in-lieu fee schedule or restoration.
- B. Pursuant to Los Angeles County Code Section 22.44.1900, new development shall also provide an additional 100-foot “Quiet Zone” from H1 Habitat where feasible. The proposed project is not considered “development” as it would not install new infrastructure and would not alter or expand the existing pipeline; rather, the project is considered necessary and will involve the installation of manholes at key points along the existing pipeline alignment to better facilitate maintenance and repair of existing infrastructure and would have no effect on the capacity or condition of the existing pipeline or roadways within which the pipeline to be inspected and repaired is located.
- D. The proposed project is located within a Natural Landscape Block and an Essential Connectivity Area, and the portion of Malibu Creek is likely utilized as a local wildlife movement passage under Las Virgenes Road. Wildlife is expected to utilize the riparian corridor associated with Malibu Creek and the adjacent upland habitats. Implementation of Mitigation Measures will reduce the potential for wildlife to be trapped or otherwise adversely affected, therefore reducing the potential impacts to wildlife movement to a less than significant than significant level. No alterations will be made in the creek channel and once installed, the manholes are not expected to impede wildlife movement. Wildlife movement may be temporarily disrupted due to construction activities (e.g., noise, light, dust, human presence).
- E. The project site does not have any mapped H2 habitat. Approximately 55 percent of the project area is H1 habitat. Mitigation BIO-11 states that Roads, vehicle access routes, and fencing shall avoid impacts to wildlife movement corridors, if feasible. If road, vehicle access routes, and fencing must occur in wildlife movement corridors, the development footprint shall be the minimized to the smallest extent feasible and the development shall avoid blocking ‘chokepoints’ within wildlife movement corridors.

PROPOSED ENVIRONMENTAL DETERMINATION

DETERMINATION DATE: July 30, 2026
PROJECT NUMBER: PRJ2021-004371-(3)
PERMIT NUMBER(S): Major Coastal Development Permit RPPL2021012462
SUPERVISORIAL DISTRICT: 3
PROJECT LOCATION: 731 Malibu Canyon Road, Calabasas
OWNER: Las Virgenes Municipal Water District
APPLICANT: Las Virgenes Municipal Water District
CASE PLANNER: William Chen, AICP, Senior Planner
WChen@planning.lacounty.gov

Los Angeles County ("County"), through the Las Virgenes Municipal Water District, completed an Initial Study to evaluate the potential environmental impacts of the above-mentioned project. The Initial Study indicated that the project could potentially result in significant adverse effects on the environment, but those effects would be avoided or reduced to a less than significant level through project design modification and/or implementation of the recommended feasible mitigation measures. Therefore, the County, through the Las Virgenes Municipal Water District, proposes that a Mitigated Negative Declaration is the appropriate environmental documentation under the California Environmental Quality Act (CEQA). Accordingly, the enclosed Mitigation Monitoring & Reporting Program (MMRP) will need to be signed by the applicant and returned to the project planner.

Attached: Initial Study – Mitigated Negative Declaration
Mitigation Monitoring and Reporting Program (MMRP)

Environmental Checklist Form (Initial Study)

County of Los Angeles, Department of Regional Planning

Project title: “Tapia Water Reclamation Facility 003 Outfall Rehabilitation”

Lead agency name and address: Las Virgenes Municipal Water District-Triunfo Joint Powers Authority (JPA)

Contact person and phone number: Veronica Hurtado, (818) 251-2332

Project sponsor’s name and address: Las Virgenes-Triunfo Joint Powers Authority, 4232 Las Virgenes Road, Calabasas, California, 91302.

Project location: 731 Malibu Canyon Road, Calabasas, CA 91302
APN: 4456-008-901; 4462-032-901; 4462-032-906 *USGS Quad:* Malibu Beach

Gross acreage: 1.4 Acres

General Plan designation: OS-P – Open Space - Parks

Community-/Area-wide Plan designation: Santa Monica Mountains Coastal Zone

Zoning: IT – Institutional; O-S-P – Open Space – Parks

Description of Project

The project area is located within unincorporated Los Angeles County near the city of Calabasas and is subject to the management direction of the Los Angeles County 2035 General Plan (County of Los Angeles 2015). This area is also located within the Santa Monica Mountains (SMM) Local Coastal Program (LCP) area, south of the SMM North Area Plan area (County of Los Angeles 2020). The project site is located within Malibu Creek State Park and consists of an approximately 2,250-foot (approximately 0.43 mile) linear 24-inch pipeline alignment extending from the Tapia Water Reclamation Facility (WRF), located at 731 Malibu Canyon Road in Agoura Hills, to Malibu Creek. Figure 1 shows the project site in a regional context, Figure 2 shows an overview of the pipeline alignment and location. Figure 3 and Figure 4 show the proposed project plans including a more detailed project alignment and configuration of the proposed manholes, and Figure 5 provides photos of existing site conditions.

Figure 1 Regional Location Map



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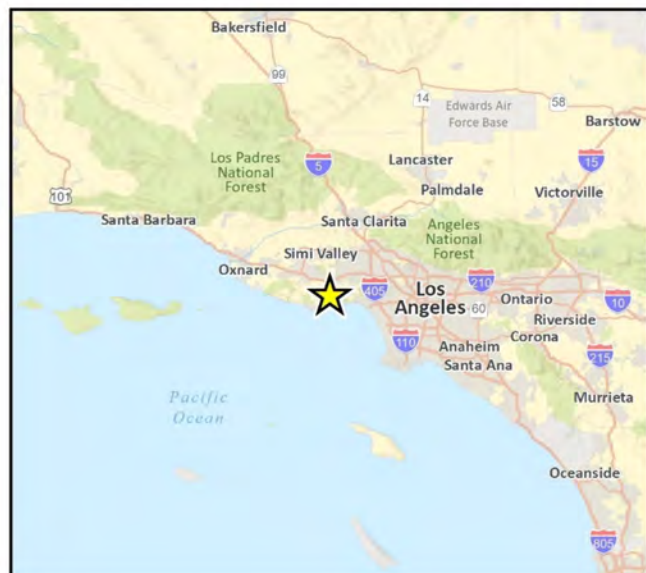
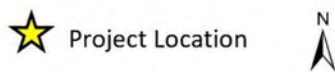


Figure 2 Proposed Project Alignment



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Additional data provided USGS, 2021.

20-10352 BIO BRA
Fig 2 Project Location_20230623

Figure 3 Proposed Project Site Plans

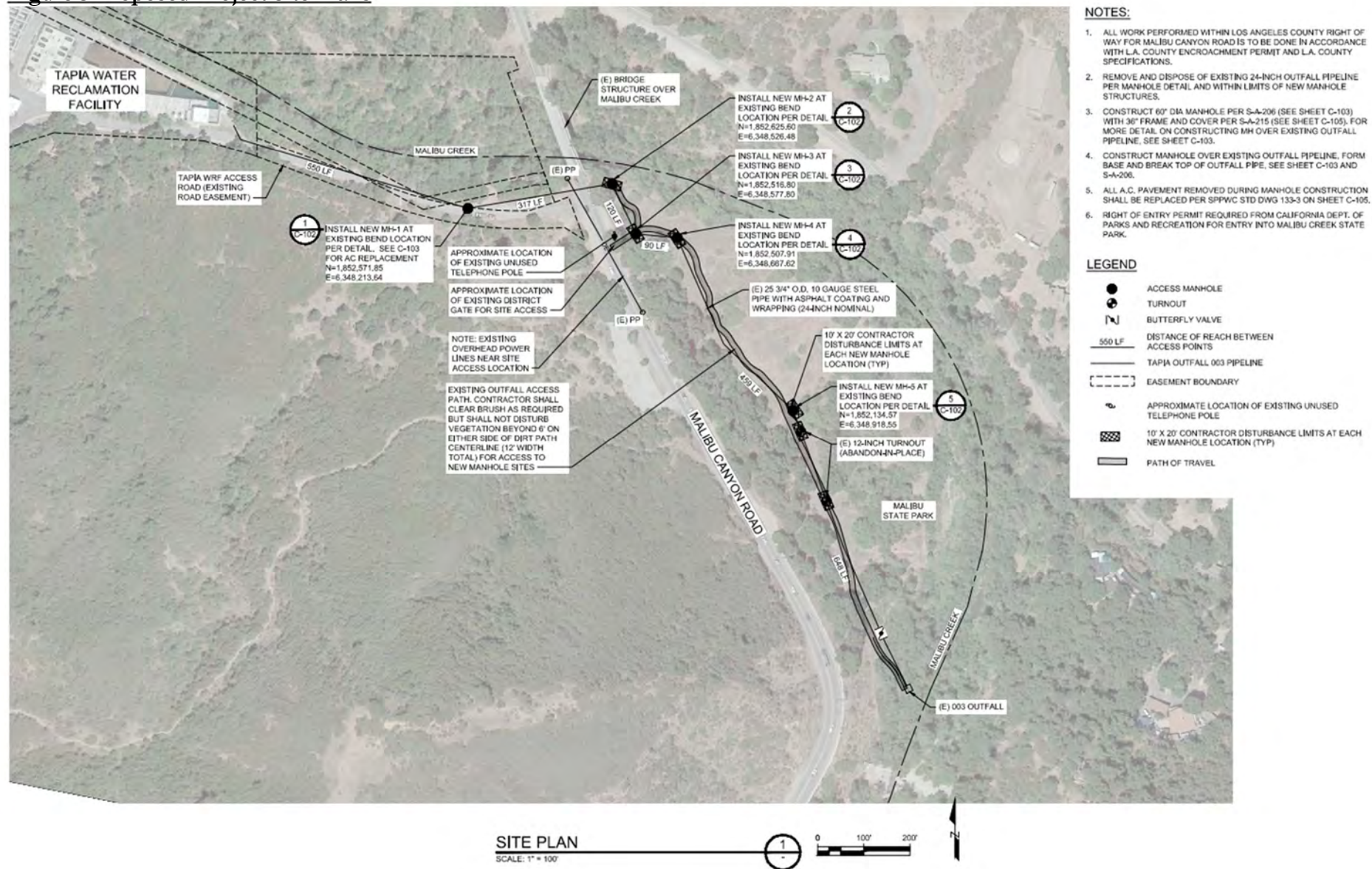
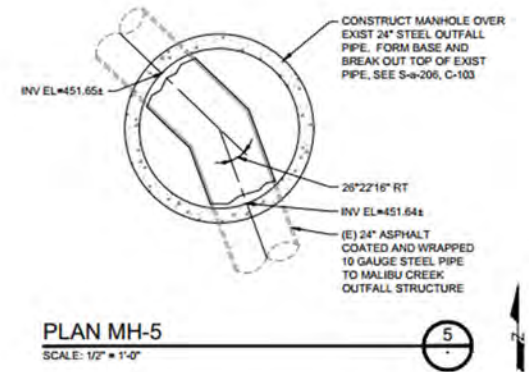
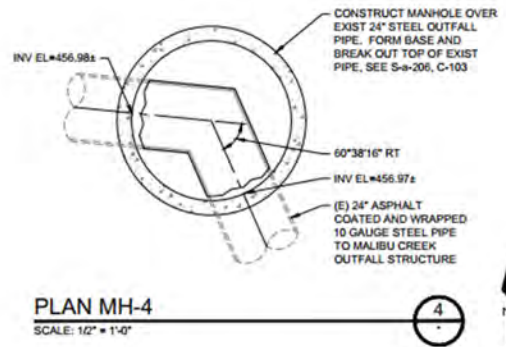
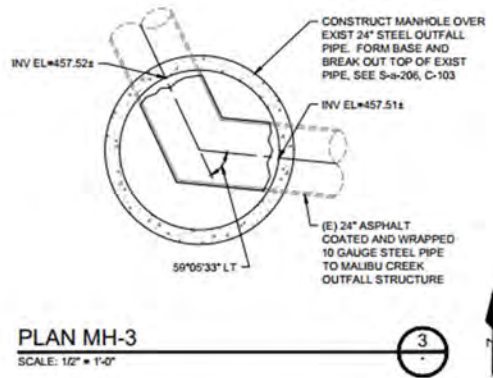
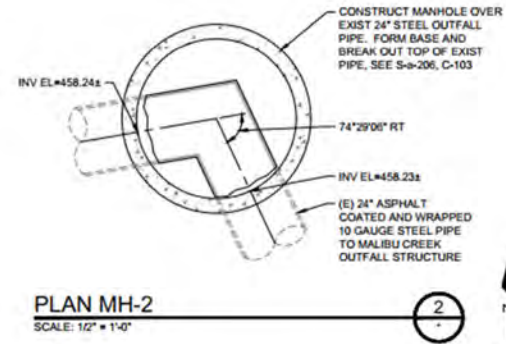
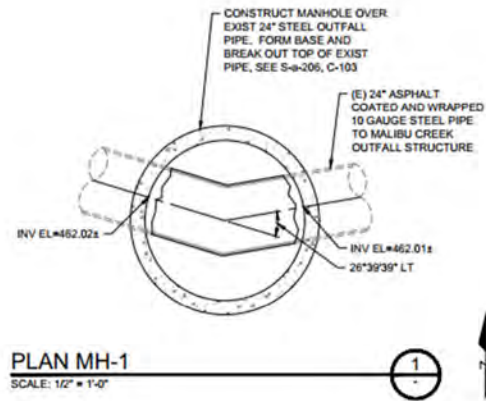


Figure 4 Proposed Manhole Plans



NOTES:

1. PIPELINE TRENCH SECTION SHALL BE IN ACCORDANCE WITH SECTION 306-1 OF STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (SSPWC) (GREENBOOK)
2. CONTRACTOR SHALL PROTECT IN PLACE ALL HARDSCAPE AND LANDSCAPE IMPROVEMENTS. ALL SURFACE IMPROVEMENTS AND VEGETATION REMOVED OR DAMAGED DURING CONSTRUCTION OF MANHOLE ACCESS LOCATIONS SHALL BE REPLACED IN KIND TO THE SATISFACTION OF THE OWNER.
3. INVERT LOCATIONS OF THE EXISTING 24" OUTFALL PIPELINE ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY DEPTHS OF THE EXISTING OUTFALL LINES AT THE CORRESPONDING MANHOLE LOCATIONS PRIOR TO POURING NEW MANHOLE BASE, AND ENSURE THE OVERALL DESIGN INTENT OF DRAINAGE TO MALIBU CREEK.

Figure 5 Project Site Photos



Photograph 1. Access road to existing pipeline looking toward Malibu Canyon Road.



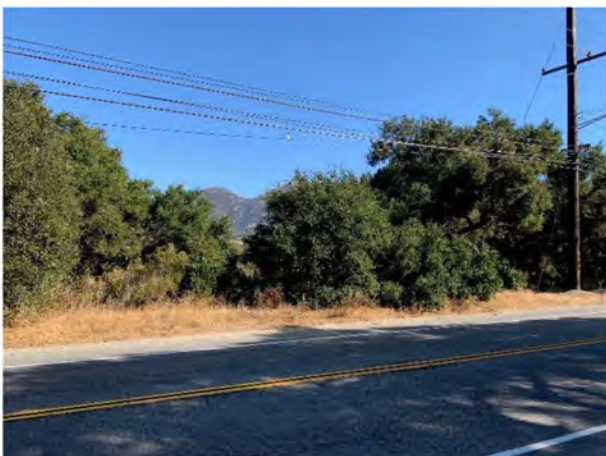
Photograph 2. Access to 003 Outfall on the east side of Malibu Canyon Road.



Photograph 3. Access road to 003 Outfall looking toward Malibu Canyon Road.



Photograph 4. View toward existing pipeline across Malibu Canyon Road.



Photograph 5. View toward existing pipeline across Malibu Canyon Road.



Photograph 6. Entrance to Tapia Water Reclamation Facility from Malibu Canyon Road.

The proposed project involves inspection and repair of an existing 24-inch outfall pipeline, which runs for approximately 2,250 linear feet (approximately 0.43 mile) from the Tapia WRF, located at 731 Malibu Canyon Road in Agoura Hills, to Malibu Creek. Starting at the Tapia WRF, the pipeline is within paved road for approximately 0.15 mile to Las Virgenes Road/Malibu Canyon Road, which is also paved, and crosses to the east side of this road (another approximate 0.03 mile). On the east side of Las Virgenes Road/Malibu Canyon Road, the pipeline is within an unpaved access road to its terminus at Malibu Creek, approximately 0.25 mile to the south. Currently, effluent from the Tapia WRF is discharged to Malibu Creek in compliance with a National Pollutant Discharge Elimination System (NPDES) permit issued and administered by the Regional Water Quality Control Board (RWQCB) for the Los Angeles Region (Order No. R4-2017-0125; NPDES No. CA0056014), and this would continue under post-project conditions. Malibu Creek is approximately 13 miles in length, initiating at the confluence of Triunfo Creek and Lobo Canyon Creek in Calabasas, and terminating at the Santa Monica Bay in Malibu, California.

The project would involve installation of five new 36-inch diameter manholes at existing bends within the pipeline alignment, which would provide access for inspection of the pipeline. Inspection of the pipeline would not expand its capacity or alter its existing uses; rather, it would help ensure the integrity of the pipeline, facilitating its continued use as intended for the conveyance of discharge between the Tapia WRF and Malibu Creek. One manhole would be installed along the paved entry road leading up to the Tapia WRF west of Malibu Canyon Road, and the remaining four manholes would be installed in the unpaved access road east of Malibu Canyon Road (Figure 3). The existing unpaved access road would need to be expanded to the north and south, and the width would be expanded to a maximum width of 20 feet.

Construction would occur over approximately two months, with construction occurring between 7:00 a.m. and 4:30 p.m. It is not anticipated that nighttime construction would be required. Construction of each manhole would involve trench excavation, backfill and compaction of soil above the Tapia 003 outfall pipeline, installation of precast concrete manhole structures into the pipeline, and removal of existing butterfly valves and turnouts. Each manhole requires a temporary work area buffer radius ranging from 13 to 25 feet, as shown in Figure 2. Approximately 200 cubic yards (cy) of soil would be excavated for the installation of the five manholes and later used as backfill after construction is complete. If groundwater is encountered during excavation, dewatering may be necessary. Disposal of dewatered groundwater would be conducted pursuant to applicable construction dewatering permits and would include required treatment prior to discharge. If dewatering is necessary, dewatered groundwater would be diverted to a waste force main for treatment at the WRF. The project would not require tree removal.

Construction equipment and worker vehicles would be staged north of the access road near its southern terminus (Figure 2). Standard construction best management practices (BMPs) would be employed during project construction to prevent disturbed soils from leaving the work area. These BMPs may include, but would not be limited to: use of designated areas for construction staging; use of safety and spill control measures for the handling of all vehicle fuels and other potentially hazardous materials; and use of straw wattles or similar materials to prevent surface runoff from leaving the active work area. Additionally, during the construction period, temporary lane closures may be used to maintain the safety of workers and the public during construction activities. Access through the project area would be maintained at all times, and workers would provide traffic management and control through the work area as needed to maintain access and safety. Each of these two project phases is described in further detail below.

Surrounding land uses and setting: The project site is located in the southwestern region of Los Angeles County in the SMM planning region of unincorporated Los Angeles County. This part of the county is generally defined by relatively steep hillsides vegetated by native chaparral and drained by incised streams along which grow bands of riparian shrubs and woodlands. The project alignment is surrounded by Sleeper

Canyon and undeveloped land to the north; Malibu Creek and undeveloped land to the east; the Backbone Trail of Malibu Creek State Park, Tapia WRF, and undeveloped land to the south; and the Tapia WRF and undeveloped land to the west.

Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code § 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

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 21080.3.2.) 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.

On December 5 and December 7, 2023, the Las Virgenes-Triunfo JPA sent letters to representatives of tribes who have requested Assembly Bill 52 (AB 52) consultation. Additional detail regarding responses and recommendations of tribal representatives is included in Section 18, Tribal Cultural Resources.

Other public agencies whose approval may be required (e.g., permits, financing approval, or participation agreement):

<i>Public Agency</i>	<i>Approval Required</i>
<u>Los Angeles County</u>	<u>Coastal Development Permit</u>
<u>Department of Regional Planning</u>	

<u>California Department of Parks and Recreation</u>	<i>Approval Required</i>
	<u>Right of Entry Permit</u>

Major projects in the area:

<i>Project/Case No.</i>	<i>Description and Status</i>
<u>N/A</u>	

Reviewing Agencies: [See [CEQA Appendix B](#) to help determine which agencies should review your project]

Responsible Agencies

- ☐ None
- ☐ Regional Water Quality Control Board:
 - ☒ Los Angeles Region
 - ☐ Lahontan Region
- ☐ Coastal Commission
- ☐ Army Corps of Engineers
- ☐ LAFCO

Special Reviewing Agencies

- ☒ None
- ☐ Santa Monica Mountains Conservancy
- ☐ National Parks
- ☐ National Forest
- ☐ Edwards Air Force Base
- ☐ Resource Conservation District of Santa Monica Mountains Area
- ☐

Regional Significance

- ☒ None
- ☐ SCAG Criteria
- ☐ Air Quality
- ☐ Water Resources
- ☐ Santa Monica Mtns. Area
- ☐

Trustee Agencies

- ☐ None
- ☐ State Dept. of Fish and Wildlife
- ☒ State Dept. of Parks and Recreation
- ☐ State Lands Commission
- ☐ University of California (Natural Land and Water Reserves System)

County Reviewing Agencies

- ☐ DPW
- ☐ Fire Department
(delete those that don't apply)
 - Forestry, Environmental Division
 - Planning Division
 - Land Development Unit
 - Health Hazmat
- ☐ District
- ☐ Public Health/Environmental Health Division: Land Use Program (OWTS), Drinking Water Program (Private Wells), Toxics Epidemiology Program (Noise)
- ☐ Sheriff Department
- ☐ Parks and Recreation
- ☐ Subdivision Committee
- ☐

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially significant impacts affected by this project.

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

DETERMINATION: (To be completed by the Lead Department.)

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

Signature (Prepared by)

Date

Signature (Approved by)

Date

EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources the Lead Department cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the Lead Department has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level. (Mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced.)
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA processes, an effect has been adequately analyzed in an earlier EIR or negative declaration. (State CEQA Guidelines § 15063(c)(3)(D).) In this case, a brief discussion should identify the following:
 - a) Earlier Analysis Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of, and adequately analyzed in, an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 7) The explanation of each issue should identify: the significance threshold, if any, used to evaluate each question, and; mitigation measures identified, if any, to reduce the impact to less than significant. Sources of thresholds include the County General Plan, other County planning documents, and County ordinances. Some thresholds are unique to geographical locations.

1. AESTHETICS

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐

The Los Angeles County 2035 General Plan identifies the San Gabriel Mountains, Verdugo Hills, Santa Susana Mountains, Simi Hills, and the Santa Monica Mountains as features with visual and aesthetic value. However, the General Plan does not recognize specific scenic vistas, views, or corridors for conservation purposes (County of Los Angeles 2015). The project site is located in the Santa Monica Mountains, and views of nearby hillsides are visible from the project site. Views of hillsides accessible from the project site are shown below in Figure 6.

Figure 6 Views of Santa Monica Mountains Hillsides from Project Site



Photograph 1. Views of hillsides to the west of the northern terminus of the project alignment.



Photograph 2. Views of hillsides to the west of the project alignment west of Malibu Canyon Road.



Photograph 3. Views of hillsides to the south of the project site, west of Malibu Canyon Road.



Photograph 4. Views of hillsides to the southwest of the northern terminus of the project alignment.

As shown above in Figure 6., hillsides and rock outcroppings of the Santa Monica Mountains would be visible from the project site. Views of these hillsides are accessible throughout the project site, along Malibu Canyon Road, and from nearby areas and hiking trails of Malibu Creek State Park.

Construction of the project, which would occur over approximately two months, would result in minor, temporary effects to views of hillsides from the project site. Construction equipment and materials located in the construction staging area would interrupt the natural setting of the project area and would disrupt otherwise uninterrupted views of surrounding hillsides. However, construction would occur at ground level along Malibu Canyon Road and the unpaved access road, and would not involve equipment that would substantially obscure views of hillsides from publicly accessible areas. Once construction is complete, the five manholes would be located on the ground surface, and would not impact views of surrounding hillsides. Therefore, the project would not have a substantial adverse effect on a scenic vista and impacts would be less than significant.

b) Be visible from or obstruct views from a regional riding, hiking, or multi-use trail?

☐ ☐ ☒ ☐

The project site is adjacent to the Backbone Trail parking lot and trailhead. As discussed above under threshold (a), project construction equipment and activities would be temporarily visible from the Backbone Trail, but would not obstruct views of surrounding trees and hillsides. Project construction would occur over two months, and construction equipment would only be temporarily located on site and visible from the Backbone Trail and other trails within Malibu Creek State Park. Construction equipment and activities would occur at ground level and would not obstruct views of elevated hillsides or Malibu Creek. During operation, the five manholes would be visible in the ground along the unpaved access road. However, from a distance, the manholes would not be visible as they would be obscured by vegetation and would not be made of a material that would stand out substantially from the surrounding landscape. In operation, the manholes would not obstruct views in the project area as they would be at surface level, would not generate light or glare, and would not involve elevated components that could obstruct views. Therefore, the project would not be visible or obstruct views from a regional riding, hiking, or multi-use trail and impacts would be less than significant due to the short and temporary construction period.

c) Substantially damage scenic resources, including, but not limited to, trees, rock

☐ ☐ ☐ ☒

outcroppings, and historic buildings within a state scenic highway?

The nearest designated state scenic highway is a portion of State Route 27 located approximately 6.6 miles east of the project site (California Department of Transportation [Caltrans] 2018). The project site is not visible from State Route 27 due to intervening mountains. Therefore, the project would not substantially damage scenic resources such as trees, rock outcroppings, and historic buildings within a state scenic highway, and there would be no impact.

d) Substantially degrade the existing visual character or quality of public views of the site and its surroundings because of height, bulk, pattern, scale, character, or other features and/or conflict with applicable zoning and other regulations governing scenic quality? (Public views are those that are experienced from publicly accessible vantage point)

☐☐☒☐

During construction, construction equipment and vehicles would be located within the project site, which would temporarily impact the existing visual character and public views of the site. Construction activities would occur over two months and the project site would be largely returned to existing conditions at the end of construction. During operation, the proposed manholes would be located at ground level. The manhole covers would consist of a dark metal, labeled with "LVMWD Sewer," and would not substantially stand out from the surrounding landscape. From a distance, manhole covers would be obscured by vegetation and difficult to discern from surrounding features. Therefore, the addition of manhole covers to the site would not substantially degrade the site's existing visual character. The project would involve work proximate to 18 trees and would require encroachment into the tree protection zone; however, the project would not require removal of any of these trees. Impacts to trees within the tree protection zone may result in physical changes to the trees, but would not result in substantial trimming or removal of branches such that the visual character of the trees and views of the trees would be substantially degraded. The project would not include aboveground features which would substantially degrade the existing visual character or quality of public views of the site and its surroundings because of height, bulk, pattern, scale, or character, and would not conflict with the Los Angeles County Zoning Code. Impacts would be less than significant.

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

☐☐☒☐

Project construction would occur during daytime hours and would not introduce new sources of light or glare at the project site which would adversely affect nighttime views in the area. During construction, sources of light or glare such as construction equipment or construction worker vehicles would be temporarily located on the project site. These sources of light and glare would be limited to the construction period, would not adversely affect daytime views of the area and would cease once the two month construction period is complete. During operation, the proposed manholes would be located entirely at ground level, and would not involve lights or reflective surfaces that would adversely affect views in the area. Therefore, light and glare impacts to daytime and nighttime views in the area would be less than significant.

2. AGRICULTURE / FOREST

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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 non-agricultural use?	☐	☐	☐	☒
<u>The project site is not located in an area designated as Farmland (California Department of Conservation [DOC] 2017). The project would not involve the conversion of agricultural lands to non-agricultural uses. There would be no impact.</u>				
b) Conflict with existing zoning for agricultural use, with a designated Agricultural Resource Area, or with a Williamson Act contract?	☐	☐	☐	☒
<u>The project site is located in Malibu Creek State Park and is not zoned for agricultural uses under Los Angeles County Zoning Code (County of Los Angeles 2023). The only Williamson Act contracts in effect in Los Angeles County are located on Santa Catalina Island (County of Los Angeles 2014a); therefore, the project site is not located in an area subject to a Williamson Act contract. There would be no impact.</u>				
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code § 12220 (g)), timberland (as defined in Public Resources Code § 4526), or timberland zoned Timberland Production (as defined in Government Code § 51104(g))?	☐	☐	☐	☒
<u>The project site is located in Malibu Creek State Park and is not zoned for forest land or timberland uses under Los Angeles County Zoning Code (County of Los Angeles 2023). There are also no forest land or timberland uses in the surrounding vicinity. Therefore, the project would not conflict with or cause rezoning of forest land, timberland, or timberland zoned Timberland Production. There would be no impact.</u>				
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒

The project is located within Malibu Creek State Park, which contains forested areas. However, the project would not result in the loss of forest land or conversion of forest land to non-forest use. There would be no impact.

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

☐☐☐☒

As discussed above in threshold a) through d), the project would not involve changes in the existing environment that would result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. There would be no impact.

3. AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

Overview of Air Pollution

The federal and state Clean Air Acts (CAA) mandate the control and reduction of certain air pollutants. Under these laws, the United States Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) for “criteria pollutants” and other pollutants. Some pollutants are emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory, etc.) into the atmosphere, including carbon monoxide, volatile organic compounds (VOC)/reactive organic gases (ROG),¹ nitrogen oxides, particulate matter with diameters of ten microns or less (PM₁₀) and 2.5 microns or less (PM_{2.5}), sulfur dioxide, and lead. Other pollutants are created indirectly through chemical reactions in the atmosphere, such as ozone, which is created by atmospheric chemical and photochemical reactions primarily between VOC and nitrogen oxides. Secondary pollutants include oxidants, ozone, and sulfate and nitrate particulates (smog).

Air pollutant emissions are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories:

- Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat.
- Area sources are widely distributed and include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products.

Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and can also be divided into two major subcategories:

- On-road sources that may be legally operated on roadways and highways.
- Off-road sources include aircraft, ships, trains, and self-propelled construction equipment.

Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles.

Air Quality Standards and Attainment

The project site is located in the South Coast Air Basin (Basin), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). As the local air quality management agency, the SCAQMD is required to monitor air pollutant levels to ensure that the NAAQS and CAAQS are met and, if they are not met, to develop strategies to meet these standards. Depending on whether the standards are met or exceeded, the Basin is classified as being in “attainment” or “nonattainment.” In areas designated as non-attainment for one or more air pollutants, a cumulative air quality impact exists for those air pollutants, and the human health impacts associated with these criteria pollutants, presented in Table 1, are already occurring in that area as part of the environmental baseline condition. Under state law, air districts are required to prepare a plan for air quality improvement for pollutants for which the Basin is in non-compliance. The Basin

¹ CARB defines VOC and ROG similarly as, “any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate,” with the exception that VOC are compounds that participate in atmospheric photochemical reactions. For the purposes of this analysis, ROG and VOC are considered comparable in terms of mass emissions, and the term VOC is used in this analysis.

is in nonattainment for the federal standards for ozone and PM_{2.5} and the state standards for ozone, PM₁₀, and PM_{2.5}. The Los Angeles County portion of the Basin is also designated non-attainment for lead (SCAQMD 2016). The Basin is designated unclassifiable or in attainment for all other federal and state standards. The health effects associated with criteria pollutants for which the Basin is in non-attainment are described in Table 1.

Table 1 Health Effects Associated with Non-Attainment Criteria Pollutants

Pollutant	Adverse Effects
Ozone	(1) Short-term exposures: (a) pulmonary function decrements and localized lung edema in humans and animals and (b) risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage.
Suspended particulate matter (PM ₁₀)	(1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma).
Suspended particulate matter (PM _{2.5})	(1) Excess deaths from short- and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes, including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children, such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease, including asthma.
Lead	(1) Short-term overexposures: lead poisoning can cause (a) anemia, (b) weakness, (c) kidney damage, and (d) brain damage; (2) long-term exposures: long-term exposure to lead increases risk for (a) high blood pressure, (b) heart disease, (c) kidney failure, and (d) reduced fertility.

Source: USEPA 2021

Air Quality Management

Because the Basin currently exceeds the federal ozone, federal PM_{2.5}, state ozone, state PM₁₀, state PM_{2.5}, and state lead standards, the SCAQMD is required to implement strategies to reduce pollutant levels to achieve attainment of the NAAQS and CAAQS. Under state law, air districts are required to prepare a plan for air quality improvement to address pollutants for which the Basin is in nonattainment status. The Final 2022 Air Quality Management Plan (AQMP) was adopted on December 2, 2022, and includes the integrated strategies

and measures needed to meet the NAAQS. It incorporates new scientific data and notable regulatory actions that have occurred since adoption of the previous AQMP in 2016, including the approval of a new federal ground-level ozone standard of 70 parts per billion. The Final 2022 AQMP addresses state and federal planning requirements and incorporates new scientific information, primarily in the form of updated emissions inventories, ambient measurements, and meteorological air quality models. In addition, the 2022 AQMP incorporates the Southern California Association of Government's (SCAG) projections for socio-economic data (e.g., population, housing, employment by industry) and transportation activities from the 2020 Regional Transportation Plan/Sustainable Communities Strategy (2020 RTP/SCS). The 2022 AQMP builds upon the approaches taken in the 2016 AQMP for the attainment of federal PM and ozone standards and addresses the reductions that must be achieved for attainment status (SCAG 2022). In addition, the AQMP provides strategies and measures to reach attainment with the state and federal thresholds for 8-hour and 1-hour ozone and PM_{2.5}.

Air Pollutant Emission Thresholds

The SCAQMD has adopted guidelines for quantifying and determining the significance of air quality emissions for CEQA purposes. This report conforms to the methodologies recommended in the SCAQMD's CEQA Air Quality Handbook (1993) and supplemental guidance provided by the SCAQMD, including recommended thresholds for emissions associated with both construction and operation of the project (SCAQMD 2019).

Criteria Pollutant Emission Thresholds

Table 2 presents the significance thresholds for construction and operational-related criteria air pollutant and precursor emissions used for the purposes of this analysis. These represent the levels at which a project's individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the Basin's existing air quality threshold exceedances. For the purposes of this analysis, the proposed project would result in a significant impact if construction or operational emissions would exceed any of the thresholds shown in Table 2.

Table 2 SCAQMD Regional Significance Thresholds

Pollutant	Construction Emission Threshold (pounds/day)	Operation Emission Threshold (pounds/day)
NO _x	100	55
VOC	75	55
PM ₁₀	150	150
PM _{2.5}	55	55
SO _x	150	150
CO	550	550

VOC = volatile organic compound, NO_x = nitrogen oxide, CO = carbon monoxide, SO_x = sulfur oxides, PM₁₀ = particulate matter with a diameter of 10 microns or less, PM_{2.5} = particulate matter with a diameter of 2.5 microns or less

Source: SCAQMD 2023

Localized Significance Thresholds

In addition to the above regional thresholds, the SCAQMD has developed Localized Significance Thresholds (LSTs) in response to the Governing Board’s Environmental Justice Enhancement Initiative (1-4), which was prepared to update the CEQA Air Quality Handbook (SCAQMD 1993). LSTs were devised in response to concern regarding exposure of individuals to criteria pollutants in local communities and have been developed for nitrogen oxides, carbon monoxide, PM₁₀, and PM_{2.5}. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each source receptor area (SRA), distance to the sensitive receptor, and project size. However, LSTs only apply to emissions from fixed stationary locations and are not applicable to mobile sources, such as cars on a roadway (SCAQMD 2008a). As such, LSTs are typically applied only to construction emissions because the majority of operational emissions are associated with project-generated vehicle trips.

LSTs have been developed for emissions from construction areas up to five acres in size. The project is located in SRA 2 (Northwest Los Angeles County Coastal) and includes a 24-inch pipeline that runs for approximately 2,250 linear feet (approximately 54,000 square feet or 1.2 acres). The SCAQMD provides lookup tables for project sites that measure one, two, or five acres. Pursuant to SCAQMD guidance, the one-acre LSTs were utilized for this analysis (SCAQMD 2008a). LSTs are provided for receptors at a distance of 25 to 500 meters (82 to 1,640 feet) from the project site boundary. The nearest sensitive receptors to the project site are single-family residences located approximately 240 meters (787 feet) to the east on an opposite hillside; therefore, per SCAQMD guidance, LSTs for receptors at a distance of 200 meters were utilized (SCAQMD 2008a). LSTs for construction on a one-acre site in SRA 2 for a receptor at 200 meters are shown in Table 3.

Table 3 SCAQMD LSTs for Construction (SRA 2)

Pollutant	Allowable Emissions for a One-acre Site in SRA 2 for a Receptor at 200 Meters (pounds/day)
Gradual conversion of NO _x to NO ₂	156
CO	2,367
PM ₁₀	57
PM _{2.5}	18

SRA = source receptor area; NO_x = nitrogen oxides; NO₂ = nitrogen dioxide; CO = carbon monoxide; PM₁₀ = particulate matter measuring 10 microns in diameter or less; PM_{2.5} = particulate matter measuring 2.5 microns in diameter or less

Source: SCAQMD 2009

Methodology

Criteria pollutant emissions for project construction and operation were calculated using the California Emissions Estimator Model (CalEEMod), version 2020.4.0. CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. The model was developed for the California

Air Pollution Control Officers Association (CAPCOA) in collaboration with the California air districts. CalEEMod allows for the use of default data (e.g., emission factors, trip lengths, meteorology, source inventory) provided by the various California air districts to account for local requirements and conditions, and/or user-defined inputs. The model calculates criteria pollutant emissions of carbon monoxide, PM₁₀, PM_{2.5}, sulfur dioxide, ozone precursors (VOC and nitrogen oxides), and GHG emissions of carbon dioxide (CO₂), nitrous oxide, and methane, reported as carbon dioxide equivalent (CO₂e). The calculation methodology and input data used in CalEEMod can be found in the CalEEMod User's Guide Appendices A, D, and E (CAPCOA 2021). The input data and subsequent construction emission estimates for the proposed project are discussed below. CalEEMod output files for the project are included in Appendix A to this report.

Construction emissions modeled include emissions generated by construction equipment used on site and emissions generated by vehicle trips associated with construction, such as worker and vendor trips. Construction input data for CalEEMod include but are not limited to: (1) the anticipated start and end dates of construction activity; (2) inventories of construction equipment to be used; (3) areas to be excavated and graded; and (4) volumes of materials to be exported from and imported to the project site. The start and end of manhole construction, construction schedule, and construction equipment were based on information provided by LVMWD. It is assumed that all construction equipment used would be diesel-powered. The analysis assessed maximum daily emissions from individual construction activities, including demolition and site preparation. Construction equipment emissions estimates are based on surveys of construction projects within California conducted by members of CAPCOA.

The quantity, duration, and the intensity of construction activity influences the amount of construction emissions and their related pollutant concentrations that occur at any one time. The emission forecasts modeled for this analysis reflect conservative assumptions where a relatively large amount of construction is occurring in a relatively intensive manner. If construction is delayed or occurs over a longer period, daily criteria pollutant emissions could be reduced because of (1) a more modern and cleaner-burning construction equipment fleet mix than assumed in the CalEEMod, and/or (2) a less intensive buildout schedule (i.e., fewer daily emissions occurring over a longer time interval).

In addition, CalEEMod has the capability to calculate reductions in construction emissions from the effects of dust control, diesel-engine classifications, and other selected emissions reduction measures. Emissions calculations assume application of water twice daily during demolition and site preparation and a 15-mile-per-hour speed limit on unpaved surfaces in compliance with SCAQMD Rule 403, Fugitive Dust. Based on the standard values in CalEEMod version 2020.4.0, the PM₁₀ and PM_{2.5} reduction for watering two times per day is 55 percent.

Applicable SCAQMD Rules and Regulations

The SCAQMD has developed Rules and Regulations to regulate sources of air pollution throughout the Basin. The SCAQMD Rules that are applicable to the proposed project are listed below.

- **SCAQMD Rule 201** – Permit to Construct, and **SCAQMD Rule 202** – Permit to Operate. Any non-self-propelled portable equipment used during construction that have engines that are over 50 horsepower would be required to obtain SCAQMD permits; or be permitted under the CARB Portable Equipment Registration Program.
- **SCAQMD Rule 401** – Visible Emissions. This rule prohibits discharge of air contaminants or other material, which are as dark or darker in shade as that designated No. 1 on the Ringelmann Chart or obscure an observer's view.
- **SCAQMD Rule 402** – Nuisance. This rule prohibits discharge of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the

public; or that endanger the comfort, repose, health, or safety of any such persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property.

- **SCAQMD Rule 403 – Fugitive Dust.** The purpose of this rule is to control the amount of particulate matter (PM) entrained in the atmosphere from man-made sources of fugitive dust. Under Rule 403, no person shall conduct active operations without utilizing the applicable best available control measures to minimize fugitive dust emissions. Construction and operation fugitive dust emission sources are subject to this rule, which covers all fugitive dust emissions sources, such as excavation and other earthmoving operations, storage piles, and unpaved and paved roads. Best available control measures would include site watering as necessary to maintain sufficient soil moisture content.

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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Would the project:

a) **Conflict with or obstruct implementation of applicable air quality plans of either the South Coast AQMD (SCAQMD) or the Antelope Valley AQMD (AVAQMD)?**

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A project may be inconsistent with the AQMP if it would result in population, housing, or employment growth exceeding forecasts used in the development of the AQMP. SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial counties, and addresses regional issues relating to transportation, economy, community development, and environment. With regard to air quality planning, SCAG has prepared the 2020 RTP/SCS, a long-range transportation plan that uses growth forecasts to project trends for regional population, housing and employment growth out to 2045 to identify regional transportation strategies to address mobility needs. These growth forecasts form the basis for the land use and transportation control portions of the 2022 AQMP.

The proposed project does not include new housing or businesses, and operation and maintenance of the proposed project would not require new employees. Therefore, the project would not directly or indirectly generate population, housing, or employment growth. As a result, the project would not exceed SCAG's projected growth forecasts, which underlie the emissions forecasts in the 2022 AQMP. Therefore, the project would not conflict with or obstruct implementation of the AQMP. No impact would occur.

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?**

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Construction Emissions

Project construction would generate temporary air pollutant emissions associated with fugitive dust (PM₁₀ and PM_{2.5}) and exhaust emissions from heavy construction equipment and construction vehicles. Table 4 summarizes the estimated maximum daily emissions of pollutants during project construction. As shown therein, construction-related emissions would not exceed SCAQMD thresholds. Therefore, project construction would not 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.

Additionally, maximum daily on-site emissions associated with project construction would not exceed applicable LSTs, as shown in Table 4. Impacts would be less than significant.

Table 4 Estimated Maximum Daily Construction Emissions

	Maximum Emissions (pounds/day)					
	VOC	NO_x	CO	SO₂	PM₁₀	PM_{2.5}
Maximum Daily Emissions	2	16	15	<1	1	1
SCAQMD Regional Thresholds	75	100	550	<1	150	55
Threshold Exceeded?	No	No	No	No	No	No
Maximum On-site Emissions	1	10	7	<1	1	<1
SCAQMD LSTs	N/A	156	2,367	N/A	57	18
Threshold Exceeded?	N/A	No	No	N/A	No	No

pounds/day = pounds per day; n/a = not available; VOC = volatile organic compounds; NO_x = nitrogen oxides; CO = carbon monoxide; PM₁₀ = particulate matter measuring 10 microns in diameter or less; PM_{2.5} = particulate matter measuring 2.5 microns in diameter or less; LST = Localized Significance Thresholds

Source: Emissions modeling was completed using CalEEMod. See Appendix A. Some numbers may not add up due to rounding. Emission data is pulled from “mitigated” results, which account for compliance with regulations (SCAQMD Rule 403) and project design features. Emissions presented are the highest of the winter and summer modeled emissions. Maximum on-site emissions are the highest emissions that would occur on the project site from on-site sources, such as heavy construction equipment, and excludes off-site emissions from sources such as construction worker vehicle trips and haul truck trips.

Operational Emissions

Once completed, the proposed project would not require additional operation and maintenance activities beyond those already occurring to operate and maintain the existing pipeline. In addition, because the purpose of the project is to ensure the pipeline’s integrity, facilitating its continued use as intended for the conveyance of discharge between the Tapia WRF and Malibu Creek, no increase in electricity usage associated with increased pumping would occur. Consequently, no operational air quality impacts would occur.

c) Expose sensitive receptors to substantial pollutant concentrations?

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Localized Carbon Monoxide Hotspot Impact

A carbon monoxide hotspot is a localized concentration of carbon monoxide that is above a carbon monoxide ambient air quality standard. Localized carbon monoxide hotspots can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local carbon monoxide concentration exceeds the NAAQS one-hour standard of 35 parts per million (ppm), the CAAQS one-hour standard of 20 ppm, or the NAAQS and CAAQS eight-hour standard of 9 ppm (CARB 2016).

The SCAQMD conducted a detailed carbon monoxide analysis for the Basin during the preparation of the 2003 AQMP. The locations selected for microscale modeling in the 2003 AQMP included high average daily traffic (ADT) intersections in the Basin that would experience the highest carbon monoxide concentrations.

The highest carbon monoxide concentration observed was at the intersection of Wilshire Boulevard and Veteran Avenue on the west side of Los Angeles near Interstate 405, which had an ADT of approximately 100,000 vehicles per day. The one-hour concentration of carbon monoxide at this intersection was 4.6 ppm, which is well below the one-hour NAAQS of 35 ppm and the one-hour CAAQS of 20 ppm. Furthermore, the Basin has been in attainment of the carbon monoxide NAAQS and CAAQS since 2007 (SCAQMD 2022).

The proposed project would result in a minor increase in vehicle traffic along the project alignment as a result of worker vehicle trips, delivery of heavy-duty equipment and materials, and haul trips during project construction. Because the project site is not located in an area with poor circulation or heavy traffic, project-related traffic would not cause or contribute to potential temporary carbon monoxide hotspots. Therefore, the project would not expose sensitive receptors to substantial concentrations of carbon monoxide, and impacts would be less than significant.

Toxic Air Contaminants

Toxic Air Contaminants (TACs) are defined in Section 39655 of the California Health and Safety Code as substances that may cause or contribute to an increase in deaths or in serious illness, or that may pose a present or potential hazard to human health. Health effects from carcinogenic air toxics are usually described in terms of cancer risk. The SCAQMD recommends an incremental cancer risk threshold of 10 in 1 million. “Incremental cancer risk” is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 9-, 30-, or 70-year exposure period will contract cancer, typically based on the use of standard Office of Environmental Health Hazard Assessment (OEHHA) risk-assessment methodology (OEHHA 2015). The project’s construction-related activities would result in short-term, project-generated emissions of DPM exhaust from off-road, heavy-duty diesel equipment for demolition and site preparation. DPM was identified as a TAC by CARB in 1998. The potential cancer risk from the inhalation of DPM (discussed in the following paragraphs) outweighs the potential non-cancer health impacts and is therefore the focus of this analysis (CARB 2021).

Generation of DPM from construction projects typically occurs in a single area for a short period. Construction of the proposed project would occur over approximately 2 months. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period of time. According to the OEHHA, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period (assumed to be the approximate time that a person spends at a single household location). The OEHHA recommends this risk be bracketed with nine-year and 70-year exposure periods and that health risk assessments should be limited to the period/duration of activities associated with the project (OEHHA 2015).

The maximum on-site PM_{2.5} emissions, which are used to represent DPM emissions for this analysis,² would occur during demolition and site preparation activities. Maximum daily on-site PM_{2.5} emissions during demolition and site preparation would be less than one pound per day, which is below the SCAQMD LST of 18 pounds per day that is designed to be protective of human health. While demolition and site preparation emissions represent the worst-case condition, site preparation would occur for approximately one month and demolition would occur for approximately two months, which represents less than one percent of the typical

² It can be conservatively assumed that DPM emissions would be equivalent to PM_{2.5} because PM_{2.5} emissions make up 92 percent of total diesel off-road equipment (e.g., construction equipment) PM emissions based on SCAQMD guidance (SCAQMD 2006).

health risk calculation periods of 9 years, 30 years, and 70 years. Therefore, DPM generated by project construction would not create conditions where the probability that the Maximally Exposed Individual would contract cancer is greater than ten in one million or generate ground-level concentrations of non-carcinogenic TACs that exceed a Hazard Index greater than one for the Maximally Exposed Individual. Project construction would not expose sensitive receptors to substantial concentrations of TACs, and impacts would be less than significant.

Upon completion of construction, the proposed project would involve the conveyance of recycled water. The project's operational uses do not include the types of uses that generate substantial TAC emissions (e.g., distribution centers, rail yards, ports, refineries). Therefore, operation of the project would not expose sensitive receptors to TACs. There would be no impact.

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

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Project construction would generate oil and diesel fuel odors from equipment. For construction activities, odors would be temporary in nature and are subject to SCAQMD Rule 402, *Nuisance*, which states that “[a] person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property” (SCAQMD 1976). Construction activities would be temporary in nature and associated odors would cease upon construction completion. Accordingly, the proposed project would not create objectionable odors affecting a substantial number of people during construction, and short-term impacts would be less than significant.

Although operation of the proposed project would involve the conveyance of recycled water, it would be fully contained belowground and would not create objectionable odors. Additionally, the project is surrounded by undeveloped land and the Tapia WRF, with the nearest sensitive land use (single-family residences) located approximately 787 feet east of the site on an opposite hillside. The recycled water would experience tertiary water treatment prior to outfall into Malibu Creek; tertiary water treatment removes inorganic compounds, bacteria, and other compounds from water prior to its safe release into the environment. Tertiary treatment removes compounds that could potentially cause objectionable odors. Therefore, project operation would not expose a substantial number of people to odorous emissions. There would be no impact.

4. BIOLOGICAL RESOURCES

Information in this section is based on the Biological Resources Assessment and the Oak and Native Tree Report prepared for the project by Rincon Consultants (Rincon) in May 2023. The Biological Resources Assessment is included as Appendix B and the Oak and Native Tree Report is included as Appendix C to this IS-MND.

Methodology

Regulated or sensitive resources studied and analyzed herein include special-status plant and wildlife species, nesting birds and raptors, sensitive plant communities, jurisdictional waters and wetlands, wildlife movement, and locally protected resources, such as protected trees. Additional information on the regulatory framework applicable to the proposed project is provided in Appendix B.

Rincon conducted a literature review to obtain baseline information about biological resources with potential to occur in the project site and surrounding area. The literature review included information from standard biological reference materials and regionally applicable regulatory guidance documents. Other sources of information reviewed include historic and current aerial imagery, topographic maps, geologic maps, and climatic data.

Field surveys were conducted by Rincon to document the existing site conditions and to evaluate the potential presence of sensitive biological resources, including special-status plant and wildlife species, sensitive plant communities, potentially jurisdictional wetlands and aquatic resources, and habitat for federally and state protected species. The first survey was conducted on July 21, 2021, between 9:30 AM and 3:00 PM. A subsequent survey was conducted on February 7, 2023, between 7:00 AM and 2:00 PM. The survey consisted of walking the extent of the project site (where feasible), documenting general site conditions, mapping vegetation and land cover types, and documenting plant and animal species observed. For areas that were inaccessible within the project site (e.g., densely vegetated areas, steep slopes), the biologist visually inspected those areas with binoculars. Wildlife species were identified by direct observation, vocalization, or by sign (e.g., tracks, scat, burrows).

Environmental Setting

The project site is within the Transverse Range, a subsection of the Southern California Coast Ecoregion. Malibu Creek flows through the project site from west to east. Malibu Creek runs for a total of approximately 13 miles, beginning at the confluence of Triunfo Creek and Lobo Canyon Creek in Agoura Hills, and terminating at Santa Monica Bay in Malibu, California. The topography of the project site is generally flat, and elevations range from 460 to 480 feet above mean sea level. The area studied for biological resources (the project site plus a buffer, or study area) is 5.53 acres and consists of native and non-native vegetation communities and developed areas, including Las Virgenes Road and a paved access road to the Tapia WRF. Land uses within and surrounding the project site consist of both open space and developed areas, including roadways, hiking trails, public utilities, and commercial and residential buildings (Appendix B).

Special Status Plant Species

Based on the database and literature review, 54 special-status plant species have been recorded or have the potential to occur within the study area. Of these 54 species, two species were observed in the study area (Fish's milkwort and southern California black walnut). Two species have a moderate potential to occur, and 10 species have a low potential to occur within the study area (Appendix B). The remaining 40 special-status species are not expected to occur on-site based on range, habitat requirements, and project site conditions.

Special status plant species with the potential to occur in the study area include:

- Malibu baccharis
- Catalina mariposa-lily
- Club-haired mariposa-lily
- Plummer's mariposa-lily
- Lewis' evening-primrose
- Western dichondra
- Humboldt lily
- Ocellated Humboldt lily
- White-veined monardella
- Ojai navarretia
- Lyon's pentachaeta
- Sonoran maiden fern

Special Status Wildlife Species

Based on the database and literature review, 28 special-status wildlife species have the potential to occur in the study area (Appendix B). Of these 28 species, two species (yellow warbler and oak titmouse) were observed in the study area. Five species have high potential to occur, 11 species have moderate potential to occur, and four species have a low potential to occur. The remaining six special-status species are not expected occur on-site based on range, habitat requirements, and project site conditions.

Special status wildlife species with the potential to occur in the study area include:

- Wawona riffle beetle
- Crotch bumble bee
- Gertch's socalchemmis spider
- Arroyo chub
- Southern California legless lizard
- Coastal whiptail
- San Bernardino ringneck snake
- Western pond turtle
- Coast horned lizard
- Two-striped garter snake
- Golden eagle
- Turkey vulture
- American peregrine falcon
- Least Bell's vireo
- Spotted bat
- Western mastiff bat
- Western red bat
- Hoary bat
- Western small-footed myotis
- Yuma myotis

Sensitive Plant Communities

Four California Department of Fish and Wildlife (CDFW) sensitive natural communities are present in the study area: black cottonwood forest and woodland, California sycamore – coast live oak woodlands, California sycamore – arroyo willow woodlands, and creeping ryegrass turfs (Appendix B). Forty-nine protected oak and native trees were surveyed as part of the Arborist Report, including 32 coast live oaks,

two southern California black walnut trees, seven California sycamore, six Arroyo willow, one blue elderberry, and one boxelder maple (Appendix C).

Jurisdictional Waters

The project site is located within the Malibu Creek watershed. Malibu Creek flows from north to south through the project site with one ephemeral drainage and one ephemeral ditch draining into Malibu Creek.

Rincon regulatory specialists assessed waters, streambeds, and wetlands potentially within the jurisdiction of the United States Army Corps of Engineers (USACE), pursuant to Section 404 of the Clean Water Act, RWQCB pursuant to Section 401 of the Clean Water Act and the California Water Code (Porter-Cologne Water Quality Control Act), CDFW pursuant to California Fish and Game Code 1600, and the Los Angeles County Department of Regional Planning (LACDRP) under authority of the California Coastal Commission (CCC) per Section 13577(b) of Title 14 of the California Code of Regulations. Results of the research and field visits determined that Malibu Creek is likely subject to USACE, RWQCB, CDFW, and LACDRP jurisdiction, and the ephemeral drainage and ditch are likely subject to RWQCB jurisdiction. Within the study area, a total of 0.29 acre (421 linear feet.) are within USACE jurisdiction, 0.30 acre (743 linear feet.) are within RWQCB jurisdiction, 1.51 acres (706 linear feet.) are within CDFW jurisdiction, and 1.51 acres (694 linear feet) are within LACDRP jurisdiction (Appendix B).

Wildlife Movement

The project site is located within a Natural Landscape Block and an Essential Connectivity Area, as determined by California Essential Habitat Connectivity (CEHC). Areas which are determined to be an Essential Connectivity Area are defined as large remaining blocks of intact habitat or natural landscape that need to be maintained, particularly as corridors for wildlife. The project site is described by the CEHC as an area that is an irreplaceable and essential corridor, which is a priority species movement corridor (Appendix B). The Essential Connectivity Area which overlaps the project site extends from the Santa Monica Mountains northward through the Simi Hills and Santa Susana Mountains to connect to both the Los Padres National Forest in the Santa Ynez Mountains and the Angeles National Forest in the western San Gabriel Mountains (Appendix B).

Malibu Creek, the main drainage feature within the project site, likely functions as a localized wildlife travel route for common wildlife species and may act as a wildlife movement corridor. Malibu Creek passes under an elevated portion of Las Virgenes Road, likely providing a valuable wildlife passage (Appendix B).

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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 (CDFW) or U.S. Fish and Wildlife Service (USFWS)?	☐	☒	☐	☐

Special Status Plant Species

Two special status plant species were observed within the project site: Fish's milkwort and southern California black walnut. The Fish's milkwort individuals observed on-site are located outside of areas that would be disturbed during project construction. Manhole construction would require work within the tree protection zone (TPZ) of 18 trees, one of which is a special-status southern California black walnut tree. The TPZ is defined by the Santa Monica Mountains Local Implementation Program as the tree's dripline plus five feet, or 15 feet from the trunk, whichever is greater (Appendix C). The remaining trees are not special-status species. The southern California black walnut would have less than 10 percent of its TPZ encroached upon during construction, and work activities would not result in mortality of this tree. Therefore, the project would not result in substantial adverse effects to the two special-status plant species observed within the project site.

Should other special-status plant species be encountered within the project footprint, direct impacts could occur through injury or mortality to individuals by heavy equipment during construction. Indirect impacts to special-status plant species in the project site could result from habitat modifications, such as by the introduction of invasive plants disseminated from construction equipment, contamination of soils, and habitat degradation due to accidental fuel spills during construction. Potential direct and indirect impacts to special-status plants would be reduced to less than significant through adherence to Measures BIO-1 through BIO-3, BIO-5, and BIO-7, which will reduce the likelihood of special-status plants being impacted as described below. Additionally, implementation of Measures BIO-4 and BIO-10 would minimize direct and indirect impacts to these species and provide compensatory mitigation if special-status plants are impacted. Therefore, impacts to special-status plant species would be less than significant with mitigation incorporated.

Special Status Wildlife Species

The proposed project may impact special-status wildlife species if they are present on-site during construction, or through habitat modification. However, adherence to mitigation measures BIO-1, BIO-2, BIO-5, BIO-7, and BIO-8 would avoid and/or minimize impacts if these species are present, therefore reducing potential direct and indirect effects to these species to a less than significant level. Direct impacts to fully aquatic species such as arroyo chub would not occur, as ground disturbance would not occur within the water and would be confined to uplands outside of Malibu Creek, beyond the top of bank. Potentially significant indirect impacts to water quality could occur due to sedimentation or erosion during construction. These potential impacts would be reduced to a less than significant level through adherence to Measures BIO-1, BIO-2, and BIO-7, which would minimize indirect impacts to Malibu Creek.

The project site contains habitat with the potential to support special-status birds. Although no nests were observed at the project site, bird nesting habitat is present in the trees and shrubs occurring in and adjacent to the site, and raptors could nest within the taller trees in the area. Accordingly, the project could also result in direct or indirect impacts to other non-listed special status bird species. Direct impacts may include mortality from vehicle or equipment strikes as foraging birds move through the project site, and physical impacts to active nests within vegetation in the project site. Indirect impacts could result from noise, vibration, and dust from construction activities throughout the project site. Implementation of Measure BIO-6 would minimize potential direct and indirect effects occur to nesting special-status birds, and implementation of BIO-1, BIO-2, BIO-5, and BIO-7 would ensure that impacts are avoided or minimized

through the duration of construction activities. With the successful implementation of these mitigation measures, impacts to special-status nesting birds would be less than significant.

Impacts to special-status bat species may occur if individuals are roosting within the project site during project activities. Direct project impacts could include the removal of roost trees and mortality or harassment of bats through noise, light, and dust pollution. Indirect impacts could include a degradation of riparian habitat which provides foraging opportunities for special-status bat species. These potential direct and indirect impacts would be reduced to a less than significant level through implementation of mitigation measures BIO-1, BIO-2, BIO-7, and BIO-8, which would confirm the presence or absence of bats in the project site prior to construction and minimize impacts if these species are present.

Overall, impacts to special-status wildlife species would be less than significant with implementation of mitigation measures BIO-1 through BIO-10.

Mitigation Measure BIO-1 Worker Environmental Awareness Program

Prior to initiation of all construction activities (including staging and mobilization), all personnel associated with project construction shall attend a Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist, to assist workers in recognizing special-status biological resources with the potential to occur in the project site. This training will include information about all special-status species determined to be present or to have a moderate or high potential to occur on-site. Training will also address protected nesting birds, special-status plants, sensitive natural communities, SERAs, resources protected by local policies, as well as other special-status species potentially occurring on the project site.

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

Mitigation Measure BIO-2 General Best Management Practices

General requirements which shall be followed by construction personnel are listed below.

- No project construction, activities, and equipment staging shall occur within the bed and banks of the stream channel. Any work, including operation of loaders, dozers, drilling rigs, cranes, and vehicles, that occurs within 30 feet from the top of stream banks will be minimized to the extent practicable to reduce impacts to special-status wildlife species that may occur within the riparian habitat. Only work that is required to occur within this buffer (e.g., construction of manholes) may be performed. Fencing and signage shall be installed 30 feet from the stream banks to exclude entry into the stream channel for the duration of the project. Fencing and signage shall not be moved (except to facilitate work that is required to occur within 30 feet of the stream banks) and must be

maintained for the duration of the project. The contractor shall advise all workers of the intent of the protection measures prior to the start of project construction and activities. No living native vegetation shall be removed from the channel, bed, or banks of Malibu Creek.

- Project-related vehicles shall observe a 5-mile-per-hour speed limit within the unpaved limits of construction.
- All open trenches shall be fenced and sloped to prevent entrapment of wildlife species.
- All hollow posts and pipes shall be capped, and metal fence stakes shall be plugged with bolts or other plugging materials to prevent wildlife entrapment and mortality.
- All food-related trash items such as wrappers, cans, bottles, and food scraps generated during proposed project construction shall be disposed of in closed containers and removed daily from the project site.
- No deliberate feeding of wildlife shall be allowed.
- No pets shall be allowed on the project site.
- No firearms shall be allowed on the project site.
- If vehicle or equipment maintenance is necessary, it shall be performed in the designated staging areas.
- During construction, heavy equipment shall be operated in accordance with standard Best Management Practices (BMPs). All equipment used on-site shall be properly maintained to avoid leaks of oil, fuel, or residues. The contractor shall prevent oil, petroleum products, or any other pollutants from contaminating the soil or entering a watercourse (dry or otherwise). When vehicles or equipment are stationary, mats or drip pans shall be placed below vehicles to contain fluid leaks. Provisions shall be in place to remediate any accidental spills.
- No changing of oil or other fluids or discarding of any trash or other construction waste materials shall occur on the project Site. Vehicles carrying supplies, such as concrete, shall not be allowed to empty, clean out, or otherwise place materials into natural areas on or immediately adjacent to the site.
- Refueling of any equipment shall only occur in designated staging areas. Designated areas shall not be located near any storm drain inlets, drainage swales, or surface waterways. When refueling gas powered equipment or mixing herbicide, workers shall refuel or mix over drip pan which is appropriately sized to catch any spillage. The designated refueling area shall be inspected frequently to ensure no spill of hazardous materials have occurred and could contaminate the ground or water. The Contractor shall advise workers to clean and report spills immediately.
- Materials shall be stored on impervious surfaces or plastic ground covers to prevent any spills or leakage and shall be at least 50 feet from drainage features. Construction materials and spoils shall be

protected from stormwater runoff using temporary perimeter sediment barriers such as berms, silt fences, fiber rolls, covers, sand/gravel bags, and straw bale barriers, as appropriate.

- While encounters with special-status-species are not anticipated, any worker who inadvertently injures or kills a special-status species or finds one dead, injured, or entrapped shall immediately report the incident to the construction foreman or biological monitor. The construction foreman or biological monitor shall immediately notify the JPA. The JPA shall follow up with written notification to LACDRP, USFWS and/or CDFW within five working days of the incident, as appropriate. All observations of special-status species shall be recorded on California Natural Diversity Database (CNDDDB) field sheets and sent to CDFW by the JPA or the biological monitor.
- Before starting or moving construction vehicles, especially after a few days of nonoperation, operators shall inspect under all vehicles to avoid impacts to any wildlife that may have sought refuge under equipment. All large building materials and pieces (e.g., sections of the bridge) with crevices where wildlife can potentially hide shall be inspected before moving. If wildlife is detected, a qualified biologist shall move wildlife out of harm's way or temporarily stop activities until the animal leaves the area.
- The construction contractor shall install temporary erosion control measures to reduce impacts to and protect on site drainages from excess sedimentation, siltation, and erosion. These measures shall consist of minimization of existing vegetation removal; the use of temporary soil covers, such as hydroseeding with native species, mulch/binder and erosion control blankets to protect exposed soil from wind and rain erosion; and/or the installation of silt fencing, berms, and dikes to protect storm drain inlets and drainages.
- Gas-powered vehicles and equipment shall not be left idling or operated beyond periods needed to accomplish approved tasks.
- Standard dust control measures of the South Coast Air Quality Management District shall be implemented to reduce impacts on nearby plants and wildlife. This includes a variety of options to reduce dust including replacing ground cover in disturbed areas as quickly as possible, watering active sites regularly, and suspending all excavating and grading operations during periods of high winds.
- Upon completion of construction, the contractor shall be held responsible for restoring any access roads or staging areas that are outside of approved grading limits. This restoration shall be done in consultation with the project biologist.

Mitigation Measure BIO-3 Blooming Season Protocol Rare Plant Survey

Blooming season protocol rare plant surveys shall be conducted for Plummer's mariposa lily (May-July) and Lyon's pentachaeta (March-August) to determine the presence/absence of these species. The rare plant survey shall also target Malibu baccharis (August), Plummer's baccharis (May-October), Catalina mariposa lily (March-June). Reference sites must be visited to document if target species are detectable prior to site surveys. Valid botanical surveys will be considered current for up to five years; if construction has not commenced within three years of the most recent survey, botanical surveys must be repeated. Plants that are

not within the immediate disturbance footprint but are located within 50 feet of disturbance limits will be flagged and fenced off by a qualified biologist before construction activities start, to avoid impacts. If avoidance is not feasible, impacts must be offset through implementation of a restoration plan.

Mitigation Measure BIO-4 Special-Status Plant Species and Sensitive Community Restoration Plan

Permanent removal of H1 habitat (California sycamore – coast live oak woodlands, California sycamore – arroyo willow woodlands, coast live oak woodland and forest, black cottonwood forest and woodland, and creeping ryegrass turfs) shall be mitigated in accordance with LCP current in-lieu fee schedule for restoration. A restoration plan consistent with County Local Implementation Plan (LIP) requirements shall be prepared to mitigate impacts to special-status plant species and sensitive communities. The LIP (County 2018b) states that:

- Mitigation for unavoidable permanent impacts to H1 Habitat for one of the non-resource dependent uses allowed by this LCP shall be provided, at a minimum, through the restoration and/or enhancement of like habitat type, at the ratio of 4:1 (acres of restored habitat to each acre of impacted H1 Habitat) for wetland habitat, or the ratio of 3:1 (acres of restored habitat to each acre of impacted H1 Habitat) for all other H1 Habitat types. Priority shall be given to on-site restoration or enhancement, unless there is not sufficient area of disturbed habitat on the project site, in which case off-site mitigation may be allowed. The County shall coordinate with other public agencies and/or qualified non-profit land preservation organizations to establish priorities for offsite restoration and enhancement efforts, where appropriate, for proposed development projects lacking adequate on-site mitigation opportunities.
- If the restoration site is off-site, written evidence that the property owner has irrevocably agreed to allow the restoration work, maintenance and monitoring required by this condition and not to disturb any native vegetation in the restoration area. The area of habitat to be restored shall be permanently preserved through the recordation of an open space deed restriction that applies to the entire restored area. The open space deed restriction shall be recorded free of prior encumbrances other than tax liens, prior to issuance of a Coastal Development Permit (CDP).

To minimize impacts to special-status plants and sensitive communities that may occur in the temporary impact areas, the project should implement topsoil and native vegetation salvage, recontour the land to existing conditions after construction, and re-vegetate using native seeds, as described below.

Removal of Non-Native Species

Areas of temporary disturbance shall be treated to remove non-native plant species, including invasive plant species, and limit their seed production prior to initiating any earthmoving activity. This shall be completed with the objectives of (1) preventing invasive species from spreading from the disturbance area, and (2) removing weed sources from the salvaged topsoil. The treatment will be completed in advance of the earthmoving for this mitigation to have its intended effect (e.g., the treatment would need to occur prior to target species setting seed). Non-native plants shall be removed primarily using hand removal methods, e.g., hand-held weed whips, loppers, and hoes. If hand removal is not feasible due to the characteristics of the species, such as resistance to hand removal methods, the size of the plants, or the number of plants,

perennial invasive non-native species may be treated with herbicides. Herbicide application shall be limited to the smallest extent possible while maintaining effectiveness. Only individual plants shall be treated; no blanket spraying efforts shall be allowed. If herbicide is applied, it shall be applied during dry and low wind conditions when no rain is predicted within a week to prevent conveyance of herbicide into drainages or other non-targeted areas. Herbicide application must be performed by a licensed applicator that can identify the species to be treated and is experienced in the handling and application of herbicides. Herbicides must only be allowed under permit and property conditions. Herbicide use may require notification to the JPA or resource agencies. Only herbicides approved for use near or in water, such as AquaMaster™ or equivalent, shall be used if necessary. Large vegetation with potential to contain bird nests shall not be removed during the breeding bird season (February 1 to September 15) unless a qualified biologist determines that it does not contain active bird nests.

Salvage of Native Vegetation

After removal of non-native species, the temporary impact areas shall be cleared of vegetation using a bulldozer or scraper as necessary. Tree canopies shall be avoided to the extent practicable. Native plant material shall be crushed and stockpiled for later use in re-vegetation. Plant material shall not be segregated based on plant community. The stockpile(s) shall be covered to prevent loss due to erosion and invasion by non-native plants. Stockpile coverings shall be a natural permeable material such as burlap or jute netting to protect the plant material without solarizing or otherwise damaging the seedbank and propagules. Alternatively, the stockpile(s) may be stored indoors within a warehouse.

Salvage of Topsoil

In areas where soil will be disturbed by project activities, the topsoil shall be salvaged and then replaced after disturbance activities are complete. Salvage, storage, and replacement of the topsoil shall be the responsibility of the Contractor, under supervision of a biological monitor. Topsoil salvage may be accomplished using two lifts, the first to remove the upper layer of soil containing the seed bank, and the second to remove the lower layer containing soil biota in the root zone. The depth of topsoil removed shall be determined by the biological monitor based on local soil and vegetation characteristics; however, it is estimated that approximately 6 to 12 inches may be salvaged in two lifts. The two soil layers shall be stockpiled in two areas inside the temporary disturbance footprint and labeled to identify it as containing either the upper or lower layer of topsoil. Stockpiles shall be covered to prevent loss of soil, plant propagules, etc. due to erosion and invasion by non-native plants. Stockpile coverings shall be a natural permeable material such as burlap or jute netting to protect the soil without solarizing or otherwise damaging the seedbank.

Source of Seeds

Plant seeds shall be collected by a qualified native nursery contractor, with oversight by a Restoration Specialist. To preserve the integrity of local gene pools, ensure adaptation to site-specific conditions, and avoid inadvertent introduction of inappropriate species or pathogens, seeds used for revegetation shall be collected primarily from the study area, or within the Cold Creek-Malibu Creek Subwatershed. If sufficient seeds cannot be collected from these areas alone, plant stock from within the Malibu Creek Watershed may also be acceptable. All plant species to be installed within potentially jurisdictional riparian communities

shall be California native plants and under no circumstances shall non-native plants be installed. All seeds obtained from the native plant nursery shall be free of any pests or pathogens.

More specific areas for collection of native plant materials will be defined in the field, considering the following:

- Ecological similarity of the area to the study area
- Proximity to the study area
- Land ownership
- Accessibility
- Abundance and availability of target species
- Need to ensure genetic diversity of source material (i.e., seed shall be collected from a diverse sample of the parent plants within the collection zone)

See Table 5 for a proposed planting palette. Species found within the Study Area, or species native to the region that are characteristic of the vegetation community, but are not included on the plant palette below, may also be used as substitutes as determined by the Restoration Specialist. The final mix will be determined by source availability.

Table 5 Proposed Seeding Palette

<u>Scientific Name</u>	<u>Common Name</u>	<u>Life Form</u>
<u>California Sycamore – Arroyo Willow Woodlands</u>		
<i>Artemisia douglasiana</i>	California mugwort	herb
<i>Baccharis salicifolia</i> ssp. <i>salicifolia</i>	mulefat	herb
<i>Bromus sitchensis</i> var. <i>carinatus</i>	California brome	herb/grass
<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	golden yarrow	herb
<i>Koeleria macrantha</i>	June grass	herb/grass
<i>Lupinus succulentus</i>	succulent lupine	herb
<i>Melica imperfecta</i>	small flowered melica	herb/grass
<i>Phacelia ramosissima</i>	branching phacelia	herb
<i>Rosa californica</i>	California wild rose	shrub
<i>Rubus ursinus</i>	California blackberry	vine
<i>Salix lasiolepis</i>	arroyo willow	shrub/tree
<i>Sambucus nigra</i> ssp. <i>caerulea</i>	blue elderberry	tree
<i>Solanum americanum</i>	common nightshade	herb
<i>Stachys bullata</i>	California hedgenettle	herb
<i>Trifolium ciliolatum</i>	foothill clover	herb
<u>Coast Live Oak Woodland and Forest</u>		

<i>Bromus sitchensis</i> var. <i>carinatus</i>	California brome	herb/grass
<i>Eriogonum roseum</i>	wand buckwheat	herb
<i>Koeleria macrantha</i>	June grass	herb/grass
<i>Lupinus succulentus</i>	succulent lupine	herb
<i>Phacelia ramosissima</i>	branching phacelia	herb
<i>Prunus ilicifolia</i> ssp. <i>ilicifolia</i>	holly leaf cherry	shrub
<i>Pseudognaphalium californicum</i>	ladies' tobacco	herb
<i>Quercus agrifolia</i>	coast live oak	tree
<i>Rosa californica</i>	California wild rose	shrub
<i>Rubus ursinus</i>	California blackberry	vine
<i>Salvia leucophylla</i>	purple sage	shrub
<i>Salvia mellifera</i>	black sage	shrub
<i>Solanum americanum</i>	common nightshade	herb
<i>Stachys bullata</i>	California hedgenettle	herb
<i>Trifolium ciliolatum</i>	foothill clover	herb
Creeping Ryegrass Turfs		
<i>Elymus triticoides</i>	creeping wild rye	herb/grass
Upland Mustards		
<i>Acmispon americanus</i> var. <i>americanus</i>	American bird's foot trefoil	herb
<i>Artemisia douglasiana</i>	California mugwort	herb
<i>Baccharis pilularis</i> ssp. <i>consanguinea</i>	coyote brush	shrub
<i>Bromus sitchensis</i> var. <i>carinatus</i>	California brome	herb/grass
<i>Corethrogyne filaginifolia</i>	California aster	herb
<i>Elymus condensatus</i>	giant wild rye	herb/grass
<i>Elymus triticoides</i>	creeping wild rye	herb/grass
<i>Eriogonum roseum</i>	wand buckwheat	herb
<i>Eschscholzia californica</i>	California poppy	herb
<i>Hazardia squarrosa</i>	sawtooth goldenbush	shrub
<i>Madia elegans</i>	common madia	herb
<i>Salvia leucophylla</i>	purple sage	shrub
<i>Salvia mellifera</i>	black sage	shrub

Post-Project Restoration

Topsoil will be replaced in the proper layers after final reconfiguration of disturbed areas. The soil will be replaced in a manner that replicates the original contours of the land and does not block or divert the flow of water from its pre-existing flow paths.

The salvaged and stockpiled native vegetative mulch will be spread within the disturbed area to allow seeds and propagules to become established naturally. No soil amendments will be applied. Mulch will be

incorporated into the top six inches of soil with hand tools to improve the integration of mulch and native plant propagules into the soil.

Seeds will be installed via hand-seeding in the temporarily impacted areas. Each seeded area will be immediately watered by hand with a water truck or similar set up as conditions allow. The Restoration Specialist shall oversee the contractor during site installation activities. Long-term irrigation and weeding will not be required.

Mitigation Measure BIO-5 Pre-Activity Surveys

No more than two weeks prior to initiation of each phase of ground disturbance and vegetation removal, a qualified biologist shall conduct a pre-construction survey for potential rare, listed, or other special-status wildlife species. Should a special-status species be located on the project site during pre-activity surveys all individuals shall be flagged or relocated, with the concurrence of the LACDRP, USFWS, and/or CDFW, as appropriate, to an approved site with suitable habitat.

Mitigation Measure BIO-6 Nesting Bird Surveys

If feasible, removal of vegetation within suitable nesting bird habitats will be scheduled to occur in the fall and winter (between September 1 and February 14), after fledging and before the initiation of the nesting season. If construction activities must occur during the nesting season (generally February 1 to September 15), surveys for nesting birds covered by the CFGC and the Migratory Bird Treaty Act (MBTA) shall be conducted by a qualified biologist no more than 14 days prior to vegetation removal for each phase of the project. The surveys shall include the disturbance area plus a 500-foot buffer around the site, or to the topographic divide where substantial topography is present in the buffer. If active nests are located, all construction work shall be conducted outside a buffer zone from the nest to be determined by a qualified biologist. The buffer shall be a minimum of 50 feet for non-raptor bird species and at least 300 feet for raptor species. Larger buffers may be required depending upon the status of the nest and the construction activities occurring in the vicinity of the nest. The buffer area(s) shall be closed to construction personnel and equipment until the adults and young are no longer reliant on the nest site. A qualified biologist shall confirm that breeding/nesting is completed, and young have fledged the nest prior to removal of the buffer. If buffer zones are determined to be infeasible, a full-time qualified biological monitor must be onsite to monitor construction within the buffer zones to ensure active nests and nesting birds are not impacted.

Active nests shall be monitored at a minimum of once per week until it has been determined that the nest is no longer being used by either the young or adults. If project activities must occur within the buffer, they shall be conducted at the discretion of a qualified biologist. If no nesting birds are observed during pre-construction surveys, no further actions would be necessary. If least Bell's vireo or other listed species are identified in the work area, work must be halted and USFWS and/or CDFW must be contacted for additional avoidance and minimization measure guidance. Pre-construction nesting bird and raptor surveys should be conducted during the time of day when birds are active and should be of sufficient duration to reliably conclude presence/absence of nesting birds and raptors onsite and within the designated vicinity.

In addition, if construction must occur within the bird breeding season, low-noise construction equipment shall be used whenever possible to reduce the amount of noise generated during construction activities within 100 feet from the limits of riparian habitat. Low-noise equipment would reduce noise to less than

60dB hourly average or to ambient noise levels. If sound levels exceed 60dB hourly average or ambient noise levels, sound mitigation measures such as sound shields, blankets around smaller equipment, use of mufflers, and minimizing the use of back-up alarms shall be employed (as feasible). If these sound mitigation measures do not reduce noise levels, work activities shall cease and shall not recommence until either new sound mitigation can be employed.

Mitigation Measure BIO-7 Construction Monitor

A biologist shall be retained by the JPA as a construction monitor to ensure that incidental construction impacts on retained biological resources are avoided or minimized. Responsibilities of the construction monitor shall include the following:

- Attend all pre-grading meetings to ensure that the timing and location of construction activities do not conflict with mitigation requirements.
- Conduct meetings with the contractor and other key construction personnel, describing the importance of restricting work to within the project boundaries and outside of the preserved areas. The monitor shall also work with the contractor to determine the most appropriate staging/storage areas for equipment and materials.
- Guide the contractor in marking/flagging the construction area limits, in accordance with the final approved grading plan.
- Periodically and routinely visit the site during construction to coordinate and monitor compliance with the above provisions.

Mitigation Measure BIO-8 Bat Surveys and Protection

The presence or absence of any bat roosts shall be confirmed prior to the initiation of project activities. A qualified bat specialist shall conduct bat surveys within the project site and within a 100-foot buffer, as feasible, to identify potential habitat that could provide daytime and/or nighttime roost sites, and any maternity roosts. Acoustic recognition technology shall be used to maximize detection of bats. Night roosts are typically utilized from the approach of sunset until sunrise. Maternity colonies, composed of adult females and their young, typically occur from spring through fall.

If bats are not detected, but the bat specialist determines that roosting bats may be present at any time of year and could roost in trees, trees planned for removal shall be pushed down using heavy machinery rather than felling it with a chainsaw. To optimize the warning for any roosting bats that may still be present, trees shall be pushed lightly two to three times, with a pause of approximately 30 seconds between each nudge to allow bats to become active. The tree shall be initially pushed slowly to allow roosting bats to escape. After a suitable bat roosting tree is felled, it shall remain in place until it is inspected by a bat specialist. Trees that are confirmed to be bat roosts shall not be bucked or mulched immediately, instead, a period of at least 24 hours, and preferably 48 hours, shall elapse prior to such operations to allow bats to escape.

If maternity roosts are found, to the extent feasible, work shall be scheduled between October 1 and February 28, outside of the maternity roosting season when young bats are present but are not yet ready to fly out of the roost (March 1 to September 30).

If maternity roosts are found and trees must be removed during the maternity season, a qualified bat specialist shall conduct a preconstruction survey to identify those trees proposed for disturbance that could provide hibernacula or nursery colony roosting habitat. Acoustic recognition technology shall be used to maximize detection of bats. Each tree identified as potentially supporting an active maternity roost shall be closely inspected by the bat specialist no more than seven days prior to tree disturbance to determine the presence or absence of roosting bats more precisely. If maternity roosts are detected, trees determined to be maternity roosts shall be left in place until the end of the maternity season. Work shall not occur within 100 feet of an active roost and construction shall not occur between 30 minutes before sunset and 30 minutes after sunrise.

Mitigation Measure BIO-9 Sensitive Community Avoidance

California sycamore – coast live oak woodlands, California sycamore – arroyo willow woodlands, and creeping ryegrass turfs shall be avoided to the extent feasible. CDFW sensitive natural communities not within the immediate disturbance footprint but located within 50 feet of disturbance limits shall be flagged and fenced off by a qualified biologist before construction activities start, to avoid impacts. Where avoidance is not feasible, impacts shall be offset through implementation of a restoration plan (BIO-4).

Mitigation Measure BIO-10 Protection Against Spread of Non-Native Seeds and Pathogens

Prior to entering the project site, workers shall inspect their clothing, including shoes, all vehicles, and equipment for invasive plant seeds or plant parts. The undercarriage and tires of loaders, dozers, drilling rigs, cranes, and vehicles, power tools, and other equipment, shall be power washed and clean from any seeds, pathogens, and mud before entering the project site for the first time. All soil and fill material shall be inspected and determined free of any invasive plant seed prior to leaving the facility where the material is coming from. Any straw, wood, or other mulch shall be purchased from a certified weed-free vendor.

Excavated soil containing non-native plants shall be stored in a previously disturbed area or staging area at least 50 feet from potentially jurisdictional features. Any soil contaminated by non-native species shall be placed at the bottom of the trench or spoils pile to reduce the spread of non-native species. Pruning and power tools shall be cleaned and disinfected before use on site to prevent introducing pathogens, and after use to prevent spread of pathogens to new areas.

Overall, the project would not have a substantial direct or indirect adverse effect on a species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by CDFW or USFWS. Impacts would be less than significant with implementation of mitigation measures BIO-1 through BIO-10.

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|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| b) Have a substantial adverse effect on any sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-jurisdictional wetlands) identified in local or regional plans, policies, regulations or by CDFW or USFWS? | ☐ | ☐ | ☒ | ☐ |
| c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means? | ☐ | ☐ | ☒ | ☐ |

CDFW-identified sensitive natural communities are present within the study area. California sycamore – coast live oak woodlands, California sycamore – arroyo willow woodlands, black cottonwood forest and woodland, and creeping ryegrass turfs are located within the project site and would be directly impacted by project activities (Appendix B). In addition, excavation, ground clearing, equipment and materials storage, access routes, and other activities could result in indirect impacts on runoff and/or water quality, potentially affecting these sensitive natural communities. Implementing construction BMPs and invasive species control measures, outlined in mitigation measures BIO-1, BIO-2, BIO-7, BIO-9, and BIO-10, would reduce the potential for substantial adverse effects on the adjacent sensitive communities by avoiding and minimizing indirect impacts. Mitigation measures BIO-1, BIO-2, BIO-7, BIO-9, and BIO-10 would reduce the impacts to sensitive natural communities, and Measure BIO-4, which includes compensatory mitigation for temporary and permanent impacts to sensitive natural communities, would compensate for potential impacts to sensitive communities.

Potentially jurisdictional waters are present within the project site and may be directly and indirectly impacted by project activities. Potentially jurisdictional waters include Malibu Creek, which is a perennial waterway, an ephemeral drainage, and an ephemeral ditch. Table 8 and Table 9 of the Biological Resources Assessment (Appendix B) show the extent of proposed impacts within potential resource agency jurisdiction, and the extent of proposed temporary and permanent impacts to vegetation communities within potential resource agency jurisdiction.

All temporary and permanent impacts would be located outside the top of bank of potentially jurisdictional features. Permanent impacts are limited to the footprint of the three-foot diameter manhole located within potentially CDFW and LACDRP jurisdictional riparian habitat. Temporary impacts to potentially jurisdictional riparian vegetation would be limited to trimming of riparian tree canopies, removal of ground vegetation, soil compaction, and excavation to facilitate the construction of manholes along the outfall pipeline. Impacts to protected riparian trees would consist of the trimming of branches near manhole locations, the severing of root tips during manhole construction, and/or insignificant compaction from vehicle access for maintenance of the pipeline. These impacts to potentially jurisdictional CDFW riparian vegetation may require a Streambed Alteration Agreement, which would be obtained prior to ground disturbance or issuance of a grading permit. In addition, adherence to Measures BIO-1, BIO-2, BIO-7, BIO-9, and BIO-10 would reduce potential direct impacts to a less than significant level by minimizing the

degree of impacts, and BIO 4, which would provide compensatory mitigation for temporary impacts to CDFW riparian habitat.

In the project site Malibu Creek may be impacted by means of indirect effects (e.g., increased turbidity, altered pH, decreased dissolved oxygen levels, etc.) after a rain event. In addition, if groundwater is encountered during excavation, dewatering may be necessary. This could lower the water table in the project site and potentially result in increased drought stress on nearby vegetation. Moreover, this could cause a decline in the health of riparian and upland vegetation adjacent to the project site. Adherence to mitigation measures BIO-1, BIO-2, BIO-7, BIO-9, and BIO-10 (and adherence to agency permits and existing regulations) would reduce potential indirect impacts to jurisdictional waters to a less than significant level.

Overall, the project would not have a substantial adverse effect on sensitive communities or state or federally protected wetlands, and impacts would be less than significant with mitigation.

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?

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The proposed project is located within a Natural Landscape Block and an Essential Connectivity Area, and the portion of Malibu Creek in the project site is likely utilized as a local wildlife movement passage under Las Virgenes Road. Wildlife could use the riparian corridor associated with Malibu Creek and the adjacent upland habitats.

No alterations would be made in the creek channel and once installed, the manholes would not impede wildlife movement. However, wildlife movement may be temporarily disrupted due to construction activities (e.g., noise, light, dust, human presence). In addition, the long-term maintenance of the manholes may necessitate increased human presence in the area which may negatively impact wildlife movement in the area for species active in daylight hours. Implementation of Measures BIO-1, BIO-2, BIO-8, and BIO-11 will reduce the potential for wildlife to be trapped or otherwise adversely affected, therefore reducing the potential impacts to wildlife movement to a less than significant level.

Mitigation Measure BIO-11 Protection Against Impacts to Wildlife Movement

- Work shall be limited to daylight hours. The project shall avoid non-essential lighting and artificial lighting. Any artificial lighting shall be of the lowest illumination, be selectively placed, and shielded and directed downward to minimize light spillage into the adjacent natural habitats.
- Gates, walls, fences, barriers, or other structures that prevent the movement of wildlife through developed areas to access adjacent open space resources shall be avoided, as feasible.
- If gates are necessary, the gates shall be wildlife-permeable and shall only be constructed on roads or driveways that provide access to the development on the parcel.
- Development shall avoid all known wildlife movement corridors, as feasible.

- If development must occur in known wildlife movement corridors, the development shall not block wildlife 'chokepoints' (within Malibu Creek) and shall allow wildlife to pass through these areas.
- Roads, vehicle access routes, and fencing shall avoid impacts to wildlife movement corridors, if feasible. If road, vehicle access routes, and fencing must occur in wildlife movement corridors, the development footprint shall be the minimized to the smallest extent feasible and the development shall avoid blocking 'chokepoints' within wildlife movement corridors.

e) **Convert oak woodlands (as defined by the state, oak woodlands are oak stands with greater than 10% canopy cover with oaks at least 5 inch in diameter measured at 4.5 feet above mean natural grade) or other unique native woodlands (juniper, Joshua, southern California black walnut, etc.)?**

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The proposed project would not require tree removal. However, the project would require work within the TPZ of 18 trees. Five of the 18 impacted trees, including four coast live oaks and one California black walnut, would have less than 10 percent of their TPZ encroached upon during construction. Twelve trees, including eight coast live oaks and one blue elderberry, would have 10 to 30 percent of their TPZ encroached upon, and one coast live oak would have 32 percent of its TPZ encroached upon (Appendix C).

None of the trees would be removed as a result of construction, and TPZ encroachment is not anticipated to result in tree mortality. The project would not convert oak woodlands or other unique native woodlands, and impacts would be less than significant.

f) **Conflict with any local policies or ordinances protecting biological resources, including Wildflower Reserve Areas (L.A. County Code, Title 12, Ch. 12.36), the Los Angeles County Oak Tree Ordinance (L.A. County Code, Title 22, Ch. 22.174), the Significant Ecological Areas (SEAs) (L.A. County Code, Title 22, Ch. 102), Specific Plans (L.A. County Code, Title 22, Ch. 22.46), Community Standards Districts (L.A. County Code, Title 22, Ch. 22.300 et seq.), and/or Coastal Resource Areas (L.A. County General Plan, Figure 9.3)?**

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The project site contains biological resources protected by local policies and ordinances, including protected trees and SERAs. Impacts to resources protected by local policies and ordinances resulting from implementation of the proposed project would be potentially significant, but mitigation measures BIO-1, BIO-2, BIO-7, BIO-9, and BIO-10 through BIO-14 will minimize direct and indirect impacts to SERAs, while measure BIO-4 includes compensatory mitigation for temporary and permanent impacts to SERAs. Implementation of these measures will reduce potential impacts to a less than significant level.

BIO-12 Minimize Impacts to Protected Trees

The following tree protection measures adhere to section 22.44.1920 of the County Code of Ordinances:

- Protective fencing shall be used around the outermost limits of the protected zones of the native trees within or adjacent to the construction area that may be disturbed during construction or grading activities. Before the commencement of any clearing, grading, or other construction activities, protective fencing shall be placed around each applicable tree. Fencing shall be maintained in place for the duration of all construction. No construction, grading, staging, or materials storage shall be allowed within the fenced exclusion areas, or within the protected zones of any on site native trees
- Any approved development, including grading or excavation, that encroaches into the protected zone of a native tree shall be constructed using only hand-held tools
- The JPA shall retain the services of a qualified independent biological consultant or arborist, approved by the Director to monitor native trees that are within or adjacent to the construction area. Public agencies may utilize their own staff who have the appropriate classification. If any breach in the protective fencing occurs, all work shall be suspended until the fence is repaired or replaced

In addition, the following tree protection guidelines adhere to current International Society of Arboriculture (ISA) standards for tree preservation during construction activities:

- Tree protection shall be established at the TPZ or at the greatest distance feasible from all protected trees not proposed for removal
- The limits of the TPZ should be staked in the field prior to commencement of construction activities
- Any brush clearing or pruning required within the TPZ should be accomplished with hand-operated equipment
- All trimming, pruning or removal of protected trees should be performed by or directly monitored by an ISA Certified Arborist in accordance with current ISA Standards
- No materials, equipment, spoil, waste or washout water should be deposited, stored or parked within the TPZ
- Construction activities should be completed using the smallest equipment feasible and shall operate outside the TPZ
- If equipment placement within the TPZ is necessary for construction activities, ground protection should be placed (2 inches of mulch, plywood) to prevent soil compaction
- Any roots of a protected tree over 1 inch in diameter exposed during construction activities should be exposed to sound tissue and cut cleanly with a saw
- For any single native protected tree, no more than 20% of live foliage should be removed or greater than 20% of the ground under a tree be disturbed during the extent of construction activities for this project

BIO-13 Oak Tree Replacement and Monitoring

In accordance with Section 22.44.950, Section O, of the SMM LIP, if any of the protected trees impacted are lost or suffer worsened health and vigor as a result of proposed development, a 10:1 ratio with seedling-sized trees shall be planted. Where on-site mitigation is not feasible, off-site mitigation shall be provided at a suitable site restricted from development or is public parkland. The project has significant encroachment impacts exceeding 10% to one protected coast live oak tree, which requires a replacement ratio of 10:1 with seedlings that are less than one-year (10 indigenous oak trees as mitigation for the one encroached). Ten (10) trees should be planted on site, or if not feasible, off site within the same watershed. According to the LIP, any off-site mitigation that is in the same watershed shall require an additional two mitigation trees per removed or encroached tree. To maintain compliance, where feasible, the replacement trees shall be indigenous oaks sourced from seeds collected in Los Angeles or Ventura Counties, unless replacement trees come from acorns from the existing oak trees within the project site. In addition, an acorn derived from a local Santa Monica Mountains of the same species that is impacted shall be planted within the watering zone of the replacement trees.

In accordance with SMM LIP Section 22.44.950, Section O, when development encroaches less than 30 percent of the TPZ of native trees, each affected tree shall be monitored annually for a period of no less than 10 years, and an annual monitoring report shall be submitted for review by the County for each of the 10 years.

The precise location of trees to be installed on-site shall be determined by a qualified restoration specialist and will address existing groundcover species, level of soil disturbance, and other factors that may influence tree growth. If considered necessary by the restoration specialist, soil may be decompacted using hand tools to encourage root growth.

If the project site is unsuitable for planting one or more of the replacement trees, the County Forester may approve other options as follows:

- Planting replacement oak trees within the same watershed as the removed or encroached trees, where feasible. Any off-site mitigation not located within a site that was previously specified shall require an additional two mitigation trees per removed or encroached tree.
- Payment into the Oak Forests Special Fund in the amount equivalent to the oak resource value as calculated by the applicant and approved by the County Forester in alignment with the International Society of Arboriculture's "Guide to Establishing Values for Trees and Shrubs."

The project is located on public lands, owned by the State of California through the Department of Parks and Recreation; therefore, on-site oak and native tree mitigation is not feasible. As stated in subsection O.4 of the SMM LIP, where on-site tree mitigation is not feasible, the CDP shall be conditioned to require off-site mitigation in accordance with subsections O.1 and O.3 of the SMM LIP, and the location shall be provided at a suitable site in the Santa Monica Mountains coastal zone that is restricted from development or is public parkland. Off-site mitigation shall be located within the same watershed as the removed or encroached trees, where feasible. Any off-site mitigation that is in the same watershed shall require an additional two mitigation trees per removed or encroached tree; therefore, a total of 96 replacement trees

should be planted off-site. Payment for offsite mitigation will include 96 mitigation oak/native trees for the 13 oak/native trees that will be encroached by 10 percent or more from the proposed project activities.

BIO-14 Avoidance and Minimization of Impacts to SERAs

Areas of temporary disturbance shall be minimized to the extent practicable. Staging and laydown areas shall be limited to unvegetated, previously disturbed and/or developed areas (areas consisting of non-native vegetation and outside of the TPZ of protected trees and native plant communities).

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

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The proposed project is not located in an area in which an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan would apply. Therefore, no impact would occur.

5. CULTURAL RESOURCES

Information in this section is based on the Cultural Resources Assessment prepared for the project by Rincon Consultants in July 2023. The Cultural Resources Assessment is included as Appendix D.

Regulatory Setting

This section provides an analysis of the project's impacts on cultural resources, including historical and archaeological resources as well as human remains. CEQA requires a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC] Section 21084.1). A historical resource is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR); a resource included in a local register of historical resources; or any object, building, structure, site, area, place, record, or manuscript a lead agency determines to be historically significant (CEQA Guidelines Section 15064.5[a][1-3]).

A resource shall be considered historically significant if it:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. 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
4. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a-b]). PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

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

Methodology

On February 27, 2023, a records search for the proposed project was conducted at the California Historical Resources Information System (CHRIS) South Central Coastal Information Center (SCCIC). The SCCIC is the official state repository for cultural resources records and reports for the county in which the project is located. The records search included a review of all previously recorded cultural resources and previous studies within the project site area plus a 0.5-mile radius. The National Register of Historic Places, the CRHR, the California Historical Landmarks list, and the Built Environment Resources Directory, as well as its predecessor the California State Historic Property Data File, were also reviewed. Additionally, the Archaeological Determination of Eligibility list was reviewed. The CHRIS records search results indicate 13

cultural resources studies have been previously conducted within the 0.5-mile records search radius. Approximately 50 percent of the 0.5-mile radius has been included in previous cultural resources studies. See Appendix D for the CHRIS records search results.

The California Native American Heritage Commission (NAHC) was contacted on February 2, 2023, to request a search of the Sacred Lands File (SLF), as well as a contact list of Native Americans culturally affiliated with the project site. On March 2, 2023, the NAHC responded to the SLF request, stating that the results of the SLF search were negative for the presence of Native American cultural resources.

A field survey was also conducted as part of the cultural resources evaluation. No cultural resources were identified as a result of the survey.

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines § 15064.5?	☐	☐	☐	☒

No historical built resources were identified within the project site as a result of the archival research and cultural resources survey. There would be no impact to historical resources.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines § 15064.5?	☐	☒	☐	☐
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No archaeological resources were identified in the project site as a result of the archival research and cultural resources survey. Furthermore, map reviews conducted as part of the records search suggest a low potential for encountering intact subsurface archaeological deposits within the project site due to disturbances associated with previous grading activities and the installation of the existing outfall pipeline (Appendix D). Although there is low potential for encountering subsurface archaeological deposits, the discovery of archaeological resources is always a possibility during ground disturbing activities. Disturbance or destruction of archaeological resources would be a significant impact, and Mitigation Measure CR-1 would be required.

Mitigation Measure CR-1: Unanticipated Discovery of Cultural Resources

In the event archaeological resources are unexpectedly encountered during ground-disturbing activities, work within 50 feet of the find shall halt and the qualified archaeologist shall be contacted immediately to evaluate the resource. If the resource is determined by the qualified archaeologist to be prehistoric, then a Native American representative shall also be contacted to participate in the evaluation of the resource. If the qualified archaeologist and/or Native American representative determines it to be appropriate, archaeological testing for CRHR eligibility shall be completed. If the resource proves to be eligible for the CRHR and significant impacts to the resource cannot be avoided via project redesign, a qualified archaeologist shall prepare a data recovery plan tailored to the physical nature and characteristics of the resource, per the requirements of CEQA Guidelines Section 15126.4(b)(3)(C). The data recovery plan shall identify data recovery excavation methods, measurable objectives, and data thresholds to reduce any significant impacts to cultural resources related to the resource. Pursuant to the data recovery plan, the qualified archaeologist and Native American representative, as appropriate, shall recover and document the

scientifically consequential information that justifies the resource's significance. Las Virgenes-Triunfo JPA shall review and approve the treatment plan and archaeological testing as appropriate, and the resulting documentation shall be submitted to the regional repository of the CHRIS, per CEQA Guidelines Section 15126.4(b)(3)(C).

With implementation of Mitigation Measure CR-1, impacts to archaeological resources would be reduced to a less-than-significant level.

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

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The existing pipeline was originally installed in 1979. Manhole installation would be limited to the extent of the existing pipeline alignment, which is within existing and unpaved roadways. The past grading and earth disturbance associated with installation of the existing pipeline and overlying roadways would have disturbed or destroyed any potential prehistoric, older historic, or paleontological remains that may have resided within at least six feet of the ground surface. The project would not involve excavation in previously undisturbed areas; as a result, the unanticipated discovery of previously unknown or unearthened cultural resources is not anticipated to occur as a result of project implementation. Impacts to paleontological resources or geologic features would be less than significant.

d) Disturb any human remains, including those interred outside of dedicated cemeteries?

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No human remains are known to be present within the project site. However, the discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be of Native American origin, the Coroner will notify the NAHC, which will determine and notify a most likely descendant (MLD). The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the landowner shall reinter the remains in an area of the property secure from subsequent disturbance. With adherence to existing regulations, impacts to human remains would be less than significant.

6. ENERGY

Energy Background

As a state, California is one of the lowest per capita energy users in the country, ranked 48th in the nation, due to its energy efficiency programs and mild climate (United States Energy Information Administration 2021). Electricity and natural gas are primarily consumed by the built environment for lighting, appliances, heating and cooling systems, fireplaces, and other uses such as industrial processes in addition to being consumed by alternative fuel vehicles. Most of California's electricity is generated in-state with approximately 28 percent imported from the Northwest and Southwest in 2019; however, the state relies on out-of-state natural gas imports for nearly 90 percent of its supply (California Energy Commission [CEC] 2021a and 2021b). In addition, approximately 32 percent of California's electricity supply comes from renewable energy sources, such as wind, solar photovoltaic, geothermal, and biomass (CEC 2021a). In 2018, Senate Bill 100 accelerated the state's Renewable Portfolio Standards Program, codified in the Public Utilities Act, by requiring electricity providers to increase procurement from eligible renewable energy and zero-carbon resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045. The proposed project is located within the Southern California Edison (SCE) and Southern California Gas Company (SCG) service areas. Table 6 summarizes the electricity consumption for Los Angeles County, in which the project site would be located, and for SCE, as compared to statewide consumption.

Table 6 2019 Electricity Consumption

Energy Type	Los Angeles County	Southern California Edison (SCE)	California	Proportion of SCE Consumption (%)	Proportion of Statewide Consumption ¹ (%)
Electricity (GWh)	66,119	80,913	279,402	23.7	29.0

GWh = gigawatt-hours

¹ For reference, the population of Los Angeles County (10,044,458 persons) is approximately 25.5 percent of the population of California (39,466,855 persons) (California Department of Finance [DOF] 2021)

Source: CEC 2021c

Petroleum

Petroleum fuels are primarily consumed by on-road and off-road equipment in addition to some industrial processes, with California being one of the top petroleum-producing states in the nation (CEC 2021d). Gasoline, which is used by light-duty cars, pickup trucks, and sport utility vehicles, is the most used transportation fuel in California with 15.4 billion gallons sold in 2019 (CEC 2021d). Diesel, which is used primarily by heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles, is the second most used fuel in California with 1.8 billion gallons sold in 2019 (CEC 2021d). Table 7 summarizes the natural gas consumption for Los Angeles County, in which the project site would be located, and for SCG, as compared to statewide consumption.

Table 7 2019 Natural Gas Consumption

Energy Type	Los Angeles County	Southern California Gas	California	Proportion of SCG	Proportion of Statewide Consumption ¹ (%)
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	Company (SCG)			Consumption (%)	
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Natural Gas (millions of therms)	3,048	5,425	13,158	23.2	41.2
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GWh = gigawatt-hours

¹ For reference, the population of Los Angeles County (10,044,458 persons) is approximately 25.5 percent of the population of California (39,466,855 persons) (California DOF 2021)

Source: CEC 2021c

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☒

Construction Energy Demand

During project construction, energy would be consumed in the form of petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, construction worker travel to and from the project site, and vehicles used to deliver materials to the site, as well as the operation of equipment and machinery to install the manholes. The project would require trench excavation, backfill and compaction of soil, and installation of precast manhole structures into the existing pipeline.

The total consumption of gasoline and diesel fuel during project construction was estimated using the assumptions and factors from CalEEMod used to estimate construction air emissions (Appendix A). Table 8 presents the estimated construction phase energy consumption, indicating construction equipment and worker trips would consume over 9,204 gallons of fuel over the project construction period. Construction energy calculations are included in Appendix E of this document.

Table 8 Estimated Fuel Consumption during Construction

Fuel Type	Gallons of Fuel	MMBtu³
Diesel Fuel (Construction Equipment) ¹	8,696	1,108
Other Petroleum Fuel (Worker Trips) ²	510	59
Total		1,167

¹ Fuel demand rate for construction equipment is derived from the total hours of operation, the equipment's horsepower, the equipment's load factor, and the equipment's fuel usage per horsepower per hour of operation, which are provided in CalEEMod outputs (see Appendix A), and from compression-ignition engine brake-specific fuel consumptions factors for engines between 0 to 100 horsepower and greater than 100 horsepower (USEPA 2018). Fuel consumed for all construction equipment is assumed to be diesel fuel.

² The fuel economy for worker trip vehicles is derived from the United States Department of Transportation (USDOT) National Transportation Statistics (24.1 mpg) (USDOT 2019). Fuel consumed for all worker trips is assumed to be gasoline fuel.

³ CaRFG CA-GREET 2.0 fuel specification of 109,786 Btu/gallon used to identify conversion rate for fuel energy consumption for worker trips specified above (CARB 2015). Low-sulfur Diesel CA-GREET 2.0 fuel specification of 127,460 Btu/gallon used to identify conversion rate for fuel energy consumption for construction equipment specified above (Schremp 2017). Due to rounding, numbers may not add up precisely to the totals indicated.

Source: Construction energy consumption calculated based on CalEEMod outputs. See Appendix A.

The construction energy estimates represent a conservative estimate because the construction equipment used in each phase of construction was assumed to be operating every day of construction. According to the California Annual Retail Fuel Outlet Report Results (CEC-A15), retail diesel sales in Los Angeles County totaled approximately 276 million gallons while retail gasoline sales totaled over 3.5 billion gallons in 2021 (CEC 2021d). Therefore, fuel consumption associated with project construction would account for less than 0.003 percent of annual retail diesel sales and less than 0.001 percent of annual retail gasoline sales in the County.

Construction equipment would be maintained to applicable standards, and construction activity and associated fuel consumption and energy use would be temporary and typical for construction sites. It is also reasonable to assume that contractors would avoid wasteful, inefficient, and unnecessary fuel consumption during construction to reduce construction costs. Therefore, the project would not involve the inefficient, wasteful, and unnecessary use of energy during construction, and there would be no impact.

Operational Energy Demand

The purpose of the project is to ensure the pipeline's integrity, facilitating its continued use as intended for the conveyance of discharge between the Tapia WRF and Malibu Creek, not to serve additional demand. As such, no operational increase in electricity usage associated with increased pumping would occur. Therefore, project operation would not result in a potential impact due to wasteful, inefficient, or unnecessary consumption of energy resources, and no operational energy impact would occur.

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

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Project operation involves the conveyance of ground water and recycled water. The project would not result in expansion of the existing capacity of the pipeline. The County of Los Angeles does not have any specific renewable energy or energy efficiency plans with which the project could comply. Therefore, no impact would occur.

7. GEOLOGY AND SOILS

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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 active fault trace? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒

The project site is not located within an earthquake fault zone. The nearest earthquake fault zone is the Malibu Coast Fault Zone, located approximately four miles south of the project site (California Geological Survey 2017). Therefore, the project would not directly or indirectly cause potential substantial adverse effects related to rupture of a known earthquake fault, and there would be no impact.

ii) Strong seismic ground shaking?	☐	☐	☒	☐
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The project site is proximate to several fault zones, including the Malibu Coast Fault Zone (approximately four miles to the south); the Santa Monica Fault (approximately 11 miles to the southeast); the Simi-Santa Rosa Fault Zone (approximately 15 miles to the north); and the Hollywood Fault Zone (approximately 20 miles to the east) (California Geological Survey 2017). The project site could be subject to seismic ground shaking during an earthquake along these faults or other active faults in the region. The project involves installation of five manholes along an existing recycled water outfall line; a large seismic event, such as a seismic shaking or ground failure, could result in breakage of manholes and the existing recycled water line. The existing facilities are subject to the same risk; therefore, there would be no increase in the potential for the project to directly or indirectly cause substantial adverse effects involving strong seismic ground shaking as compared to existing conditions. Furthermore, in the event an earthquake compromised a project component during operation, the Las Virgenes-Triunfo JPA would temporarily shut-off the sewer line and conduct emergency repairs. Project design would be required to incorporate the materials and installation standards of the American Water Works Association as required pursuant to Title 22 California Code of Regulations (CCR) Chapter 16, which include appropriate standard engineering practices and specifications in pipeline design to minimize risk of structural failure in a seismic event and would reduce any potential secondary impacts.

Therefore, the project would not expose people or structures to potential substantial adverse effects involving strong seismic ground shaking, and impacts would be less than significant.

iii) Seismic-related ground failure, including liquefaction and lateral spreading?	☐	☐	☐	☒
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The project would be located in a known liquefaction zone (California Geological Survey 2017). However, the project would not involve activities (such as fracking or mining) that could trigger an earthquake that would in turn lead to damage from liquefaction. The project would not include habitable structures and would therefore not expose people to loss, injury, or death involving seismic-related ground failure, including liquefaction. Therefore, the project would not directly or indirectly cause potential adverse effects related to seismic ground failure or liquefaction, and no impact would occur.

iv) Landslides?

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The project would be located in a known landslide hazard zone (California Geological Survey 2017). However, the project site itself is generally flat, and although the topography gently slopes toward Malibu Creek, slopes are less than 10 percent and landslides would not be anticipated within the project site. The project would not include habitable structures and therefore would not expose people to loss, injury, or death involving landslides. Implementation of the project would not exacerbate the existing risk of earthquake-induced landslides in the immediate vicinity because the project would not directly result in a seismic event or destabilize soils prone to landslide. Therefore, because the project would not introduce new infrastructure to the site that would exacerbate landslide hazards, the proposed project would not directly or indirectly cause potential adverse effects involving earthquake-induced landslides. No impact would occur.

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

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Soil erosion or the loss of topsoil may occur when soils are disturbed but not secured or restored, such that wind or rain events may mobilize disturbed soils, resulting in their transport off the project site. During construction of the proposed project, erosion would be limited to the relatively small footprint of each proposed manhole. Project construction would implement standard dust control measures, as required by the SCAQMD, including but not limited to replacing ground cover in disturbed areas, watering active sites regularly, and suspending all excavating and grading operations during periods of high winds. These measures would be required pursuant to SCAQMD Rule 403. Additionally, since the project is greater than one acre in size, it would be subject to the NPDES Construction General Permit and would be required to develop a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP must include erosion and sediment control BMPs that would meet or exceed measures required by the Construction General Permit. Construction BMPs could include inlet protection, silt fencing, fiber rolls, stabilized construction entrances, stockpile management, solid waste management, and concrete waste management. Post-construction stormwater performance standards are also required to specifically address water quality and channel protection events. Implementation of the required SWPPP would reduce the potential for eroded soil and any contaminants attached to that soil to contaminate a waterbody following a storm event. Therefore, with compliance with SCAQMD Rule 403 and the NPDES Construction General Permit, the project would not result in substantial soil erosion or loss of topsoil, and impacts would be less than significant.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of

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the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

As discussed above, the project site is located in known liquefaction and landslide hazard zones. The project would be subject to geologic hazards such as lateral spreading, subsidence, or collapse as it is located in a seismically active area. The project would occur on a relatively flat area that includes an existing recycled water line. The proposed project would incorporate all applicable building standards and requirements in compliance with the California Building Standards Code and the American Water Works Association Standards. Therefore, given project compliance with applicable building standards, the proposed project would not significantly affect soil stability or increase the potential for on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. No impact would occur.

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

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The project site is underlain by Cotharin clay loam soils (Natural Resources Conservation Service 2023). Due to the moderate clay content of most on-site soils, there is potential for expansive soils to occur. However, the existing facilities are subject to the same risk; therefore, there would no increase in the potential for project facilities to create substantial direct or indirect risks to life or property as compared to existing conditions. Furthermore, the project would not include habitable structures and would therefore not create substantial direct or indirect risks to life or property beyond existing conditions. As a result, the project would not create substantial direct or indirect risks to life or property as a result of expansive soil, and there would be no impact

e) Have soils incapable of adequately supporting the use of on-site wastewater treatment systems where sewers are not available for the disposal of wastewater?

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The project would involve installation of five manholes along an existing recycled water line that outfalls to Malibu Creek. The project would not involve the use of septic tanks or alternative wastewater disposal systems. No impact would occur.

f) Conflict with the Hillside Management Area Ordinance (L.A. County Code, Title 22, Ch.22.104)?

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The Hillside Management Area Ordinance defines Hillside Management Areas as any portion of a lot or parcel of land which contains terrain with a natural slope gradient of 25 percent or steeper (County of Los Angeles 2015). The project would be located primarily within a flat, unpaved access road, and would not be located in a Hillside Management Area. Therefore, the project would not conflict with the Hillside Management Area Ordinance and there would be no impact.

8. GREENHOUSE GAS EMISSIONS

Overview of Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of GHG emissions contributing to the "greenhouse effect," a natural occurrence which takes place in Earth's atmosphere and helps regulate the temperature of the planet. The majority of radiation from the sun hits Earth's surface and warms it. The surface, in turn, radiates heat back towards the atmosphere in the form of infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping into space and re-radiate it in all directions.

GHG emissions occur both naturally and as a result of human activities, such as fossil fuel burning, decomposition of landfill wastes, raising livestock, deforestation, and some agricultural practices. GHGs produced by human activities include carbon dioxide (CO₂), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO₂) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" (CO₂e), which is the amount of GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 28, meaning its global warming effect is 28 times greater than CO₂ on a molecule per molecule basis (Intergovernmental Panel on Climate Change [IPCC] 2014).³

Anthropogenic activities since the beginning of the industrial revolution (approximately 250 years ago) are adding to the natural greenhouse effect by increasing the concentration of GHGs in the atmosphere that trap heat. Since the late 1700s, estimated concentrations of CO₂, methane, and nitrous oxide in the atmosphere have increased by over 43 percent, 156 percent, and 17 percent, respectively, primarily due to human activity (USEPA 2020). Emissions resulting from human activities are thereby contributing to an average increase in Earth's temperature. Potential climate change impacts in California may include loss of snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (State of California 2018).

Significance Thresholds

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

According to CEQA Guidelines Section 15183.5, projects can tier off of a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of the project's consistency with the GHG reduction policies included in a qualified GHG reduction plan. This approach is considered by the Association of Environmental Professionals (AEP) in its white paper, *Beyond Newhall and*

³ The IPCC's *Fifth Assessment Report* determined methane has a GWP of 28 (IPCC 2014). However, the 2017 Climate Change Scoping Plan published by the California Air Resources Board uses a GWP of 25 for methane, consistent with the IPCC's *Fourth Assessment Report*. Therefore, this analysis utilizes a GWP of 25 (IPCC 2007).

2020, to be the most defensible approach presently available under CEQA to determine the significance of a project's GHG emissions (AEP 2016). LVMWD is in the process of drafting a Climate Action Plan, but has not published a qualified climate action plan. The next best approach would be to use a quantitative threshold from the local air district.

The SCAQMD has adopted an interim CEQA GHG significance threshold for projects where SCAQMD is the lead agency. While SCAQMD is not the lead agency for the project, SCAQMD's threshold is used as a reference for comparative purposes. In guidance provided by the SCAQMD's GHG CEQA Significance Threshold Working Group in September 2010, SCAQMD considered a tiered approach to determine the significance of GHG emissions generated by development. The draft tiered approach is outlined in meeting minutes dated September 29, 2010 (SCAQMD 2008b and 2010):

- Tier 1. If the project is exempt from further environmental analysis under existing statutory or categorical exemptions, there is a presumption of less than significant impacts with respect to climate change. If not, then the Tier 2 threshold should be considered.
- Tier 2. Consists of determining whether or not the project is consistent with a GHG reduction plan that may be part of a local general plan, for example. The concept embodied in this tier is equivalent to the existing concept of consistency in CEQA Guidelines Sections 15064(h)(3), 15125(d) or 15152(a). Under this Tier, if the project is consistent with the qualifying local GHG reduction plan, it is not significant for GHG emissions. If there is not an adopted plan, then a Tier 3 approach would be appropriate.
- Tier 3. Establishes a screening significance threshold level to determine significance. The Working Group has provided a recommendation of 10,000 MT CO₂e per year for industrial projects and 3,000 MT CO₂e per year for all non-industrial projects.
- Tier 4. Establishes a service population threshold to determine significance. The Working Group has provided a recommendation of 4.8 MT CO₂e per year for land use projects.

The project would not be statutory or categorically exempt, and therefore Tier 1 does not apply. Las Virgenes Municipal Water District does not have a local, qualified GHG reduction plan for the project to tier off, thus Tier 2 would not apply. Therefore, for a project-specific threshold, LVMWD has selected SCAQMD's 3,000 MT CO₂e per year threshold for non-industrial projects as the applicable project-specific threshold, in accordance with Tier 3. The SCAQMD's 3,000 MT CO₂e per year threshold was determined based upon a 90 percent capture rate of GHG emissions (i.e., 90 percent of emissions would occur for projects that exceed the 3,000 MT CO₂e per year threshold, and therefore mitigation is focused upon those projects).

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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Would the project:

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

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Project construction would generate GHG emissions from the operation of heavy machinery for manhole installation, motor vehicles, and worker trips to and from the site. Construction GHG emissions would be

temporary and would cease upon completion of construction. Because the project involves inspection and repair of the existing pipeline with the purpose of ensuring the pipeline's integrity, facilitating its continued use as intended for the conveyance of discharge between the Tapia WRF and Malibu Creek, the entirety of the project's GHG emissions would be associated with project construction, and no operational emissions would occur.

As shown in

Table 9, construction of the proposed project would generate an estimated total of 50 MT of CO₂e. Amortized over a 30-year period pursuant to SCAQMD guidance, construction of the proposed project would generate an estimated 2 MT of CO₂e per year. Therefore, the proposed project would not exceed the locally-applicable, project-specific threshold of 3,000 MT of CO₂e per year, and impacts would be less than significant.

Table 9 Estimated Construction GHG Emissions

	Emissions (MT of CO ₂ e)
Total	50
Amortized over 30 years	2

MT = metric tons; CO₂e = carbon dioxide equivalents

Notes: Emissions modeling was completed using CalEEMod. See Appendix A for modeling results.

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

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The SCAQMD has not adopted any plans, policies, or regulations for the purpose of reducing GHG emissions, and LVMWD has not adopted a qualified climate action plan. Nevertheless, because the project would not result in a significant increase in GHG emissions and involves maintenance of an existing piece of wastewater infrastructure, it would not conflict with any applicable plans, policies or regulations for the purpose of reducing GHG emissions. Therefore, no impact would occur.

9. HAZARDS AND HAZARDOUS MATERIALS

<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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Would the project:

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

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Construction of the proposed manholes in the existing pipeline would temporarily increase the transport and use of hazardous materials in the project area through the operation of vehicles and equipment needed to conduct the installation of the five manholes. Such substances include diesel fuel, oil, solvents, and other similar materials that would be brought onto the construction site for use during the construction period, and are commonly used throughout the project area, including at the Tapia WRF where the project initiates. These materials would be contained within vessels specifically engineered for safe storage and would not be transported, stored, or used in quantities that would pose a significant hazard to the public or construction workers themselves. In addition, these materials would be disposed off-site in accordance with applicable laws pertaining to the handling and disposal of hazardous waste. Furthermore, the proposed project would include minimal excavation activities to install the manholes to inspect the existing pipeline. This ground disturbance would include the use of a limited amount of potentially hazardous substances during equipment operation for site preparation and manhole construction.

Project construction materials (e.g., asphalt and concrete) and soils have the potential to be contaminated by vehicle-related pollution (e.g., oil, gasoline, diesel, and other automotive chemicals). However, all such materials and soils removed during construction would be transported and disposed of in accordance with applicable codes and regulations, such as CCR Title 22, Division 4.5, to ensure no significant hazard to construction workers or the surrounding community would occur. The transport, use, and storage of hazardous materials during construction would be conducted in accordance with applicable federal and state laws, such as the Hazardous Materials Transportation Act, California Hazardous Material Management Act, and CCR Title 22. Additionally, no hazardous or potentially hazardous materials would be handled in or adjacent to Malibu Creek. Operation of the project would involve the conveyance of recycled water and would not require the use, storage, or disposal of hazardous materials. Therefore, the project would not create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials, and impacts would be less than significant.

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

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The use, transport, and storage of hazardous materials during excavation and site preparation (e.g., diesel fuel, oil, solvents, and other similar materials) could introduce the potential for an accidental spill or release to occur. The presence of hazardous materials during project construction activities, including but not limited to ground-disturbing activities, such as excavation, could result in an accidental upset or release of hazardous materials if they are not properly stored and secured. However, only minimal amounts of hazardous materials would be used; therefore, the potential for an accidental release of significant quantities of hazardous materials that could affect the surrounding environment is low. Hazardous materials used during project construction

would be disposed of off-site in accordance with all applicable laws and regulations, as well the regulations of the federal and state Occupational Safety and Health Administrations. Additionally, no hazardous or potentially hazardous materials would be handled in or adjacent to Malibu Creek.

As discussed under response ‘9.a,’ operation and maintenance of the project would involve the conveyance of recycled water and would not require the routine use, storage, or disposal of hazardous materials. Impacts related to the release of hazardous materials due to reasonably foreseeable upset or accident conditions during project operation would be less than significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of sensitive land uses?

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The nearest schools, David Gonzales Camp School and MUSE Global School, are located approximately 0.5 mile and 0.8 mile north, respectively, of the project alignment. The nearest sensitive land use is a private residence located approximately 0.15 mile east of the site, on an opposite hillside. As discussed under response ‘9.b,’ project construction would involve minimal use of hazardous materials, and the use, transport, and storage of hazardous materials during construction would be required to comply with existing hazardous materials regulations. In operation, the project site would return to essentially existing conditions and would not involve activities that would emit hazardous emissions or handle hazardous materials. Therefore, the project would not emit hazardous emissions or handle hazardous materials, substances, or waste within 0.25 mile of sensitive land uses or an existing or proposed school. No impact would occur.

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

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Government Code Section 65962.5 requires the California Environmental Protection Agency to develop an updated Cortese List. The California Department of Toxic Substances Control (DTSC) is responsible for a portion of the information contained in the Cortese List. The analysis for this section included a review of the following resources in June 2023 to provide hazardous material release information:

- Online Cortese List database (DTSC 2023a)
- State Water Resources Control Board (SWRCB) GeoTracker database (SWRCB 2023)
- DTSC EnviroStor database (California DTSC 2023b)

According to the DTSC Cortese List and the EnviroStor database, the project site is not located on or within 0.25 mile of an open hazardous waste site (DTSC 2023a and 2023b). The SWRCB’s GeoTracker database indicates the Tapia WRF was identified as a Waste Discharge Requirement (WDR) site in 1994; this indicates the Tapia WRF operated under a WDR issued by the SWRCB via the RWQCB (SWRCB 2020). WDRs address non-designated waste discharges that are typically applied to land (SWRCB 2020). This listing does not indicate the presence of any conditions or materials that could result in adverse impacts to hazards and hazardous materials from the proposed project. Additionally, there is one leaking underground storage tank cleanup site at the Tapia WRF with the status “Completed – Case Closed as of July 24, 1996.” The presence of the closed LUST site would not create a significant hazard to the public or environment during project construction or operation. Therefore, impacts would be less than significant.

e) For a project located within an airport land use plan, or where such a plan has not been adopted,

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within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

The project site is not located in an airport land use plan area or within two miles of a public or private airport (Los Angeles County Airport Land Use Commission 2009). The closest airports are the Van Nuys Airport located approximately 15.3 miles to the northeast, the Santa Monica Municipal Airport located approximately 15.6 miles to the southeast, and the Los Angeles International Airport located approximately 19.8 miles to the southeast. The proposed project would not add new residents to the project area and given the distance of these airports from the project site, the project would not result in a safety hazard or excessive noise for construction workers in the project area due to proximity to an airport. No impact would occur.

f) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?

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Construction activities associated with the proposed project may require temporary lane closures to maintain the safety of construction workers and the public during inspection and repair of the existing pipeline; however, such closures would be temporary and of short duration, and access through the project area would be maintained at all times. Additionally, the project would not permanently alter roadways, and upon completion of construction, damaged features, including roadway pavement, would be restored to pre-construction condition or better. The manhole components would be located underground and therefore would not obstruct access to any roadways or structures during operation. Therefore, impacts would be less than significant.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving fires, because the project is located:

i) within a high fire hazard area with inadequate access?

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The project site is located in a Very High Fire Hazard Severity Zone (VHFHSZ) within a State Responsibility Area (CAL FIRE 2021). Vehicle access to the project site is provided via Malibu Canyon Road and Piuma Road. Los Angeles County Fire Department Station 67 is located approximately 0.5 mile southeast of the project along Piuma Road. Construction activities associated with the project may require temporary lane closures to maintain the safety of construction workers and the public during inspection and repair of the existing pipeline; however, such closures would be temporary and of short duration, and access through the project area would be maintained at all times. Pursuant to the County's Standard Specifications for Public Works Construction, all temporary lane closures, detours, signs, and other traffic control measures shall conform to the California Manual on Uniform Traffic Control Devices, and a Traffic Control Plan would be prepared to manage traffic and maintain emergency access (County of Los Angeles Public Works 2016). In operation, manhole components would be located underground and would not obstruct access to roadways. Therefore, impacts would be less than significant.

ii) within an area with inadequate water and pressure to meet fire flow standards?

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The project site is located within 200 feet of the Tapia WRF which provides adequate water and pressure to meet existing fire flow standards. Proposed project activities include the installation of five new manholes along the existing pipeline alignment to provide access for inspection and repairs. Although project construction may require a temporary water supply for dust suppression, water supply would be obtained from existing sources available at Tapia WRF. As with the existing operational use, the proposed project would involve the conveyance of recycled water and would not alter or increase existing water demand. Therefore, impacts would be less than significant.

iii) within proximity to land uses that have the potential for dangerous fire hazard?

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As shown in CAL FIRE's FHSZ Viewer, the project site and surrounding area are located in a VHFHSZ (CAL FIRE 2021). As the manholes would be located within an existing pipeline and the project does not include the development of habitable structures, the proposed project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving fires. Therefore, impacts would be less than significant.

h) Does the proposed use constitute a potentially dangerous fire hazard?

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Project operation would not involve potentially flammable activities. However, project construction would involve activities that could ignite a fire. Potential ignition sources may include sparks from exhaust pipes, discarded cigarette butts, contact of mufflers with dry grass, other sources of sparks or flame, and spills or releases of flammable materials such as gasoline. Compliance with applicable federal and State laws and regulations related to the proper use, storage, and transport of hazardous materials would reduce the risk of wildfire ignition from the use of hazardous materials during construction activities. Therefore, impacts related to wildland fires during project construction would be less than significant.

10. HYDROLOGY AND WATER QUALITY

<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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Would the project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

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The project site is located in the South Coast hydrologic region. The nearest surface water bodies to the project site are Malibu Creek, which is approximately 75 feet north of the northernmost proposed manhole, and the Pacific Ocean, which is approximately 3.5 miles south of the project site. Malibu Creek outfalls to the Pacific Ocean at the Malibu Lagoon 3.5 miles south of the project site.

Excavation, grading, and construction activities associated with project construction would result in soil disturbance. Stormwater flowing through a construction site can collect sediment, debris, and chemicals, and transport them to receiving water bodies, which could result in potentially significant impacts to surface or ground water quality. As discussed in Section 7, *Geology and Soils*, erosion during construction would be limited to the relatively small footprint of the project area, including each manhole and the unpaved access road. Project construction would implement standard dust control measures, including but not limited to replacing ground cover in disturbed areas, watering active sites regularly, and suspending all excavation and grading operations during periods of high winds. These measures would be required pursuant to SCAQMD Rule 403. Additionally, as described in Section 9, *Hazards and Hazardous Materials*, accidental leaks or spills of hazardous materials that may occur during project construction would be cleaned up and disposed of in accordance with applicable regulations. Therefore, project construction activities would not substantially degrade groundwater quality.

In operation, the proposed manholes and maintenance activities would not result in erosion, waste discharge, and would not involve other activities that could substantially degrade surface or groundwater quality. Therefore, operation of the project would not violate water quality standards or waste discharge requirements or substantially degrade surface or groundwater quality. Impacts would be less than significant.

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

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The project site does not overlie a designated groundwater basin and is not subject to a groundwater sustainability plan (California Department of Water Resources 2023). Project construction would require excavation for the proposed manholes, and if groundwater is encountered during excavation, dewatering may be necessary. Disposal of dewatered groundwater would be conducted pursuant to applicable permits and would include required treatment prior to discharge. Project construction would not inhibit groundwater recharge. In operation, the five proposed manholes would negligibly increase the amount of impervious surfaces in the project site due to their size and would not interfere substantially with groundwater recharge. Therefore, the project would not decrease groundwater supplies or interfere substantially with groundwater

recharge such that the project may impede sustainable groundwater management, and impacts would be less than significant.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of a Federal 100-year flood hazard area or County Capital Flood floodplain; the alteration of the course of a stream or river; or through the addition of impervious surfaces, in a manner which would:

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(i) Result in substantial erosion or siltation on- or off-site?

(ii) Substantially increase the rate, amount, or depth of surface runoff in a manner which would result in flooding on- or offsite?

(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

(iv) Impede or redirect flood flows which would expose existing housing or other insurable structures in a Federal 100-year flood hazard area or County Capital Flood floodplain to a significant risk of loss or damage involving flooding?

The project site a not located within a federal 100-year flood hazard zone or other federally designated flood hazard zone (Federal Emergency Management Agency 2018). The project site is not located in a flood area designated by the County of Los Angeles (County of Los Angeles 2018a). The project would involve installation of five manholes along an existing recycled water line, and the project would not include components that would result in alterations to the course of a stream or river. As described under threshold (b), the proposed manholes would not increase the amount of impervious surfaces on site, and disturbed ground surfaces would be restored upon completion of construction. Therefore, the project would not alter the existing drainage pattern along the pipeline alignment as compared to existing conditions. No impact would occur.

d) Otherwise place structures in Federal 100-year flood hazard or County Capital Flood floodplain areas which would require additional flood proofing and flood insurance requirements?

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The project site a not located within a federal 100-year flood hazard zone or any other federally designated flood hazard zone (Federal Emergency Management Agency 2018). The project site is not located in a flood area designated by the County of Los Angeles (County of Los Angeles 2018a). Therefore, the project would not otherwise place structures in a federal 100-year flood hazard or County Capital Flood floodplain area and no impact would occur.

e) Conflict with the Los Angeles County Low Impact Development Ordinance (L.A. County Code, Title 12, Ch. 12.84)?

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Chapter 12.84 of Los Angeles County Code, Low Impact Development Standards, includes development standards to lessen the adverse impacts of stormwater runoff from development and to minimize pollutant loadings from impervious surfaces (Los Angeles County Code Chapter 12.84). Because the project site exceeds one acre, the project would be required to comply with requirements of the Low Impact Development Ordinance, including minimization of site modifications to natural drainage systems and prevention of pollutants of concern from leaving the project site via stormwater. Compliance with the Low Impact Development Ordinance would reduce impacts related to stormwater associated with the project. Additionally, the five proposed manholes would negligibly increase impervious areas within the project site, and would not substantially increase stormwater runoff. Therefore, no impact would occur.

f) Use onsite wastewater treatment systems in areas with known geological limitations (e.g. high groundwater) or in close proximity to surface water (including, but not limited to, streams, lakes, and drainage course)?

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The project would involve installation of five manholes along an existing recycled water line, and would not introduce on-site wastewater treatment systems to the project site. Therefore, no impact would occur.

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

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As discussed under threshold (d), the project site is not located in a flood hazard zone. The nearest bodies of water that could be subject to a tsunami or seiche (oscillations in the water level of a water body) are the Pacific Ocean, 3.5 miles south of the project site, or Malibu Lake, 3.3 miles northwest of the project site. Due to distance and intervening hills between the project site and these water bodies, a tsunami or seiche would not impact the project site. Additionally, the project would not introduce pollutants to the project site. Therefore, the project would not risk release of pollutants due to project inundation, and no impact would occur.

h) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

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The project site is within the jurisdiction of the Los Angeles RWQCB, which implements the Los Angeles RWQCB Basin Plan. The Basin Plan establishes narrative and numerical water quality objectives and includes total maximum daily loads, which are a calculation of the maximum amount of a pollutant a water body can have and still meet water quality objectives established by the region (Los Angeles RWQCB 2014). As discussed under response (a), the proposed project would not generate substantial erosion, and all accidental leaks or spills of hazardous materials that may occur during construction would be remediated in accordance with applicable regulations. Furthermore, the project would involve implementation of SCAQMD dust control measures pursuant to Rule 403, including but not limited to replacing ground cover in disturbed areas as quickly as possible, watering active sites regularly, and suspending all excavating and grading operations during periods of high winds. As such, the project would not conflict with or obstruct implementation of the Basin Plan.

The project site does not overlie a designated groundwater basin and is not subject to a groundwater sustainability plan (California Department of Water Resources 2023). Therefore, the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan, and no impact would occur.

11. LAND USE AND PLANNING

<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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Would the project:

a) Physically divide an established community? ☐ ☐ ☐ ☒

The project would involve construction of five manholes along an existing recycled water pipeline within Malibu Creek State Park. There are no residences or businesses located near the project site, and construction and operation of the project would not permanently inhibit movement along Malibu Canyon Road or within Malibu Creek State Park. Therefore, the project would not physically divide an established community and there would be no impact.

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

The project site is located within Malibu Creek State Park and is zoned as Open Space – Parks. Pursuant to Los Angeles County Code Section 22.16.030, water system facilities are permitted in Open Space – Parks zones. The project would be subject to compliance with the applicable development standards outlined in Los Angeles County Code Section 22.16.030.

The SMM LCP establishes several zoning maps pertaining to land use, biological resources, and scenic resources within the SMM LCP planning area. The project site is within an area designated as Open Space – Parks by the SMM LCP’s Land Use Policy; a SERA by the SMM LCP’s Biological Resources section; and an area designated as a Scenic Element by the Scenic Resources section (County of Los Angeles 2018b). The SMM LCP is enforced by Chapter 22.44 of Los Angeles County Code. Section 22.44.1770 of Los Angeles County Code defines permitted uses within Open Space – Parks areas of the SMM LCP, and designates that water facilities are a permitted use within Open Space – Parks. Furthermore, as discussed in Section 4, *Biological Resources*, the project site contains SERAs, impacts to which would be reduced by mitigation measures BIO-1, BIO-2, BIO-7, BIO-9, BIO-10, and BIO-14. Finally, as discussed in Section 1, *Aesthetics*, the project would not result in permanent adverse impacts to scenic resources in the project area. Therefore, the project would not cause a significant environmental impact due to conflict with the SMM LCP.

The project would further the policies of the Los Angeles County General Plan Public Services and Facilities Element. The project would be consistent with Policy PS/F 1.2, which aims to ensure the provision of adequate services and facilities, and Policy PS/F 1.4, which aims to ensure the adequate maintenance of infrastructure. The project would involve installation of five manholes, which would be used to perform inspections and maintenance of the existing recycled water line.

Furthermore, as noted throughout this document, the project would result in no impact, less than significant impacts, or less than significant impacts with the incorporation of mitigation measures for all issue areas evaluated. As a result, the proposed project would be consistent with the goals and policies outlined in the

Los Angeles County Code and the Los Angeles County General Plan as they relate to these topics. With incorporation of mitigation to ensure the project would not cause a significant environmental impact due to conflict with the SMM LCP, the proposed project would not cause a significant environmental impact due to a conflict with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

c) Conflict with the goals and policies of the General Plan related to Hillside Management Areas or Significant Ecological Areas?

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As discussed under threshold (f) of Section 7, *Geology and Soils*, the project would not be located within a Hillside Management Area. The project site is located within the Santa Monica Mountains Significant Ecological Area (Appendix B). As discussed in Section 4, *Biological Resources*, the project would not result in substantial adverse effects to special status species, sensitive communities, waterways, wildlife corridors, or other biological resources potentially located with the Santa Monica Mountains Significant Ecological Area with implementation of mitigation measures BIO-1 through BIO-11. With incorporation of mitigation to ensure the project would not conflict with the goals and policies of the General Plan related to Hillside Management Areas or Significant Ecological Areas, impacts would be less than significant.

12. MINERAL RESOURCES

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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?	☐	☐	☐	☒

According to Mineral Land Classification Maps prepared by the California Geological Survey, the project site is in an area where available geologic information indicates there is low potential for the presence of significant construction aggregate resources (California Geological Survey 2021). Additionally, the proposed project would not involve changes in land use that could affect the availability of mineral resources. The project site is not currently used for mineral resource extraction. Therefore, no impact to mineral resources of regional or statewide importance would occur.

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?	☐	☐	☐	☒
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The project site is not located within an area delineated in the Mineral Resources Map of the Los Angeles County 2035 General Plan (County of Los Angeles 2014a). The proposed project would not involve changes in land use that could affect the availability of mineral resources. The project site is not currently used for mineral resource extraction. Therefore, no impact to mineral resources of local importance would occur.

13. NOISE

Overview of Sound and Vibration

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs (e.g., the human ear). Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA).

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent structures. Vibration amplitudes are usually expressed in peak particle velocity (PPV) or RMS vibration velocity. The PPV and RMS velocity are normally described in inches per second (in./sec.). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used in monitoring of vibration because it is related to the stresses that are experienced by buildings (Caltrans 2020).

Existing Noise Environment

The primary existing noise sources along the project alignment are the Tapia WRF and vehicular travel on Malibu Canyon Road. Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. According to the Los Angeles County General Plan Noise Element, land uses that house sensitive receptors, or those at high risk of being affected by high noise levels, are considered noise-sensitive uses. Noise-sensitive uses, such as residences, hospitals, schools, childcare facilities, and places of assembly are especially vulnerable to excessive noises generated by airports, rail, freeways, primary arterials, heavy industry, and warehousing facilities (County of Los Angeles 2015). Vibration-sensitive receivers, which are similar to noise-sensitive receivers, include residences and institutional uses, such as schools, churches, and hospitals. Vibration-sensitive receivers also include buildings where vibrations may interfere with vibration-sensitive equipment that is affected by vibration levels that may be well below those associated with human annoyance (e.g., recording studios or medical facilities with sensitive equipment). The sensitive receiver nearest to the site is a private residence located approximately 0.15 mile east of the project, on an opposite hillside.

Regulatory Setting

Los Angeles County General Plan

The goal and associated policies included in the Los Angeles County General Plan Noise Element focus on reducing and limiting the exposure of the general public to excessive noise levels. The following Noise Element policies are applicable to the project (Los Angeles County 2015).

Goal N 1: The reduction of excessive noise impacts.

- **Policy N 1.2:** Reduce exposure to noise impacts by promoting land use compatibility.
- **Policy N 1.3:** Minimize impacts to noise-sensitive land uses by ensuring adequate site design, acoustical construction, and use of barriers, berms, or additional engineering controls through Best Available Technologies (BAT).
- **Policy N 1.9:** Require construction of suitable noise attenuation barriers on noise sensitive uses that would be exposed to exterior noise levels of 65 CNEL and above, when unavoidable impacts are identified.
- **Policy N 1.11:** Maximize buffer distances and design and orient sensitive receptor structures (hospitals, residential, etc.) to prevent noise and vibration transfer from commercial/light industrial uses.

Los Angeles County Code

Chapter 12.08, Noise Control, of the Los Angeles County Code (LACC) regulates unnecessary, excessive, and annoying noise and vibration in the county. The LACC includes exterior noise standards, interior noise standards, and other specific noise and vibration restrictions.

LACC Section 12.08.390 identifies exterior noise standards for various receiving properties in the county, as shown in Table 10.

Table 10 Exterior Noise Standards

Noise Zone	Land Use (Receiving Property)	Time Interval	Exterior Noise Level (dBA L _{eq})
I	Noise-Sensitive Area	Anytime	45
II	Residential Properties	10:00 p.m. to 7:00 a.m.	45
		7:00 a.m. to 10:00 p.m.	50
III	Commercial Properties	10:00 p.m. to 7:00 a.m.	55
		7:00 a.m. to 10:00 p.m.	60
IV	Industrial Properties	Anytime	70
Source: LACC Section 12.08.390			

According to LACC Section 12.08.390, the exterior noise level shall not exceed:

- The noise standard for a cumulative period of more than 30 minutes in any hour;
- The noise standard plus 5 dBA for a cumulative period of more than 15 minutes in any hour;
- The noise standard plus 10 dBA or a cumulative period of more than 5 minutes in any hour;
- The noise standards plus 15 dBA for a cumulative period of more than 1 minute in any hour; and/or
- The noise standard plus 20 dBA for any period of time.

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 County General Plan or noise ordinance (Los Angeles County Code, Title 12,

Potentially Significant Impact *Less Than Significant Impact with Mitigation Incorporated* *Less Than Significant Impact* *No Impact*

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Chapter 12.08), or applicable standards of other agencies?

Construction of the proposed project would include the temporary use of construction equipment and machinery to install the five new manholes. Such activities would be temporary and limited to the duration of the project construction period and would occur Monday through Friday between the hours of 7 a.m. and 4:30 p.m. The Tapia WRF is not a sensitive noise receiver, and is itself a source of noise associated with operation of the water reclamation facility. The nearest sensitive receiver to the proposed manholes is a private residence located approximately 0.15 mile east of the site, on an opposite hillside. Noise associated with construction of the manholes may be perceptible at this residence during construction of the manholes, but any such effect would be minor and temporary, limited to the duration of a portion of the construction period, when the manholes located 0.15 mile from the existing residence would be installed. Construction noise impacts would be less than significant.

As a pipeline, the proposed project would not include an operational source of noise. Furthermore, the proposed project would not require additional maintenance activities beyond those already occurring to operate and maintain the existing pipeline. Therefore, the project would not result in an increase in vehicle trips or associated roadway noise. No operational noise impact would occur.

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

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The project would not involve major groundborne vibration-inducing activities, such as pile driving or blasting. Installation of the five new manholes would include the use of excavators, track-type tractors, motor graders, hydraulic excavators, and off-highway trucks which could produce some localized vibration. However, such effects would be temporary, and limited to a short portion of the construction period. In addition, the nearest sensitive receiver to the project's manhole locations is a private residence located approximately 0.15 mile east of the project, on an opposite hillside. Due to this distance and the surrounding topography, any temporary ground vibration associated with installation of the new manholes would not be perceptible to this receptor. Construction vibration impacts would be less than significant.

The proposed project would not include significant stationary sources of vibration, such as manufacturing or heavy equipment operations. No operation-related vibration impact would occur.

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?

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The project site is not located in an airport land use plan area or within two miles of a public or private airport (Los Angeles County Airport Land Use Commission 2009). The closest airports are the Van Nuys Airport located approximately 15.3 miles to the northeast, the Santa Monica Municipal Airport located approximately 15.6 miles to the southeast, and the Los Angeles International Airport located approximately 19.8 miles to the southeast. The proposed project would not add new residents to the project area, and given the distance of these airports from the project site, the project would not expose construction workers to excessive noise levels associated with airport operations. No impact would occur.

14. POPULATION AND HOUSING

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒

The project does not include construction of new homes or businesses and would not directly induce population growth in Los Angeles County. The proposed project would install five new manholes along the existing pipeline alignment to provide access for inspection and repair of the pipeline. Inspection and repair of the pipeline would ensure its integrity, facilitating its continued use as intended for the conveyance of discharge between the Tapia WRF and Malibu Creek, and would not serve additional demand or new growth. The project would not expand service beyond areas presently served by existing infrastructure. In addition, the pipeline would be maintained by existing LVMWD employees and would not indirectly induce population growth as a result of new employment opportunities. Therefore, the project would not directly or indirectly support population growth, and no impact related to unplanned population growth would occur.

b) Displace substantial numbers of existing people or housing, especially affordable housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
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The proposed pipeline inspection and repair would be constructed in existing public roadway rights-of-way and State Park lands. The project does not propose demolition of existing housing. Therefore, the project would not displace substantial numbers of existing people or housing, and no impact would occur.

15. PUBLIC SERVICES

	<i>Less Than Significant</i>	<i>Less Than Significant</i>	<i>No</i>
<i>Potentially Significant Impact</i>	<i>Impact with Mitigation Incorporated</i>	<i>Impact</i>	<i>Impact</i>

a) Would the project create capacity or service level problems, or result in substantial adverse physical impacts associated with the provision of 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? ☐ ☐ ☐ ☒

The Los Angeles County Fire Department (LACoFD) responds to fire, medical, and disaster calls in the project area. The project area is located within Division 5 of the LACoFD, and includes one Battalion/Division Headquarters location, two Fire Camp locations, and 11 Fire Station locations. As discussed in Section 20, *Wildfire*, the project area is subject to high risk of wildfire hazards; however, the proposed project would not alter existing fire hazards in the project area and would not change the LACoFD existing service population size or distribution. In addition, emergency access through the project area would be maintained during project construction and operation, such that the project would not have direct or indirect adverse effects on fire protection.

Furthermore, as discussed in Section 14, *Population and Housing*, the proposed project would not involve the construction of housing or other such facilities which may increase demand for fire protection. As a result, inspection and repair of the existing pipeline would generate no additional demand for fire protection services. Furthermore, the proposed project would not include any features or facilities requiring additional or unusual fire protection resources. Therefore, no impact to fire protection services would occur.

Sheriff protection? ☐ ☐ ☐ ☒

The County of Los Angeles Sheriff's Department (LASD) provides police protection services in the project area, with support from local law enforcement divisions as applicable. LASD provides general-service law enforcement to unincorporated areas of Los Angeles County as well as to cities within Los Angeles County that have contracted with the agency for law-enforcement services (County of Los Angeles 2014a). The project area is served by the Malibu/Lost Hills Service Area of the LASD. Construction of the proposed project would not require the assistance of law enforcement and would not result in activities requiring law enforcement support. In addition, construction of the project would maintain emergency access through the project area, and the project would therefore not have direct or indirect effects on police service.

Furthermore, as discussed in Section 14, *Population and Housing*, the proposed project would not involve the construction of housing or other such facilities which may increase demand for police protection. As a result, inspection and repair of the existing pipeline would generate no additional demand for sheriff protection services. Furthermore, the proposed project would not include any features or facilities requiring additional or unusual sheriff protection resources. Therefore, no impact to sheriff protection services would occur.

Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Libraries?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

As discussed in Section 14, *Population and Housing*, the proposed project would not directly or indirectly induce population growth. The project would not involve the construction of housing or other such facilities which may increase demand for schools, parks, libraries, or other public facilities and services. As a result, inspection and repair of the existing pipeline would generate no additional demand for schools, parks, libraries, or other public facilities and services. Therefore, no impact to public services would occur.

16. RECREATION

<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

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As discussed in Section 14, *Population and Housing*, the proposed project would not directly or indirectly induce population growth, as it consists of manhole installation along an existing pipeline. Therefore, the project would not generate any residents who would require parks or other recreational facilities. No impact would occur.

b) Does the project include neighborhood and regional parks or other recreational facilities or require the construction or expansion of such facilities which might have an adverse physical effect on the environment?

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The project alignment is located within Malibu Creek State Park, which extends across the crest of the Santa Monica Mountains, and is divided by a section of Malibu Creek (California State Parks 2018). Construction of the proposed manholes would require a right-of-entry permit from California State Parks for access. During construction of the proposed project, vehicles and equipment would be transported to the project area; however, such activities would not affect recreational access to and within Malibu Creek State Park, as construction traffic would be limited and temporary, and would be consistent with existing traffic associated with operation and maintenance of Tapia WRF. Construction of the project may require temporary lane closures to maintain the safety of construction workers and the public during inspection and repair of the existing pipeline. The project would not include the development of any recreational facilities. Furthermore, the existing pipeline alignment is located within and beneath roadways and thus, the alignment itself does not support recreational activities.

The proposed project does not include recreational facilities and does not require the construction or expansion of recreational facilities. Therefore, no impact would occur.

c) Would the project interfere with regional trail connectivity?

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The nearest regional trail is the Backbone Trail, located approximately 300 feet south of the proposed project. The proposed project would not interfere with trail connectivity as the existing pipeline alignment is located within and beneath roadways. Therefore, no impact would occur.

17. TRANSPORTATION

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Conflict with an applicable program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒

Construction-related vehicle trips would include construction workers traveling to and from the project site, haul trucks (for moving and importing soil), and other trucks associated with equipment and material deliveries. Such trips would occur on area roadways such as Malibu Canyon/Las Virgenes Road. Construction activities may require temporary lane closures to maintain the safety of construction workers and the public during inspection and repair of the existing pipeline; however, such closures would be temporary and of short duration, and access through the project area would be maintained at all times. Additionally, the project would not permanently alter roadways, and upon completion of construction, damaged features, including roadway pavement, would be restored to pre-construction condition or better. Pursuant to the County's Standard Specifications for Public Works Construction, all temporary lane closures, detours, signs, and other traffic control measures would conform to the California Manual on Uniform Traffic Control Devices, and a Traffic Control Plan would be prepared to manage traffic and maintain emergency access (County of Los Angeles Public Works 2016). During operation, manhole components would be located underground and would not obstruct access to roadways. The project would not result in a net increase in trips to the project site.

The project would not conflict with an applicable program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, and there would be no impact.

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☐	☒
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CEQA Guidelines Section 15064.3(b) identifies criteria for evaluating transportation impacts. Specifically, the guidelines state VMT exceeding an applicable threshold of significance may indicate a significant impact. According to CEQA Guidelines Section 15064.3(b)(3), a lead agency may include a qualitative analysis of operational and construction traffic if existing models or methods are not available to estimate VMT for the particular project being considered. Such a qualitative analysis would evaluate factors such as the availability of transit and proximity to other destinations.

A VMT calculation is typically conducted on a daily or annual basis for long-range planning purposes. As discussed under item (a) above, traffic on local roadways would temporarily increase during project construction due to worker trips and the necessary transport of construction vehicles, equipment and materials to the project site. Increases in VMT from construction would be short-term, minimal, and

temporary. During operation, the proposed project would not result in a net increase in vehicle trips. Therefore, the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b), and no impact would occur.

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

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The project would not involve the construction of new roads or reconfiguration of roadways or intersections that could result in a substantial increase in traffic hazards. Construction equipment would be primarily staged within the project site outside of roadways, as shown in Figure 2. Although the project would require temporary, single lane closures of Malibu Canyon Road during construction, a Traffic Control Plan would be prepared to manage traffic and maintain emergency access, which would minimize the potential for traffic hazards. As such, the project would not substantially increase hazards due to a geometric design feature or incompatible use, and impacts would be less than significant.

d) Result in inadequate emergency access?

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During construction, temporary single lane closures of Malibu Canyon Road would be required. As discussed above, a Traffic Control Plan would be prepared to the specifications of the California Manual on Uniform Traffic Control Devices, and emergency access would be maintained at all times during project construction. During operation, the project would not inhibit use of Malibu Canyon Road. Therefore, the project would not result in inadequate emergency access and impacts would be less than significant.

18. TRIBAL CULTURAL RESOURCES

AB 52 of 2015 expanded CEQA by defining a new resource category, “tribal cultural resources.” AB 52 states “a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment” (PRC Section 21084.2). It further states the lead agency shall establish measures to avoid impacts altering the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3). PRC Section 21074 (a)(1)(A-B) defines tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and is:

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

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

Pursuant to PRC 21080.3.1 and AB 52, Las Virgenes Triunfo JPA sent notification letters via email December 5 and December 7, 2023 to the following Native American tribes that are traditionally and culturally affiliated with the project site:

- Barbareño/Ventureño Band of Mission Indians
- Chumash Council of Bakersfield
- Coastal Band of the Chumash Nation
- Fernandeño Tataviam Band of Mission Indians
- Gabrieño Band of Mission Indians – Kizh Nation
- Gabrieño/Tongva San Gabriel Band of Mission Indians
- Gabrielino /Tongva Nation
- Gabrielino Tongva Indians of California Tribal Council
- Gabrielino Tongva Indians of California Tribal Council
- Gabrielino-Tongva Tribe
- Northern Chumash Tribal Council
- Santa Rosa Band of Cahuilla Indians
- Santa Ynez Band of Chumash
- Soboba Band of Luiseño Indians

The consultation period was open on December 5, 2023 and closed Monday, January 8, 2024. No responses or requests for consultation were received.

<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code §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:

- i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code § 5020.1(k), or
- ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

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☐	☐	☐	☒

As discussed in Section 5, Cultural Resources, no cultural resources were identified within or immediately adjacent to the project site as a result of the CHRIS records search or field survey. Furthermore, the SLF search conducted by the NAHC was negative for the presence of tribal cultural resources. Additionally, the Las Virgenes-Triunfo JPA did not receive requests for consultation from Native American tribes contacted pursuant to AB 52. As such, no known tribal cultural resources were identified within the project site as part of the AB 52 consultation process. Therefore, the project would not cause a substantial adverse change in the significance of a tribal cultural resource. There would be no impact.

19. UTILITIES AND SERVICE SYSTEMS

	<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, storm water drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
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?	☐	☐	☐	☒

Water

The proposed inspection and repair to the existing recycled water pipeline would restore the intended capacity and integrity of the existing pipeline and would not involve expansion of potable water infrastructure or increase potable water pipeline capacity to serve additional customers. No changes to the potable water system are proposed. No impact related to water infrastructure would occur.

Wastewater Treatment

The Tapia WRF provides wastewater collection and treatment services for approximately 100,000 residents in the LVMWD and the Triunfo Water and Sanitation District service areas (Las Virgenes Triunfo JPA 2013). The Tapia WRF produces recycled water that is treated to tertiary Title 22 standards through tertiary filtration and disinfection (LVMWD 2021a). Currently, the Tapia WRF treats an average of 9.5 million gallons of wastewater per day and approximately 20 percent of all water delivered by LVMWD is recycled for irrigation use (LVMWD 2021b). The remainder of tertiary-treated wastewater is discharged to either Malibu Creek, the 005 discharge point, JPA operated spray fields, and/or through the recycled water system developed both jointly by the JPA and through individual efforts by LVWMD and Triunfo Water and Sanitation District (Las Virgenes Triunfo JPA 2013).

Project construction and operation would not generate additional wastewater. Additionally, as discussed in Section 14, *Population and Housing*, inspection and repair of the pipeline would ensure its integrity, facilitating its continued use as intended for the conveyance of discharge between the Tapia WRF and Malibu Creek, and would not serve additional demand or new growth. Therefore, the project would not place additional demand on the Tapia WRF and no impacts to wastewater infrastructure would occur.

Stormwater Drainage

As discussed in Section 10, *Hydrology and Water Quality*, the five manholes would not introduce substantial new impervious surfaces as the manholes would be installed under existing paved and impervious roadways that would be restored to their existing conditions upon completion of construction. Therefore, the proposed pipeline would not alter the drainage pattern along the project alignment and would not increase stormwater

flow such that new or expanded stormwater drainage systems would be necessary. Therefore, the project would not create or contribute runoff water such that new or expanded stormwater drainage systems would be necessary. No impacts to stormwater drainage infrastructure would occur.

Electric Power, Natural Gas, and Telecommunications

The proposed project would not require electric power or natural gas connections or telecommunications infrastructure. No impact would occur.

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

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Small quantities of water may be required during construction for dust suppression; however, water consumption associated with dust suppression would be temporary and minimal because only disturbed areas would need to be watered. Water for dust suppression would be sources from the existing LVMWD system and would not result in a substantial decrease in water supplies.

Operation of the proposed project would involve the conveyance of recycled water and would not result in water consumption. As discussed in Section 14, *Population and Housing*, the purpose of the project is to ensure the pipeline's integrity, facilitating its continued use as intended for the conveyance of discharge between the Tapia WRF and Malibu Creek, and not to serve additional demand or new growth that would require additional water supplies. Therefore, implementation of the proposed project would not result in new or expanded water supply entitlements. Impacts to water supplies would be less than significant.

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?

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e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

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The proposed project may result in minimal, short-term generation of solid waste associated with construction of the five new manholes. The project would be required to comply with federal, State, and local statutes and regulations related to solid waste, such as AB 939, AB 341, and the Countywide Integrated Waste Management Plan. Los Angeles County has achieved a landfill diversion rate of 65 percent (County of Los Angeles 2019). Due to the minimal and short-term nature of the construction activities, the disposal of materials associated with construction activities would not result in a long-term increase in the amount of waste generated. In addition, the proposed project would be required to recycle and reuse the majority of its construction-generated solid waste. No solid waste would be generated during operation of the proposed project. Therefore, impacts would be less than significant.

20. WILDFIRE

<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

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a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

The project site is located within a VHFHSZ in a State Responsibility Area (California Department of Forestry and Fire Protection 2021). Malibu Canyon Road is designated as a secondary disaster route by the County of Los Angeles. Malibu Canyon Road connects to U.S. Highway 101 to the north and State Route 1 to the south, which both serve as primary disaster routes (County of Los Angeles 2021). Temporary lane closures of Malibu Canyon Road may be required to maintain the safety of workers and the public during construction activities. However, access through the project area would be maintained at all times, and workers would provide traffic management and control through the work area. Pursuant to the County's Standard Specifications for Public Works Construction, all temporary lane closures, detours, signs, and other traffic control measures would conform to the California Manual on Uniform Traffic Control Devices, and a Traffic Control Plan would be prepared to manage traffic and maintain emergency access (County of Los Angeles Public Works 2016). During operation, the project would not inhibit access to Malibu Canyon Road as manhole components would be located belowground. Therefore, the project would not substantially impair an adopted emergency response plan or emergency evacuation plan, and impacts would be less than significant.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

☐	☐	☐	☒
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The project would not involve construction of structures which people or workers would occupy. Project components would be located belowground and would not affect the existing slope, prevailing winds, or other factors that create wildfire risk in the area. Therefore, the project would not expose people to pollutant concentrations from a wildfire or uncontrolled spread of wildfire, and there would be no impact.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

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The project would involve construction of five manholes at existing bends in the pipeline alignment, and would require widening of the unpaved access road. Construction of the manholes and widening of the roadway could result in increased wildfire risk due to the potential for construction equipment to cause the start of a wildfire. As discussed in Section 9, *Hazards and Hazardous Materials*, compliance with applicable federal and State laws and regulations related to the proper use, storage, and transport of hazardous

materials would reduce the risk of wildfire ignition from the use of hazardous materials during construction activities. Additionally, the project would not involve flammable activities during operation. Therefore, impacts related to wildland fires during project construction would be less than significant.

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?

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Construction of the manholes would involve excavation of previously-disturbed soils and would not increase the risk of flooding, landslides, or post-fire slope instability. Construction would require relatively little excavation of soil (200 cy) which would be used as backfill once construction is complete; accordingly, the project would not result in drainage changes in the project area. The project would not expose people or structures to downstream flooding, landslides, post-fire slope instability, or drainage changes, and impacts would be less than significant.

e) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

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As discussed above under response '20.c,' operation of the project would not involve flammable activities. During construction, compliance with applicable federal and State laws and regulations related to the proper use, storage, and transport of hazardous materials would reduce the risk of wildfire ignition from the use of hazardous materials. Therefore, the project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, and impacts would be less than significant.

21. MANDATORY FINDINGS OF SIGNIFICANCE

<i>Potentially Significant Impact</i>	<i>Less Than Significant Impact with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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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?

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As discussed in Section 4, *Biological Resources*, the proposed project involves installation of manholes in an existing pipeline, and it would not 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, or substantially reduce the number or restrict the range of a rare or endangered plant or animal. As discussed in Section 5, *Cultural Resources*, and Section 18, *Tribal Cultural Resources*, the project would not have the potential to eliminate important examples of the major periods of California history or prehistory. Therefore, impacts would be less than significant.

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)?

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As described in Sections 1 through 20, the proposed project would not result in significant and unmitigable impacts to the environment with respect to all environmental issues. This is largely because project construction activities would be temporary, low-intensity, and would not significantly alter the environmental baseline condition. In addition, operation of the project and the permanent location of the proposed manholes would not significantly alter the environmental baseline condition.

Cumulative impacts could occur if the construction of other projects occurs at the same time as the proposed project and in the same geographic scope, such that the effects of similar impacts of multiple projects combine to create greater levels of impact than would occur at the project-level. For example, if the construction of other projects in the area occurs at the same time as project activities, combined air quality and noise impacts may be greater than at the project-level.

Project impacts are primarily temporary, localized effects that would occur during construction activities. Therefore, the potential for the project to contribute to cumulative impacts would be limited to the relatively short period of project activities and the following issue areas:

Air Quality. Because the Basin is in nonattainment for the federal standards for ozone and PM_{2.5} and the state standards for ozone, PM₁₀, and PM_{2.5}, cumulative air quality impacts currently exist for these pollutants. As discussed in Section 3, *Air Quality*, project construction activities would not generate emissions of this air pollutant exceeding SCAQMD significance thresholds, which are intended to assess whether a project's contribution to existing cumulative air quality impacts is considerable. Therefore, the project's contribution to cumulative air quality impacts would not be cumulatively considerable.

- **Biological Resources.** Most cumulative impacts to biological resources occur when a disproportionate number of development projects occur at once and regionally impact a local population of a special status species, riparian habitat, sensitive natural communities, wetlands, or other locally protected biological resources. Due to the nature of potential cumulative projects and the discretionary approvals required for each one, development projects would be required to undergo CEQA review to identify the extent of these biological resources impacts and to mitigate those impacts appropriately. Given the uncertainty in the extent of impacts associated with these projects, this analysis conservatively assumes a significant cumulative impact to biological resources would occur. Nevertheless, the proposed project would be required to implement mitigation measures BIO-1 through BIO-11 to reduce its impacts to biological resources to a less-than-significant level such that project-level impacts would not result in a cumulatively considerable contribution to this cumulative impact.
- **Cultural and Tribal Cultural Resources.** Cumulative development in the region would continue to disturb areas with the potential to contain cultural and tribal cultural resources. If cumulative projects would result in impacts to known or unknown cultural or tribal cultural resources, impacts to such resources would be addressed on a case-by-case basis. Given the uncertainty in the extent of impacts associated with cumulative projects, this analysis conservatively assumes a significant cumulative impact to cultural and tribal cultural resources would occur. Nevertheless, the proposed project would be required to implement mitigation measure CR-1 to reduce its impacts to cultural and tribal cultural resources to a less-than-significant level such that project-level impacts would not result in a cumulatively considerable contribution to this cumulative impact.
- **Greenhouse Gas Emissions.** GHG emissions and climate change are, by definition, cumulative impacts. As discussed in Section 8, *Greenhouse Gas Emissions*, the adverse environmental impacts of cumulative GHG emissions, including sea level rise, increased average temperatures, more drought years, and more large forest fires, are already occurring. As a result, cumulative impacts related to GHG emissions are significant. Thus, the issue of climate change involves an analysis of whether a project's contribution towards an impact is cumulatively considerable. As discussed in Section 8, *Greenhouse Gas Emissions*, project emissions would be below the identified threshold of significance and would therefore not be cumulatively considerable.

- **Hazards and Hazardous Materials.** Similar to the proposed project, cumulative projects would be required to comply with regulations applicable to the use, disposal, and transportation of hazardous materials during construction activities, and compliance with applicable regulations would reduce potential cumulative impacts to less-than-significant levels. With respect to the use and accidental release of hazardous materials in the environment at construction, effects are generally limited to site-specific conditions. Therefore, cumulative impacts related to accidental release of hazardous materials would be less than significant.
- **Noise.** Overlapping construction activities associated with cumulative development projects in conjunction with proposed project activities could result in cumulative noise impacts related to a temporary increase in ambient noise levels at the same noise-sensitive receivers located throughout the area, especially during construction activities. However, similar to the proposed project, cumulative development projects would be subject to compliance with the noise level limits established in Los Angeles County Code Chapter 12.08. Therefore, cumulative construction noise impacts would be less than significant.

Transportation. The Los Angeles County General Plan identified that there would be cumulative impacts to transportation as growth and development in Los Angeles County occurs (County of Los Angeles 2014b). As discussed in Section 17, *Transportation*, the project would not result in significant impacts to transportation. However, overlapping construction schedules associated with cumulative development projects in conjunction with proposed project activities could result in cumulative transportation impacts. Similar to the proposed project, cumulative projects would be required to prepare traffic control plans, which would minimize impacts to transportation hazards and emergency access. The project would require minimal maintenance trips during operation compared to existing conditions; accordingly, there would be no cumulative contribution to operational impacts. Therefore, the project would not contribute to a cumulatively significant impact.

Given the above discussion, the proposed project would not result in a cumulatively considerable contribution to a significant cumulative impact with mitigation incorporated.

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

☐ ☐ ☒ ☐

In general, impacts to human beings are associated with air quality, hazards and hazardous materials, and noise impacts. As discussed in Section 3, *Air Quality*, the proposed project would not result in significant air quality impacts during construction or operation. As discussed in Section 9, *Hazards and Hazardous Materials*, compliance with federal, state, and local laws regulating the transportation of hazardous materials would minimize the potential for an accidental release of hazardous materials during construction, and the proposed project would not involve the use of hazardous materials during operation. As discussed in Section 13, *Noise*, the project would not generate substantial temporary or permanent increases in ambient noise levels in the vicinity of the project site. Therefore, the proposed project would not adversely affect human beings, directly or indirectly, and impacts would be less than significant.

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Appendix A

CalEEMod Modeling Outputs

Appendix A

CalEEMod Modeling Outputs

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project****South Coast AQMD Air District, Summer****1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per applicant provided information.

Grading -

Mobile Land Use Mitigation -

Construction Phase - Per applicant provided information.

Off-road Equipment - Per applicant provided information.

Off-road Equipment - Per applicant provided information.

Area Coating - Per applicant provided information.

Construction Off-road Equipment Mitigation - Per SCAQMD Rule 403.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Parking	60	0

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	NumDays	10.00	66.00
tblConstructionPhase	NumDays	1.00	22.00
tblConstructionPhase	PhaseEndDate	11/12/2021	1/31/2022
tblConstructionPhase	PhaseEndDate	11/15/2021	11/30/2021
tblConstructionPhase	PhaseStartDate	11/13/2021	11/1/2021
tblOffRoadEquipment	HorsePower	158.00	81.00
tblOffRoadEquipment	HorsePower	402.00	247.00
tblOffRoadEquipment	LoadFactor	0.38	0.73
tblOffRoadEquipment	LoadFactor	0.38	0.40
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType	Concrete/Industrial Saws	Excavators
tblOffRoadEquipment	OffRoadEquipmentType	Rubber Tired Dozers	Off-Highway Trucks

2.0 Emissions Summary

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	1.5586	16.2974	15.3752	0.0275	0.7315	0.7583	1.4897	0.1106	0.6976	0.8082	0.0000	2,674.8046	2,674.8046	0.8089	4.7900e-003	2,696.4540
2022	0.5907	5.6083	7.6393	0.0118	0.1118	0.2931	0.4049	0.0296	0.2697	0.2993	0.0000	1,144.7381	1,144.7381	0.3396	2.4500e-003	1,153.9576
Maximum	1.5586	16.2974	15.3752	0.0275	0.7315	0.7583	1.4897	0.1106	0.6976	0.8082	0.0000	2,674.8046	2,674.8046	0.8089	4.7900e-003	2,696.4540

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	1.5586	16.2974	15.3752	0.0275	0.4398	0.7583	1.1981	0.0791	0.6976	0.7767	0.0000	2,674.8046	2,674.8046	0.8089	4.7900e-003	2,696.4540
2022	0.5907	5.6083	7.6393	0.0118	0.1118	0.2931	0.4049	0.0296	0.2697	0.2993	0.0000	1,144.7381	1,144.7381	0.3396	2.4500e-003	1,153.9576
Maximum	1.5586	16.2974	15.3752	0.0275	0.4398	0.7583	1.1981	0.0791	0.6976	0.7767	0.0000	2,674.8046	2,674.8046	0.8089	4.7900e-003	2,696.4540

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	34.59	0.00	15.39	22.45	0.00	2.84	0.00	0.00	0.00	0.00	0.00	0.00

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.6000e-004	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.6000e-004	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000	0.0000	2.3000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.6000e-004	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.6000e-004	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000	0.0000	2.3000e-004

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	11/1/2021	1/31/2022	5	66	
2	Site Preparation	Site Preparation	11/1/2021	11/30/2021	5	22	

Acres of Grading (Site Preparation Phase): 11**Acres of Grading (Grading Phase): 0****Acres of Paving: 0.02****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Excavators	1	8.00	158	0.38
Demolition	Excavators	1	8.00	81	0.73
Site Preparation	Graders	1	8.00	187	0.41
Demolition	Off-Highway Trucks	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6221	6.2741	7.3257	0.0108		0.3531	0.3531		0.3248	0.3248		1,041.6130	1,041.6130	0.3369		1,050.0350
Total	0.6221	6.2741	7.3257	0.0108		0.3531	0.3531		0.3248	0.3248		1,041.6130	1,041.6130	0.3369		1,050.0350

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0373	0.0275	0.4168	1.0400e-003	0.1118	7.1000e-004	0.1125	0.0296	6.6000e-004	0.0303		105.7863	105.7863	2.9900e-003	2.6600e-003	106.6540
Total	0.0373	0.0275	0.4168	1.0400e-003	0.1118	7.1000e-004	0.1125	0.0296	6.6000e-004	0.0303		105.7863	105.7863	2.9900e-003	2.6600e-003	106.6540

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6221	6.2741	7.3257	0.0108		0.3531	0.3531		0.3248	0.3248	0.0000	1,041.6130	1,041.6130	0.3369		1,050.0350
Total	0.6221	6.2741	7.3257	0.0108		0.3531	0.3531		0.3248	0.3248	0.0000	1,041.6130	1,041.6130	0.3369		1,050.0350

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0373	0.0275	0.4168	1.0400e-003	0.1118	7.1000e-004	0.1125	0.0296	6.6000e-004	0.0303		105.7863	105.7863	2.9900e-003	2.6600e-003	106.6540
Total	0.0373	0.0275	0.4168	1.0400e-003	0.1118	7.1000e-004	0.1125	0.0296	6.6000e-004	0.0303		105.7863	105.7863	2.9900e-003	2.6600e-003	106.6540

3.2 Demolition - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5563	5.5841	7.2576	0.0108		0.2925	0.2925		0.2691	0.2691		1,041.8233	1,041.8233	0.3370		1,050.2470
Total	0.5563	5.5841	7.2576	0.0108		0.2925	0.2925		0.2691	0.2691		1,041.8233	1,041.8233	0.3370		1,050.2470

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0344	0.0242	0.3817	1.0100e-003	0.1118	6.7000e-004	0.1124	0.0296	6.1000e-004	0.0303		102.9147	102.9147	2.6700e-003	2.4500e-003	103.7106
Total	0.0344	0.0242	0.3817	1.0100e-003	0.1118	6.7000e-004	0.1124	0.0296	6.1000e-004	0.0303		102.9147	102.9147	2.6700e-003	2.4500e-003	103.7106

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5563	5.5841	7.2576	0.0108		0.2925	0.2925		0.2691	0.2691	0.0000	1,041.8233	1,041.8233	0.3370		1,050.2470
Total	0.5563	5.5841	7.2576	0.0108		0.2925	0.2925		0.2691	0.2691	0.0000	1,041.8233	1,041.8233	0.3370		1,050.2470

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0344	0.0242	0.3817	1.0100e-003	0.1118	6.7000e-004	0.1124	0.0296	6.1000e-004	0.0303		102.9147	102.9147	2.6700e-003	2.4500e-003	103.7106
Total	0.0344	0.0242	0.3817	1.0100e-003	0.1118	6.7000e-004	0.1124	0.0296	6.1000e-004	0.0303		102.9147	102.9147	2.6700e-003	2.4500e-003	103.7106

3.3 Site Preparation - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.8694	9.9738	7.2992	0.0149		0.4039	0.4039		0.3716	0.3716		1,442.7762	1,442.7762	0.4666		1,454.4417
Total	0.8694	9.9738	7.2992	0.0149	0.5303	0.4039	0.9342	0.0573	0.3716	0.4289		1,442.7762	1,442.7762	0.4666		1,454.4417

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Site Preparation - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0298	0.0220	0.3334	8.4000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.3000e-004	0.0242		84.6291	84.6291	2.3900e-003	2.1300e-003	85.3232
Total	0.0298	0.0220	0.3334	8.4000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.3000e-004	0.0242		84.6291	84.6291	2.3900e-003	2.1300e-003	85.3232

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			0.0000			0.0000
Off-Road	0.8694	9.9738	7.2992	0.0149		0.4039	0.4039		0.3716	0.3716	0.0000	1,442.776 2	1,442.776 2	0.4666		1,454.441 7
Total	0.8694	9.9738	7.2992	0.0149	0.2386	0.4039	0.6425	0.0258	0.3716	0.3974	0.0000	1,442.776 2	1,442.776 2	0.4666		1,454.441 7

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Site Preparation - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0298	0.0220	0.3334	8.4000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.3000e-004	0.0242		84.6291	84.6291	2.3900e-003	2.1300e-003	85.3232
Total	0.0298	0.0220	0.3334	8.4000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.3000e-004	0.0242		84.6291	84.6291	2.3900e-003	2.1300e-003	85.3232

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.543376	0.059966	0.184357	0.131187	0.023843	0.006245	0.012012	0.009162	0.000826	0.000515	0.023898	0.000748	0.003864

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.0 Energy Detail**

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.2 Energy by Land Use - NaturalGas****Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.6000e-004	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	3.6000e-004	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.5000e-004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	3.6000e-004	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.5000e-004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	3.6000e-004	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

7.0 Water Detail**7.1 Mitigation Measures Water**

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project****South Coast AQMD Air District, Winter****1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per applicant provided information.

Grading -

Mobile Land Use Mitigation -

Construction Phase - Per applicant provided information.

Off-road Equipment - Per applicant provided information.

Off-road Equipment - Per applicant provided information.

Area Coating - Per applicant provided information.

Construction Off-road Equipment Mitigation - Per SCAQMD Rule 403.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Parking	60	0

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	NumDays	10.00	66.00
tblConstructionPhase	NumDays	1.00	22.00
tblConstructionPhase	PhaseEndDate	11/12/2021	1/31/2022
tblConstructionPhase	PhaseEndDate	11/15/2021	11/30/2021
tblConstructionPhase	PhaseStartDate	11/13/2021	11/1/2021
tblOffRoadEquipment	HorsePower	158.00	81.00
tblOffRoadEquipment	HorsePower	402.00	247.00
tblOffRoadEquipment	LoadFactor	0.38	0.73
tblOffRoadEquipment	LoadFactor	0.38	0.40
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType	Concrete/Industrial Saws	Excavators
tblOffRoadEquipment	OffRoadEquipmentType	Rubber Tired Dozers	Off-Highway Trucks

2.0 Emissions Summary

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	1.5618	16.3021	15.3023	0.0274	0.7315	0.7583	1.4897	0.1106	0.6976	0.8082	0.0000	2,663.7085	2,663.7085	0.8089	5.0800e-003	2,685.4470
2022	0.5925	5.6106	7.6027	0.0117	0.1118	0.2931	0.4049	0.0296	0.2697	0.2993	0.0000	1,138.7539	1,138.7539	0.3397	2.6000e-003	1,148.0187
Maximum	1.5618	16.3021	15.3023	0.0274	0.7315	0.7583	1.4897	0.1106	0.6976	0.8082	0.0000	2,663.7085	2,663.7085	0.8089	5.0800e-003	2,685.4470

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	1.5618	16.3021	15.3023	0.0274	0.4398	0.7583	1.1981	0.0791	0.6976	0.7767	0.0000	2,663.7085	2,663.7085	0.8089	5.0800e-003	2,685.4470
2022	0.5925	5.6106	7.6027	0.0117	0.1118	0.2931	0.4049	0.0296	0.2697	0.2993	0.0000	1,138.7539	1,138.7539	0.3397	2.6000e-003	1,148.0187
Maximum	1.5618	16.3021	15.3023	0.0274	0.4398	0.7583	1.1981	0.0791	0.6976	0.7767	0.0000	2,663.7085	2,663.7085	0.8089	5.0800e-003	2,685.4470

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	34.59	0.00	15.39	22.45	0.00	2.84	0.00	0.00	0.00	0.00	0.00	0.00

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.6000e-004	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.6000e-004	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000	0.0000	2.3000e-004

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.6000e-004	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.6000e-004	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000	0.0000	2.3000e-004

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	11/1/2021	1/31/2022	5	66	
2	Site Preparation	Site Preparation	11/1/2021	11/30/2021	5	22	

Acres of Grading (Site Preparation Phase): 11**Acres of Grading (Grading Phase): 0****Acres of Paving: 0.02****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Excavators	1	8.00	158	0.38
Demolition	Excavators	1	8.00	81	0.73
Site Preparation	Graders	1	8.00	187	0.41
Demolition	Off-Highway Trucks	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6221	6.2741	7.3257	0.0108		0.3531	0.3531		0.3248	0.3248		1,041.6130	1,041.6130	0.3369		1,050.0350
Total	0.6221	6.2741	7.3257	0.0108		0.3531	0.3531		0.3248	0.3248		1,041.6130	1,041.6130	0.3369		1,050.0350

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0391	0.0301	0.3763	9.8000e-004	0.1118	7.1000e-004	0.1125	0.0296	6.6000e-004	0.0303		99.6218	99.6218	3.0200e-003	2.8200e-003	100.5391
Total	0.0391	0.0301	0.3763	9.8000e-004	0.1118	7.1000e-004	0.1125	0.0296	6.6000e-004	0.0303		99.6218	99.6218	3.0200e-003	2.8200e-003	100.5391

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6221	6.2741	7.3257	0.0108		0.3531	0.3531		0.3248	0.3248	0.0000	1,041.6130	1,041.6130	0.3369		1,050.0350
Total	0.6221	6.2741	7.3257	0.0108		0.3531	0.3531		0.3248	0.3248	0.0000	1,041.6130	1,041.6130	0.3369		1,050.0350

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0391	0.0301	0.3763	9.8000e-004	0.1118	7.1000e-004	0.1125	0.0296	6.6000e-004	0.0303		99.6218	99.6218	3.0200e-003	2.8200e-003	100.5391
Total	0.0391	0.0301	0.3763	9.8000e-004	0.1118	7.1000e-004	0.1125	0.0296	6.6000e-004	0.0303		99.6218	99.6218	3.0200e-003	2.8200e-003	100.5391

3.2 Demolition - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5563	5.5841	7.2576	0.0108		0.2925	0.2925		0.2691	0.2691		1,041.8233	1,041.8233	0.3370		1,050.2470
Total	0.5563	5.5841	7.2576	0.0108		0.2925	0.2925		0.2691	0.2691		1,041.8233	1,041.8233	0.3370		1,050.2470

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0362	0.0265	0.3451	9.5000e-004	0.1118	6.7000e-004	0.1124	0.0296	6.1000e-004	0.0303		96.9305	96.9305	2.7000e-003	2.6000e-003	97.7717
Total	0.0362	0.0265	0.3451	9.5000e-004	0.1118	6.7000e-004	0.1124	0.0296	6.1000e-004	0.0303		96.9305	96.9305	2.7000e-003	2.6000e-003	97.7717

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5563	5.5841	7.2576	0.0108		0.2925	0.2925		0.2691	0.2691	0.0000	1,041.8233	1,041.8233	0.3370		1,050.2470
Total	0.5563	5.5841	7.2576	0.0108		0.2925	0.2925		0.2691	0.2691	0.0000	1,041.8233	1,041.8233	0.3370		1,050.2470

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0362	0.0265	0.3451	9.5000e-004	0.1118	6.7000e-004	0.1124	0.0296	6.1000e-004	0.0303		96.9305	96.9305	2.7000e-003	2.6000e-003	97.7717
Total	0.0362	0.0265	0.3451	9.5000e-004	0.1118	6.7000e-004	0.1124	0.0296	6.1000e-004	0.0303		96.9305	96.9305	2.7000e-003	2.6000e-003	97.7717

3.3 Site Preparation - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.8694	9.9738	7.2992	0.0149		0.4039	0.4039		0.3716	0.3716		1,442.7762	1,442.7762	0.4666		1,454.4417
Total	0.8694	9.9738	7.2992	0.0149	0.5303	0.4039	0.9342	0.0573	0.3716	0.4289		1,442.7762	1,442.7762	0.4666		1,454.4417

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Site Preparation - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0313	0.0241	0.3011	7.9000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.3000e-004	0.0242		79.6975	79.6975	2.4100e-003	2.2600e-003	80.4313
Total	0.0313	0.0241	0.3011	7.9000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.3000e-004	0.0242		79.6975	79.6975	2.4100e-003	2.2600e-003	80.4313

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2386	0.0000	0.2386	0.0258	0.0000	0.0258			0.0000			0.0000
Off-Road	0.8694	9.9738	7.2992	0.0149		0.4039	0.4039		0.3716	0.3716	0.0000	1,442.776 2	1,442.776 2	0.4666		1,454.441 7
Total	0.8694	9.9738	7.2992	0.0149	0.2386	0.4039	0.6425	0.0258	0.3716	0.3974	0.0000	1,442.776 2	1,442.776 2	0.4666		1,454.441 7

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Site Preparation - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0313	0.0241	0.3011	7.9000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.3000e-004	0.0242		79.6975	79.6975	2.4100e-003	2.2600e-003	80.4313
Total	0.0313	0.0241	0.3011	7.9000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.3000e-004	0.0242		79.6975	79.6975	2.4100e-003	2.2600e-003	80.4313

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.543376	0.059966	0.184357	0.131187	0.023843	0.006245	0.012012	0.009162	0.000826	0.000515	0.023898	0.000748	0.003864

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.0 Energy Detail**

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.6000e-004	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Unmitigated	3.6000e-004	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.5000e-004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	3.6000e-004	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.5000e-004					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	3.6000e-004	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004

7.0 Water Detail**7.1 Mitigation Measures Water**

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project****South Coast AQMD Air District, Annual****1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per applicant provided information.

Grading -

Mobile Land Use Mitigation -

Construction Phase - Per applicant provided information.

Off-road Equipment - Per applicant provided information.

Off-road Equipment - Per applicant provided information.

Area Coating - Per applicant provided information.

Construction Off-road Equipment Mitigation - Per SCAQMD Rule 403.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Parking	60	0

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	NumDays	10.00	66.00
tblConstructionPhase	NumDays	1.00	22.00
tblConstructionPhase	PhaseEndDate	11/12/2021	1/31/2022
tblConstructionPhase	PhaseEndDate	11/15/2021	11/30/2021
tblConstructionPhase	PhaseStartDate	11/13/2021	11/1/2021
tblOffRoadEquipment	HorsePower	158.00	81.00
tblOffRoadEquipment	HorsePower	402.00	247.00
tblOffRoadEquipment	LoadFactor	0.38	0.73
tblOffRoadEquipment	LoadFactor	0.38	0.40
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType	Concrete/Industrial Saws	Excavators
tblOffRoadEquipment	OffRoadEquipmentType	Rubber Tired Dozers	Off-Highway Trucks

2.0 Emissions Summary

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0247	0.2518	0.2572	4.4000e-004	9.2700e-003	0.0124	0.0217	1.5400e-003	0.0114	0.0130	0.0000	38.5308	38.5308	0.0116	8.0000e-005	38.8456
2022	6.1900e-003	0.0589	0.0799	1.2000e-004	1.1500e-003	3.0800e-003	4.2300e-003	3.1000e-004	2.8300e-003	3.1400e-003	0.0000	10.8613	10.8613	3.2400e-003	3.0000e-005	10.9497
Maximum	0.0247	0.2518	0.2572	4.4000e-004	9.2700e-003	0.0124	0.0217	1.5400e-003	0.0114	0.0130	0.0000	38.5308	38.5308	0.0116	8.0000e-005	38.8456

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0247	0.2518	0.2572	4.4000e-004	6.0600e-003	0.0124	0.0185	1.2000e-003	0.0114	0.0126	0.0000	38.5308	38.5308	0.0116	8.0000e-005	38.8456
2022	6.1900e-003	0.0589	0.0799	1.2000e-004	1.1500e-003	3.0800e-003	4.2300e-003	3.1000e-004	2.8300e-003	3.1400e-003	0.0000	10.8613	10.8613	3.2400e-003	3.0000e-005	10.9497
Maximum	0.0247	0.2518	0.2572	4.4000e-004	6.0600e-003	0.0124	0.0185	1.2000e-003	0.0114	0.0126	0.0000	38.5308	38.5308	0.0116	8.0000e-005	38.8456

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	30.81	0.00	12.39	18.38	0.00	2.17	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	11-1-2021	1-31-2022	0.3372	0.3372
		Highest	0.3372	0.3372

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	7.0000e-005	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	7.0000e-005	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	11/1/2021	1/31/2022	5	66	
2	Site Preparation	Site Preparation	11/1/2021	11/30/2021	5	22	

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Acres of Grading (Site Preparation Phase): 11****Acres of Grading (Grading Phase): 0****Acres of Paving: 0.02****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Excavators	1	8.00	158	0.38
Demolition	Excavators	1	8.00	81	0.73
Site Preparation	Graders	1	8.00	187	0.41
Demolition	Off-Highway Trucks	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0140	0.1412	0.1648	2.4000e-004		7.9400e-003	7.9400e-003		7.3100e-003	7.3100e-003	0.0000	21.2611	21.2611	6.8800e-003	0.0000	21.4330
Total	0.0140	0.1412	0.1648	2.4000e-004		7.9400e-003	7.9400e-003		7.3100e-003	7.3100e-003	0.0000	21.2611	21.2611	6.8800e-003	0.0000	21.4330

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e-004	6.9000e-004	8.7100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4800e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	2.0647	2.0647	6.0000e-005	6.0000e-005	2.0837
Total	8.2000e-004	6.9000e-004	8.7100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4800e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	2.0647	2.0647	6.0000e-005	6.0000e-005	2.0837

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2021****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0140	0.1412	0.1648	2.4000e-004		7.9400e-003	7.9400e-003		7.3100e-003	7.3100e-003	0.0000	21.2610	21.2610	6.8800e-003	0.0000	21.4329
Total	0.0140	0.1412	0.1648	2.4000e-004		7.9400e-003	7.9400e-003		7.3100e-003	7.3100e-003	0.0000	21.2610	21.2610	6.8800e-003	0.0000	21.4329

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.2000e-004	6.9000e-004	8.7100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4800e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	2.0647	2.0647	6.0000e-005	6.0000e-005	2.0837
Total	8.2000e-004	6.9000e-004	8.7100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4800e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	2.0647	2.0647	6.0000e-005	6.0000e-005	2.0837

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.8400e-003	0.0586	0.0762	1.1000e-004		3.0700e-003	3.0700e-003		2.8300e-003	2.8300e-003	0.0000	9.9238	9.9238	3.2100e-003	0.0000	10.0041
Total	5.8400e-003	0.0586	0.0762	1.1000e-004		3.0700e-003	3.0700e-003		2.8300e-003	2.8300e-003	0.0000	9.9238	9.9238	3.2100e-003	0.0000	10.0041

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	2.8000e-004	3.7300e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.9375	0.9375	3.0000e-005	3.0000e-005	0.9456
Total	3.5000e-004	2.8000e-004	3.7300e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.9375	0.9375	3.0000e-005	3.0000e-005	0.9456

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Demolition - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.8400e-003	0.0586	0.0762	1.1000e-004		3.0700e-003	3.0700e-003		2.8300e-003	2.8300e-003	0.0000	9.9238	9.9238	3.2100e-003	0.0000	10.0041
Total	5.8400e-003	0.0586	0.0762	1.1000e-004		3.0700e-003	3.0700e-003		2.8300e-003	2.8300e-003	0.0000	9.9238	9.9238	3.2100e-003	0.0000	10.0041

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.5000e-004	2.8000e-004	3.7300e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.9375	0.9375	3.0000e-005	3.0000e-005	0.9456
Total	3.5000e-004	2.8000e-004	3.7300e-003	1.0000e-005	1.1500e-003	1.0000e-005	1.1600e-003	3.1000e-004	1.0000e-005	3.1000e-004	0.0000	0.9375	0.9375	3.0000e-005	3.0000e-005	0.9456

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Site Preparation - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.8300e-003	0.0000	5.8300e-003	6.3000e-004	0.0000	6.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5600e-003	0.1097	0.0803	1.6000e-004		4.4400e-003	4.4400e-003		4.0900e-003	4.0900e-003	0.0000	14.3975	14.3975	4.6600e-003	0.0000	14.5139
Total	9.5600e-003	0.1097	0.0803	1.6000e-004	5.8300e-003	4.4400e-003	0.0103	6.3000e-004	4.0900e-003	4.7200e-003	0.0000	14.3975	14.3975	4.6600e-003	0.0000	14.5139

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	2.7000e-004	3.4100e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8075	0.8075	2.0000e-005	2.0000e-005	0.8150
Total	3.2000e-004	2.7000e-004	3.4100e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8075	0.8075	2.0000e-005	2.0000e-005	0.8150

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.3 Site Preparation - 2021****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.6200e-003	0.0000	2.6200e-003	2.8000e-004	0.0000	2.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.5600e-003	0.1097	0.0803	1.6000e-004		4.4400e-003	4.4400e-003		4.0900e-003	4.0900e-003	0.0000	14.3975	14.3975	4.6600e-003	0.0000	14.5139
Total	9.5600e-003	0.1097	0.0803	1.6000e-004	2.6200e-003	4.4400e-003	7.0600e-003	2.8000e-004	4.0900e-003	4.3700e-003	0.0000	14.3975	14.3975	4.6600e-003	0.0000	14.5139

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	2.7000e-004	3.4100e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8075	0.8075	2.0000e-005	2.0000e-005	0.8150
Total	3.2000e-004	2.7000e-004	3.4100e-003	1.0000e-005	9.7000e-004	1.0000e-005	9.7000e-004	2.6000e-004	1.0000e-005	2.6000e-004	0.0000	0.8075	0.8075	2.0000e-005	2.0000e-005	0.8150

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.543376	0.059966	0.184357	0.131187	0.023843	0.006245	0.012012	0.009162	0.000826	0.000515	0.023898	0.000748	0.003864

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Historical Energy Use: N

5.1 Mitigation Measures Energy

[illegible]

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated

[illegible]

Mitigated

[illegible]

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	7.0000e-005	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Unmitigated	7.0000e-005	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Total	6.0000e-005	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.0000e-005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005
Total	6.0000e-005	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	3.0000e-005

7.0 Water Detail**7.1 Mitigation Measures Water**

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**10.0 Stationary Equipment**

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Appendix B

Biological Resources Assessment



Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project

Biological Resources Assessment

prepared for

Las Virgenes Municipal Water District – Triunfo Joint Powers Authority

4232 Las Virgenes Road

Calabasas, California 91302 Contact: Veronica Hurtado, Water
Reclamation Manager

prepared by

Rincon Consultants, Inc.

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August 2024



RINCON CONSULTANTS, INC.

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Executive Summary

This report documents the findings of a Biological Resources Assessment (BRA) conducted by Rincon Consultants, Inc. (Rincon) to assist the Las Virgenes-Triunfo Joint Powers Authority (JPA) with the planning of the Tapia Water Reclamation Facility (WRF) 003 Outfall Rehabilitation Project (“project”). The project site is located in the Santa Monica Mountains region of unincorporated Los Angeles County (County), within the Santa Monica Mountains (SMM) Local Coastal Program (LCP) area. In accordance with the LCP Local Implementation Plan (LIP), this BRA Report documents the biological resources located in the project area based on a desktop analysis and field survey and identifies sensitive biological resources that could be affected based the current site plans.

The project site contains riparian and upland woodlands, grasslands, and paved roads. Vegetation communities and land cover types in the project site consist of black cottonwood forest and woodland, California sycamore – coast live oak woodlands, California sycamore – arroyo willow woodlands, coast live oak woodland and forest, coyote brush scrub, creeping ryegrass turfs, developed lands, wild oats and annual brome grasslands, wild oats and annual brome grasslands with herbaceous natives, and upland mustards. Several of these vegetation communities are considered Sensitive Environmental Resource Areas (SERAs) defined by the County LIP (County 2018a) and sensitive natural communities by California Department of Fish and Wildlife (CDFW). Flowing water was observed in Malibu Creek during field surveys. The project site also contains native trees protected by County ordinance.

Rincon assessed the potential for 54 special-status plant species to occur within the project site, two of which were observed: southern California black walnut (*Juglans californica*) and Fish's milkwort (*Polygala cornuta* var. *fishiae*). Rincon assessed the potential for 28 special-status animal species to occur within the subject property, and two were observed: yellow warbler (*Dendroica petechia*) and oak titmouse (*Baeolophus inornatus*).

The project site includes a segment of Malibu Creek, an unnamed ephemeral drainage, and an ephemeral ditch. The site is also located within an *Essential Connectivity Area* for wildlife movement, as determined by the California Essential Habitat Connectivity Project (Spencer et al. 2010). Malibu Creek likely functions as a localized wildlife travel route for common wildlife species.

Malibu Creek, the ephemeral drainage, and ephemeral ditch are potentially subject to United States Army Corps of Engineers (USACE), Los Angeles Regional Water Quality Control Board (RWQCB), CDFW, and/or Los Angeles County Department of Regional Planning (LACDRP) jurisdictions. The project as currently proposed may directly impact CDFW and LACDRP jurisdictional areas associated with Malibu Creek, and recommendations are provided to minimize these direct impacts as well as potential indirect impacts to the features.

Implementation of the measures recommended in this report would minimize the project’s impact on sensitive biological resources, including special-status plants and wildlife, nesting birds, native vegetation and habitats, riparian resources, and wildlife movement.

1 Introduction

Rincon Consultants, Inc. (Rincon) has prepared this BRA Report (report) for the purpose of documenting existing biological resources at the project site on Las Virgenes Road (Assessor's Parcel Numbers 4456-008-901, 4462-032-901, and 4462-032-906). The project is located within the coastal zone of the Santa Monica Mountains and is subject to the requirements set forth in the SMM LCP, LIP and the Land Use Plan (LUP) (County 2018a, 2019b). In accordance with the LIP, the SMM Biological Assessment checklist is included as Appendix A.

1.1 Project Location

The project site is located within the Coastal Zone of the Santa Monica Mountains, adjacent to Malibu Creek in unincorporated Los Angeles County, California (Figure 1 and Figure 2). The proposed project would construct manholes and conduct repairs on the 003 outfall pipeline southwest of Malibu Creek, as described in detail below.

The approximate center of the project site is located at latitude 34.080750 and longitude -118.703756 (WGS84). The Public Land Survey System depicts the project site in Township 01 South, Range 17 West, Section 18 (San Bernardino Meridian). The site is in the United States Geological Survey (USGS) Malibu Beach, California 7.5-minute topographic quadrangle (USGS 2021a). The Pacific Ocean is approximately 3.5 miles to the south of the project site.

1.1.1 Study Area

The Study Area addressed in this report consists of a 100-foot buffer around all project components and is located at elevations between 460 to 480 feet above mean sea level. The Study Area is located within unincorporated Los Angeles County south of the city of Calabasas and north of the city of Malibu and is subject to the management direction of the Los Angeles County 2035 General Plan (County of Los Angeles 2015).

The Study Area occurs the southwestern region of Los Angeles County within the Santa Monica Mountains subsection of the Southern California Coast, an ecological unit that extends from Point Mugu in Ventura County to the Hollywood Hills in Los Angeles County (National Park Service 2020). This ecological unit is generally defined by its topography and geography which includes relatively steep hillsides vegetated by native chaparral and drained by incised streams along which grow bands of riparian shrubs and woodlands.

Figure 1 Regional Location Map

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★ Project Location

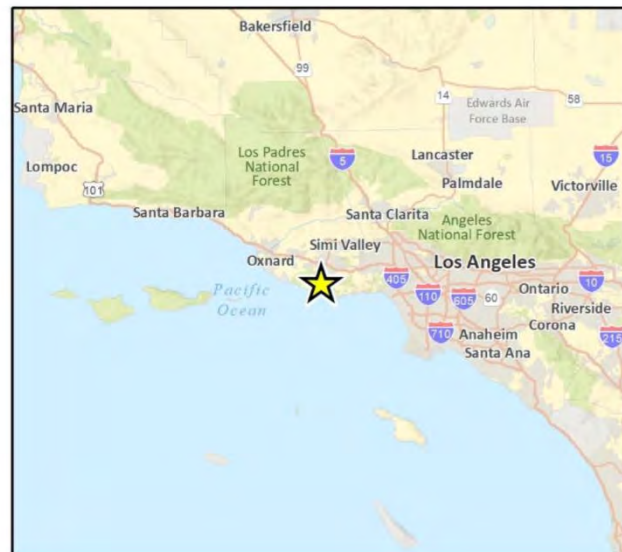


Fig. 1 Regional Location

Figure 2 Study Area



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Additional data provided USGS, 2021.

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Fig 2 Project Location

1.2 Project Description

The Las Virgenes-Triunfo JPA plans to inspect and repair an existing 24-inch outfall pipeline which runs for approximately 2,250 linear feet (lin.ft.) from the Tapia WRF, located at 731 Malibu Canyon Road in Agoura Hills, to Malibu Creek (Figure 1 and Figure 2). The section of pipeline to be inspected and repaired under the proposed project is located within existing roadways and natural areas. Starting at the Tapia WRF, the pipeline is within paved road for approximately 0.15 mile to Las Virgenes Road/Malibu Canyon Road, which is also paved, and crosses to the east side of this road (another approximately 0.03 mile). On the east side of Las Virgenes Road/Malibu Canyon Road, the pipeline runs parallel to an unpaved footpath to its terminus at Malibu Creek, approximately 0.25 mile to the south.

The project would install five new manholes along the existing pipeline alignment, to provide access for inspection of the pipeline. Inspection of this pipeline would not expand its capacity or alter its existing uses; rather, it would help ensure the integrity of the pipeline, facilitating its continued use as intended for the conveyance of discharge between the Tapia WRF and Malibu Creek. Under both existing and post-project conditions, effluent from the Tapia WRF is discharged to Malibu Creek in compliance with a National Pollutant Discharge Elimination System (NPDES) permit issued and administered by the RWQCB for the Los Angeles Region (Order No. R4-2017-0124, NPDES No. CA0056014).

The project would install five new 36-inch diameter manholes at existing bends in the alignment, including one manhole located in a paved roadway and four manholes located in natural substrate. Each manhole requires a temporary work area buffer radius ranging from 13 to 25 feet. Installation would allow for the existing pipeline to be inspected using access provided via the new manholes along the existing pipeline alignment. Standard construction best management practices (BMPs) would be employed during project construction to prevent disturbed soil from leaving the work area. These BMPs may include but would not be limited to use of designated areas for construction staging; use of safety and spill control measures for the handling of all vehicle fuels and other potentially hazardous materials; use of straw wattles or similar materials to prevent surface runoff from leaving the active work area. Also, during the construction phase, temporary lane closures may be used to maintain the safety of workers and the public during construction activities. Access through the project area would be always maintained, and workers would provide traffic management and control through the work area as needed to maintain access and safety.

Construction of each manhole would involve trench excavation, backfill and compaction of soil above the Tapia 003 outfall, installation of precast concrete manhole structures into the pipeline, and removal of existing butterfly valves and turnouts. The location of each manhole has been selected to facilitate visual inspection of the entire length of the pipeline via closed circuit television (CCTV). Impacts to biological resources are addressed in this report from the proposed temporary and permanent impacts associated with the project.

2 Methodology

This section consisted of a review of relevant regulatory conditions, background literature, and a field reconnaissance survey to document the biological conditions of the Study Area (Figure 2).

2.1 Regulatory Overview

Regulated or sensitive resources studied and analyzed herein include special-status plant and wildlife species, nesting birds and raptors, sensitive plant communities, jurisdictional waters and wetlands, wildlife movement, and locally protected resources, such as protected trees. Additional information on the regulatory framework is provided as Appendix B.

The project site is located within the SMM LCP area, south of the SMM North Area Plan area (County 2020). The SMM LCP area is subject to the management direction of the SMM LIP, consistent with the California Coastal Act (CCA); as such, the project is subject to review and approval of the Los Angeles County Department of Regional Planning, for consistency with the SMM LCP/LIP and the CCA.

2.1.1 Environmental Statutes

For the purpose of this report, potential impacts to biological resources were analyzed based on the following statutes:

- California Environmental Quality Act (CEQA)
- Federal Endangered Species Act (ESA)
- California Endangered Species Act (CESA)
- Federal Clean Water Act (CWA)
- California Fish and Game Code (CFGF)
- Migratory Bird Treaty Act (MBTA)
- The Bald and Golden Eagle Protection Act
- Porter-Cologne Water Quality Control Act
- Santa Monica Mountains Local Implementation Plan
- Santa Monica Mountains Land Use Plan
- County of Los Angeles General Plan (2015)

2.1.2 Guidelines for Determining CEQA Significance

The following threshold criteria, as defined by the CEQA Guidelines Appendix G Initial Study Checklist, were used to evaluate potential environmental effects. Based on these criteria, the proposed project would have a significant effect on biological resources if it would:

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

- b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.*
- c) *Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal areas, etc.) through direct removal, filling, hydrological interruption, or other means.*
- d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.*
- e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.*
- f) *Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional or state habitat conservation plan.*

2.2 Database and Literature Review

Rincon conducted a literature review to obtain baseline information about biological resources with potential to occur in the Study Area and surrounding area. The literature review included information from standard biological reference materials and regionally applicable regulatory guidance documents including (but not limited to) the following: *Mammals of North America* (Bowers et al. 2004); *A Field Guide to the Mammals of North American North of Mexico* (Burt and Grossenheider 1980); *The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin et al. 2012); *The Manual of California Vegetation, Second Edition* (MCV2; Sawyer et al. 2009); *A Field Guide to Western Reptiles and Amphibians* (Stebbins 2003); and American Ornithologists Union 2018.

Other sources of information reviewed include historic and current aerial imagery, topographic maps, geologic maps, and climatic data. Rincon also conducted queries of relevant scientific databases which provide information about occurrences of sensitive biological resources: the CDFW Biogeographic Information and Observation System (BIOS) California Natural Diversity Database (CNDDB) (CDFW 2021b) query of a 5-mile radius around the Study Area; the United States Fish and Wildlife Service (USFWS) Critical Habitat Portal (USFWS 2021a) query of the Study Area; United States National Wild and Scenic Rivers Program Map (United States National Wild and Scenic Rivers System 2020) of the Study Area; National Wetlands Inventory (NWI) (USFWS 2021c) of the Study Area; the United States Department of Agriculture, Natural Resource Conservation Service (USDA NRCS) Web Soil Survey (USDA NRCS 2021) of the Study Area; Los Angeles County's Sensitive Bird Species (County Sensitive Bird Species Working Group 2009); and a query of the California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants of California (CNPS 2021b) 6-quadrangle map surrounding the Study Area. Due to the Study Area's location on the coast, the CNPS query was limited to the quadrangle containing the Study Area and the five adjacent terrestrial quadrangles consisting of the *Malibu Beach*, *Point Dume*, *Thousand Oaks*, *Calabasas*, *Canoga Park*, and *Topanga*, California quadrangles. In addition, the Los Angeles County General Plan 2035 (County 2015), and the County LCP, which is comprised of the LIP and the LUP was reviewed, including current mapping of biological resource habitats (County 2018a, 2018b).

2.3 Field Surveys

Field surveys were conducted to document the existing site conditions and to evaluate the potential presence of sensitive biological resources, including special-status plant and wildlife species, sensitive plant communities, potentially jurisdictional wetlands and aquatic resources, and habitat for federally and state protected species. The first survey was conducted by Rincon Senior Biologist Julie Love and Rincon Biologist Carolyn Welch on July 21, 2021, between 9:30 AM and 3:00 PM. Weather conditions during the survey included an average temperature of 77 degrees Fahrenheit (°F), calm winds up to five miles per hour, and clear skies with good visibility. A second field survey was conducted by Rincon Senior Biologist Thea Benson and Carolyn Welch on August 4, 2021, between 8:00 AM and 10:00 AM. Weather conditions during the survey included an average temperature of approximately 70°F, calm winds up to five miles per hour, and clear skies with good visibility. A final survey was conducted by biologists Carolyn Welch and Genelle Watkins on February 7, 2023, between 7:00 AM and 2:00 PM. Weather conditions during the survey included an average temperature of approximately 42°F, calm winds up to five miles per hour, and clear skies with good visibility.

The survey consisted of walking the extent of the Study Area (where feasible), documenting general site conditions, mapping vegetation and land cover types, and documenting plant and animal species observed. For areas that were inaccessible within the Study Area (e.g., densely vegetated areas, steep slopes), the biologist visually inspected those areas with 10x42 binoculars. Wildlife species were identified by direct observation, vocalization, or by sign (e.g., tracks, scat, burrows).

Plant species nomenclature and taxonomy followed *The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin et al. 2012). The vegetation classification used for this analysis is based on MCV2 (Sawyer et al. 2009), modified as needed based on species dominance to most accurately describe the existing vegetation communities and land cover types within the Study Area. Updates to the MCV2 provided in the online database (CNPS 2021a) were taken into account. Representative site photographs of the Study Area are provided in Appendix C.

3 Existing Conditions

This section summarizes the results of the literature review and field surveys. Brief discussions regarding the general environmental setting, soils, vegetation and land cover types, and plant and wildlife species, are presented below. Representative photographs of the Study Area are provided in Appendix C, and complete lists of all plant and wildlife species observed within the Study Area are presented in Appendix D.

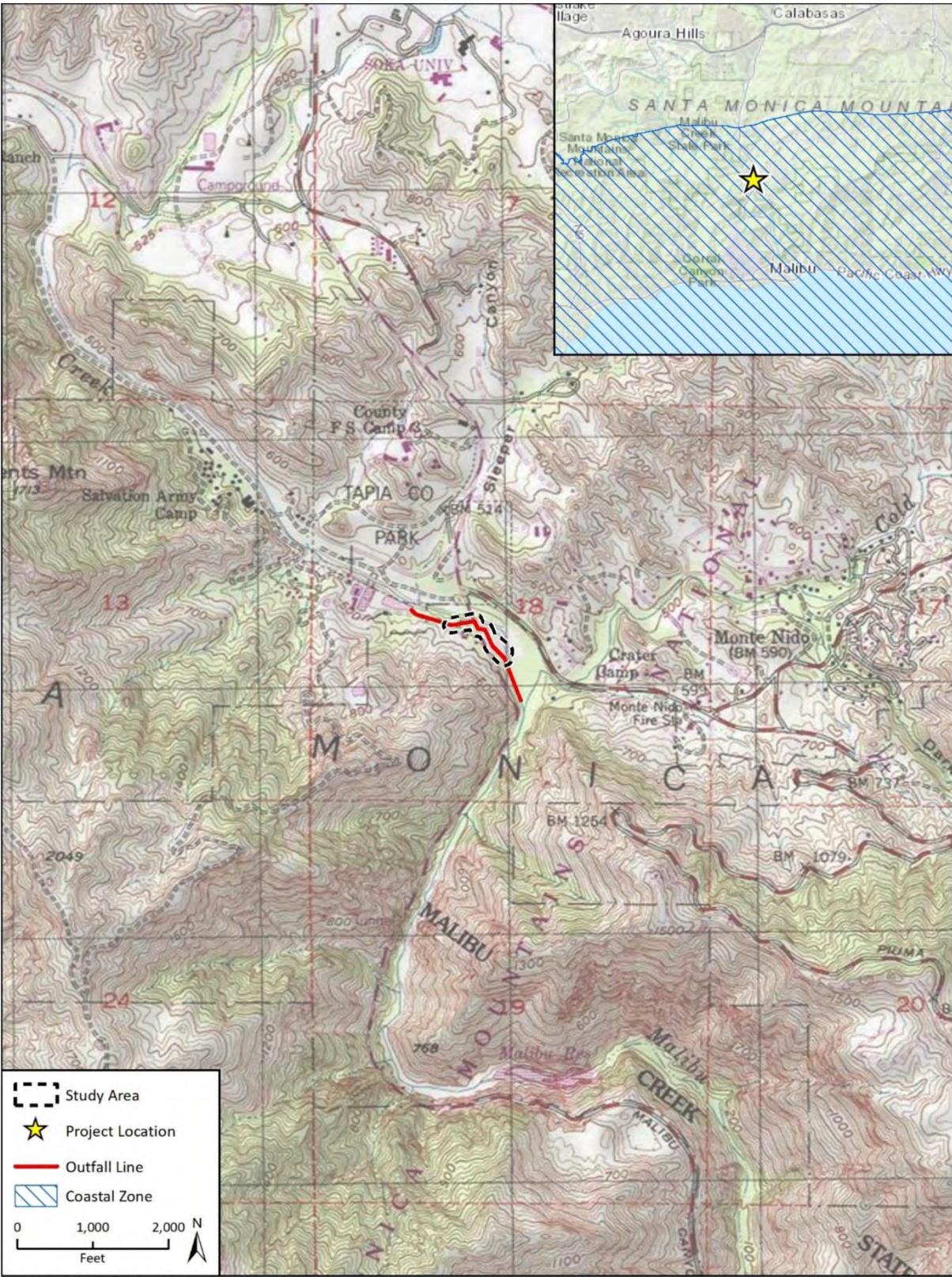
3.1 Environmental Setting

The Study Area is within the Transverse Range, a subsection of the Southern California Coast Ecoregion. Malibu Creek flows through the Study Area from west to east. Malibu Creek runs for a total of approximately 13 miles, beginning at the confluence of Triunfo Creek and Lobo Canyon Creek in Agoura Hills, and terminating at Santa Monica Bay in Malibu, California. The topography of the Study Area is generally flat, and elevations range from 460 to 480 feet above mean sea level (Figure 3). The Study Area is 5.53 acres and consists of native and non-native vegetation communities and developed areas, including Las Virgenes Road and a paved access road to the Tapia WRF. The Study Area is close to the boundary of the 2018 Woolsey Fire; however, the site has not burned since the 1996 Calabasas Fire. Land uses within and surrounding the Study Area consist of both open space and developed areas, including roadways, hiking trails, public utilities, and commercial and residential buildings.

Open space consisting of grasslands and trees predominated in this area through at least 1947, though Las Virgenes Road is visible on aerial photographs as early as 1952 and the bridge over Malibu Creek was constructed by 1959. By 1967, the Tapia WRF buildings were constructed west of the Study Area (Historic Aerials 2021).

The Study Area is characterized by a Mediterranean climate influenced by proximity to the ocean with warm and dry days most of the year with mild-moist winters. The average annual rainfall is approximately 15 inches (World Weather & Climate 2021).

Figure 3 Topographic Map



3.1.1 Soils

Information about the soil types present within the Study Area was obtained from the NRCS Online Web Soil Survey (soil survey; USDA NRCS 2021a). Based on data from the soil survey, two soil map units underlie the Study Area: Cotharin clay loam, 30 to 75 percent slopes and Fluvaquents-Riverwash complex, 0-5 percent slopes (Figure 4). Only the Fluvaquents-Riverwash complex, 0-5 percent slopes soil type is classified as a hydric soil (USDA, NRCS 2021b).

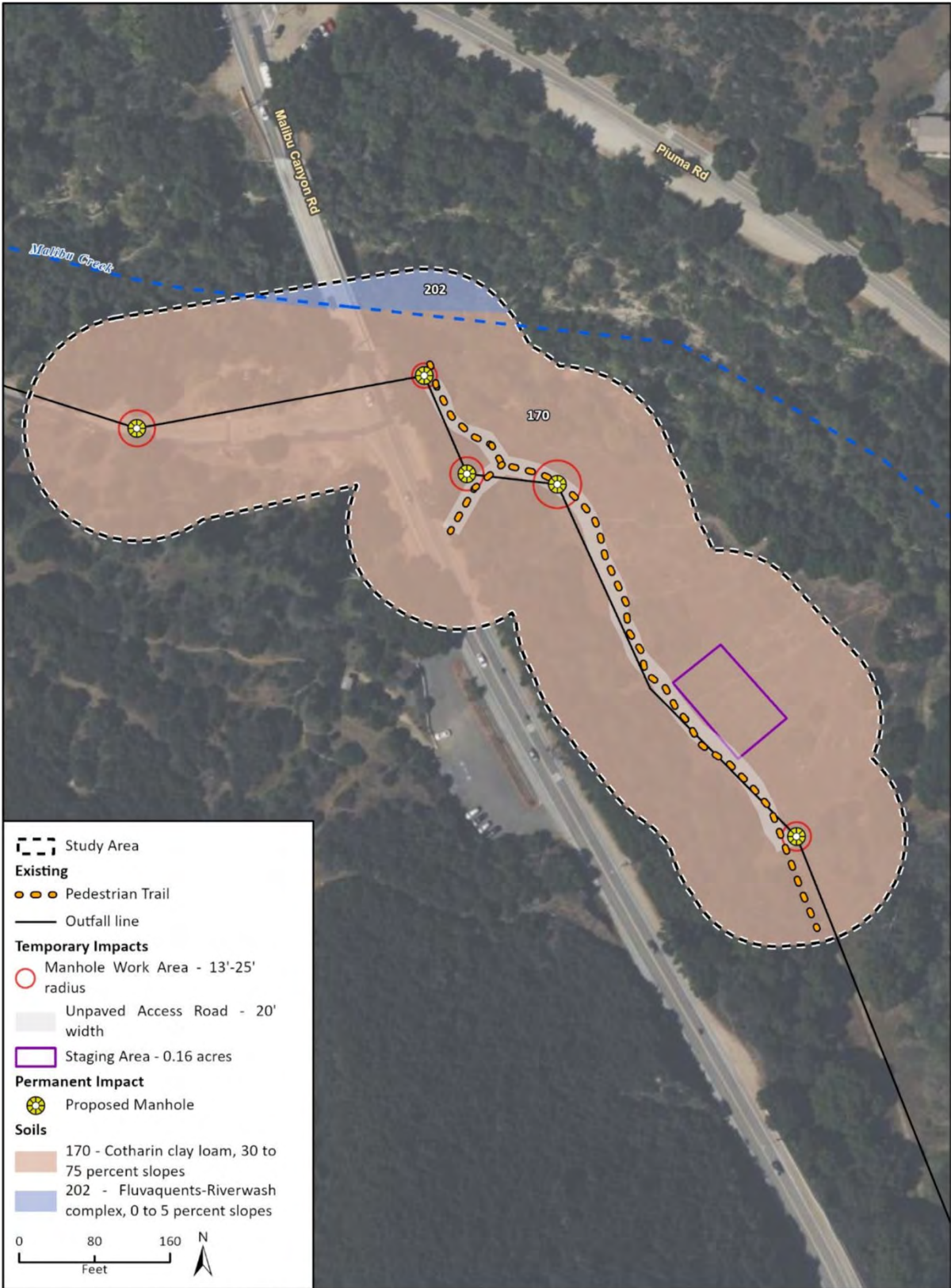
Cotharin Clay Loam, 30 to 75 Percent Slopes

Cotharin soils are well-drained and formed in colluvium and/or residuum weathered from andesite. They are typically found in hills and mountains and exhibit very high runoff and very low water storage. A typical soil profile consists of a surface layer of leaf litter and charcoal followed by loamy soils to 11 inches in depth, which are underlain by a highly fractured meta-volcanic bedrock.

Fluvaquents-Riverwash Complex, 0 to 5 Percent Slopes

This soil type is a complex of fluvaquents and riverwash. Fluvaquent soils are formed from alluvium derived from sandstone and shale and are very poorly drained. A typical soil profile consists of layers of loam, sandy loam, and loamy sand to a depth of 19 inches underlain by gravelly sand. Riverwash occurs within and along perennial and intermittent streams including Malibu Creek. Drainage is excessive due to the stony and gravelly soil. The land is typically inundated following storms and highly subject to scouring. This soil map unit is included on the National Hydric Soils List (USDA, NRCS 2021b).

Figure 4 Soil Map



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Additional data provided USGS, 2021; and USDA Natural Resources Conservation Service, 2023.

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Fig. 3 Soils

3.2 Vegetation and Land Cover Types

Vegetation communities and land cover types documented within the Study Area include black cottonwood forest and woodland, California sycamore – coast live oak woodlands, California sycamore – arroyo willow woodlands, coast live oak woodland and forest, coyote brush scrub, creeping ryegrass turfs, developed, wild oats and annual brome grasslands, wild oats and annual brome grasslands with herbaceous natives, and upland mustards (Table 1).

CDFW utilizes NatureServe's (2010) methodologies to rank communities at both the Global (G) and State (S) levels, resulting in a rank ranging from 1 (very rare and threatened) to 5 (demonstrably secure). Natural Communities with ranks of S1-S3 are considered Sensitive Natural Communities (CDFW 2022c). Four of the vegetation communities present in the Study Area (i.e., California sycamore – coast live oak woodlands, California sycamore – arroyo willow woodlands, black cottonwood forest and woodland, and creeping ryegrass turfs) are CDFW sensitive vegetation communities (CDFW 2022c).

The Study Area also contains H1 and H2 Habitat, which is considered a SERA pursuant to Section 22.44.630 of the LIP (County 2018b). H1 habitat is defined by areas of highest biological significance, rarity, and sensitivity, including riparian, native oak woodlands, rock outcrops, wetlands, and sensitive plant and animal species. H2 habitats consist of areas of high biological significance, rarity, and sensitivity and include coastal sage scrub and chaparral-dominated habitats. H3 habitat is also contained within the Study Area and is defined as habitat that is primarily disturbed or non-native. SERA habitat is further described in Section 4.5.3 below.

Table 1 Summary of Vegetation and Land Cover Types within the Study Area

Habitat Type	Approximate Acreage	Approximate Percent Area	CDFW Sensitive Natural Community Rank ¹	CDFW Sensitive Status (Yes/No) ¹	LIP Designations ²
Black cottonwood forest and woodland (<i>Populus trichocarpa</i> Forest and Woodland Alliance)	0.06	<1%	G5S3	Yes	H1 Habitat
California sycamore – coast live oak woodlands (<i>Platanus racemosa</i> – <i>Quercus agrifolia</i> Woodland Association)	0.73	11%	G3S3	Yes	H1 Habitat
California sycamore – arroyo willow woodlands (<i>Platanus racemosa</i> – <i>Salix lasiolepis</i> - Woodland Association)	0.70	11%	G3S3	Yes	H1 Habitat
Coast live oak woodland and forest (<i>Quercus agrifolia</i> Forest and Woodland Alliance)	2.27	35%	G5S4	No	H1 Habitat
Coyote brush scrub (<i>Baccharis pilularis</i> Shrubland Alliance)	0.33	5%	G5S5	No	H2 Habitat
Creeping ryegrass turfs (<i>Elymus triticoides</i> Herbaceous Alliance)	0.07	<1%	G3S3	Yes	H1 Habitat
Developed	0.67	10%	N/A	No	N/A
Wild oats and annual brome grassland (<i>Avena</i> spp. – <i>Bromus</i> spp. Herbaceous Semi-Natural Alliance)	0.46	7%	GNASNA	No	H3 Habitat
Wild oats and annual brome grassland with herbaceous natives	0.15	2%	GNASNA	No	H2 Habitat
Upland mustards (<i>Hirschfeldia incana</i> Herbaceous Semi-Natural Association)	1.15	18%	Not ranked	No	H3 Habitat
Total	6.59	100%	–	–	–

¹ Based on CDFW Sensitive Natural Communities List (CDFW 2022c).

² Based on vegetation alliances pursuant to the LIP (County 2018a).

Black Cottonwood Forest and Woodland (*Populus trichocarpa* Forest and Woodland Alliance)

Black cottonwood forest and woodland (*Populus trichocarpa* Forest and Woodland Alliance) is typically found in seasonally flooded and permanently saturated soils on stream banks and alluvial terraces. This vegetation alliance is less than 30 meters tall with open to continuous canopy and shrub layers. The herbaceous layer is sparse to continuous. Black cottonwood (*Populus trichocarpa*) is greater than 5% absolute cover and is co-dominant with coast live oak (*Quercus agrifolia*), arroyo willow (*Salix lasiolepis*), and red willow (*Salix laevigata*). The USACE Wetland Inventory recognizes black cottonwood as a FAC plant. This vegetation community is ranked G5S3 and is considered sensitive (CDFW 2023). It is also classified as a SERA H1 habitat as defined by Section 22.44.630 of the LIP (County 2018b).

Black cottonwood forest is located along the southern edge of the Study Area, near the existing, unpaved access road. This alliance comprises 0.06 acre within the Study Area.

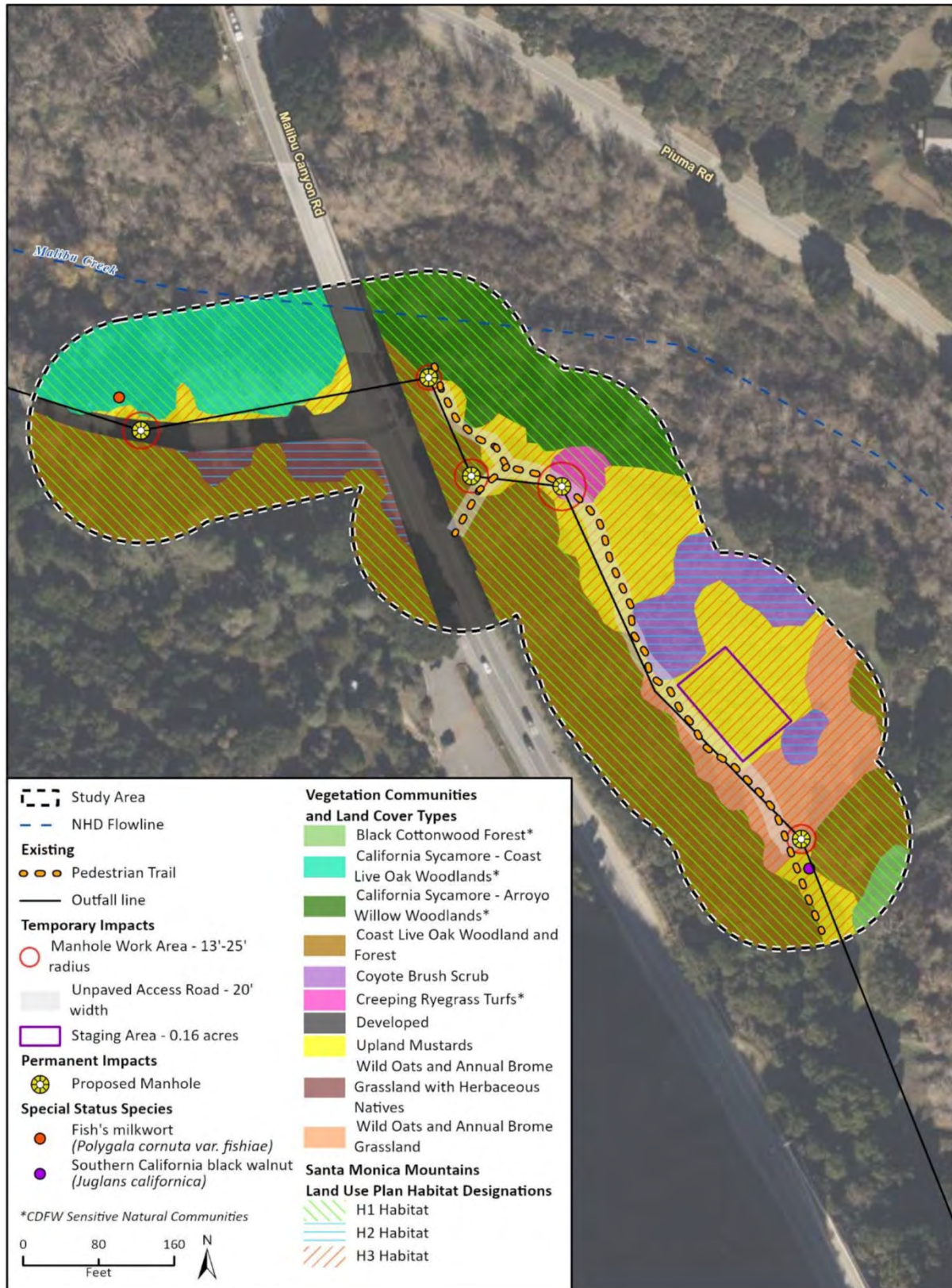
California Sycamore – Coast Live Oak Woodlands (*Platanus racemosa* – *Quercus agrifolia* Woodland Association)

California sycamore – coast live oak woodlands (*Platanus racemosa* – *Quercus agrifolia* Woodland Alliance) are typically found along gullies, stream banks, and terraces associated with intermittent streams, springs and seeps that are subject to high-intensity flooding. Soils are generally rocky or cobbly alluvium with permanent moisture at depth. This alliance is found between sea level and 7,874 feet (2,400 meters) in elevation. The community is characterized by open to intermittent tree and shrub layers, and a sparse or grassy herbaceous layer. California sycamore (*Platanus racemosa*) has at least 30% relative cover in the tree layer with coast live oak, willows (*Salix* spp.), or Fremont cottonwood (*Populus fremontii*) present as co-dominants. In the *Platanus racemosa* – *Quercus agrifolia* association, these two species are co-dominant in the tree canopy. This association is ranked G3S3 and is considered a CDFW sensitive natural community (CDFW 2022c). It is also classified as a SERA H1 habitat as defined by Section 22.44.630 of the LIP (County 2018b).

This association is found along the bed and steep southern bank of Malibu Creek in the northwestern portion of the Study Area, west of Las Virgenes Road. California sycamore and coast live oak are dominant in the tree canopy, and scattered California bay laurel (*Umbellularia californica*), and Oregon ash (*Fraxinus latifolia*) are also present. Dense shrub and herbaceous layers include arroyo willow, toyon (*Heteromeles arbutifolia*), ripgut brome (*Bromus diandrus*), and California blackberry (*Rubus ursinus*). Open water is present within the active channel of Malibu Creek. This association also includes a grove of mature California sycamore trees north of the Tapia WRF access road that is subject to regular mowing and weed removal.

Three Fish's milkwort (*Polygala cornuta* var. *fishiae*; California Rare Plant Rank [CRPR] 4.3) individuals are present in this association near the western boundary of the Study Area (Figure 5). Approximately 0.73 acre of California sycamore – coast live oak woodlands is present within the Study Area.

Figure 5 Vegetation and Land Cover Types



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 Additional data provided by Los Angeles County, 2021; USGS, 2021.

California Sycamore – Arroyo Willow Woodlands (*Platanus racemosa* – *Salix lasiolepis* - Woodland Association)

California sycamore woodlands (*Platanus racemosa* – *Quercus agrifolia* Woodland Alliance) are described above. In the *Platanus racemosa* – *Salix laevigata*/*Salix lasiolepis* - *Baccharis salicifolia* association, there is a mixed tree canopy consisting of red willow, arroyo willow, and mulefat (*Baccharis salicifolia*). This association is considered a CDFW sensitive natural community (CDFW 2022c). This association is considered a SERA H1 habitat as defined by Section 22.44.630 of the LIP (County 2018b).

In the Study Area, this association is located along the banks of Malibu Creek east of Las Virgenes Road. California sycamore is dominant in the tree canopy along with arroyo willow. Therefore, the association name was refined to California sycamore – arroyo willow woodlands for clarity. Scattered red willow, Pacific willow (*Salix lasiandra* var. *lasiandra*), coast live oak, mulefat, box elder (*Acer negundo*), and black cottonwood (*Populus trichocarpa*) are also present. Herbaceous species present include California mugwort (*Artemisia douglasiana*), tule (*Schoenoplectus acutus* var. *occidentalis*), ripgut brome, shortpod mustard (*Hirschfeldia incana*), and smilo grass (*Stipa miliacea* var. *miliacea*). Open water is present in the active channel of Malibu Creek. Approximately 0.70 acre of California sycamore – arroyo willow woodlands are present within the Study Area.

Coast Live Oak Woodland and Forest (*Quercus agrifolia* Forest & Woodland Alliance)

Coast live oak woodland and forest (*Quercus agrifolia* woodland alliance) is typically found on canyon bottoms, slopes, and flats between sea level and 3,937 feet (1,200 meters) in elevation. Soils are typically deep and sandy or loamy with high organic matter. This vegetation community is characterized by a tree layer that ranges from continuous to open and sparse shrub and herbaceous layers. Coast live oak contributes to at least 60% relative cover in the tree layer (Sawyer et al. 2009). This vegetation community is ranked G5S4 and is not considered a CDFW sensitive natural community (CDFW 2022c). Coast live oak woodland and forest is considered a SERA H1 habitat as defined by Section 22.44.630 of the LIP (County 2018b).

In the Study Area, this native vegetation community is found on uplands south of the access road to the Tapia WRF as well as to the east of Las Virgenes Road. The tree canopy in this community consists of an intermittent to closed canopy of coast live oaks. Shrubs present include coyote brush (*Baccharis pilularis* ssp. *consanguinea*), purple sage (*Salvia leucophylla*), and black sage (*Salvia mellifera*). A dense herbaceous layer is dominated by shortpod mustard, ripgut brome, slender wild oats (*Avena barbata*), and Italian thistle (*Carduus pycnocephalus* ssp. *pycnocephalus*). Patches of this vegetation community have been disturbed by mowing in the northwest portion of the Study Area, and several pedestrian access trails pass through the oak woodland east of Las Virgenes Road.

One emergent southern California black walnut (*Juglans californica*, CRPR 4.2) was observed in this vegetation community near the southern extent of the Study Area (Figure 5). Approximately 2.27 acres of coast live oak woodland and forest are present in the Study Area.

Coyote Brush Scrub (*Baccharis pilularis* Shrubland Alliance)

Coyote brush scrub (*Baccharis pilularis* Shrubland Alliance) is typically found in coastal bluffs, terraces, stabilized dunes of coastal bars, spits along the coastline, river mouths, stream sides, open exposed slopes, ridges, and gaps in forest stands. Soils are variable and generally sandy to relatively heavy clay. Coyote brush (*Baccharis pilularis*) contributes to at least 50% relative cover in the shrub

layer, and the shrub layer is less than 3 meters, while the herbaceous layer is variable. Coyote brush scrub is ranked G5S5 and is not considered a CDFW sensitive natural community (CDFW 2023). This vegetation is classified as SERA H2 habitat as defined by Section 22.44.630 of the LIP (County 2023b).

In the Study Area, coyote brush scrub is found interspersed within the upland mustard habitat, adjacent to the unpaved access roadway and pedestrian walking trail. The vegetation community contains a dense herbaceous layer of ripgut brome. Approximately 0.33 acre of coyote brush scrub is present in the Study Area.

Creeping Ryegrass Turfs (*Elymus triticoides* Herbaceous Alliance)

Creeping ryegrass turfs (*Elymus triticoides* Herbaceous Alliance) is typically found on poorly drained floodplains, playas, drainage and valley bottoms, or marsh margins with mesic flat to sloping topography between sea level and 9,843 feet (3,000 meters). Soils are generally alkaline or saline clays and loams. Creeping wild rye (*Elymus triticoides*) contributes at least 50% relative cover in the herbaceous layer, and the herbaceous layer is open to continuous. Creeping ryegrass turfs are ranked G3S3 and classified as a CDFW sensitive natural community (CDFW 2022c). This vegetation community is considered a SERA H1 habitat as defined by Section 22.44.630 of the LIP (County 2018b).

In the Study Area, creeping ryegrass turfs are found in the uplands east of Las Virgenes Road and south of Malibu Creek. The vegetation community consists of a dense herbaceous layer composed of creeping wild rye and ripgut brome. Approximately 0.07 acre of creeping ryegrass turfs are present in the Study Area.

Developed

Developed areas consist of paved roadways and gravel or hardpacked dirt road shoulders with little to no vegetation. This land cover type is present along Las Virgenes Road and on the access road to the Tapia WRF. Developed areas are largely un-vegetated; therefore, no native or non-native plant species are associated with this land cover type. This land cover type does not qualify as a habitat designation under Section 22.44.630 of the LIP (County 2018b). Approximately 0.67 acre of development is present in the Study Area.

Upland Mustards (*Hirschfeldia incana* Herbaceous Semi-Natural Association)

Upland mustards (*Brassica nigra* herbaceous semi-natural alliance) are widespread and can be found in fallow fields, rangelands, grasslands, roadsides, levee slopes, disturbed coastal scrub, riparian areas, cleared roadsides, and waste places between sea level and 9,186 feet (2,200 meters). Mustards and other non-native plant species make up over 80 percent of relative cover, and mustard species are dominant (Sawyer et al. 2009). In the *Hirschfeldia incana* association, shortpod mustard is dominant. This vegetation community is not ranked due to the dominance of invasive species and is not considered sensitive (CDFW 2022c). This association is considered H3 habitat as defined by Section 22.44.630 of the LIP (County 2018b).

This non-native association is found in several areas in the Study Area, including on the north shoulder of the access road to the Tapia WRF, where the vegetation is subject to regular mowing. Upland mustards are also present to the east of Las Virgenes Road, between Malibu Creek and the coast live oak woodland and forest. Several pedestrian access trails cross this area. Shortpod mustard is the dominant species in the dense herbaceous layer, along with ripgut brome and

slender wild oats. Also present are rescue grass (*Bromus catharticus*), Italian thistle, tocalote (*Centaurea melitensis*), fennel (*Foeniculum vulgare*), and telegraph weed (*Heterotheca grandiflora*). Scattered shrubs are present, including coyote brush, sawtooth goldenbush (*Hazardia squarrosa*), and California aster (*Corethrogyne filaginifolia*). Approximately 1.15 acres of upland mustards are present in the Study Area.

Wild Oat and Annual Brome Grasslands

Wild oat and annual brome grasslands (*Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance) can be found in a wide variety of topographies and soil settings between 0 to 2,200 meters in elevation. Red brome occurs at over 80 percent relative cover in the herbaceous layer. This vegetation community is ranked GNASNA and is not considered sensitive (CDFW 2023). This alliance is considered H3 habitat as defined by Section 22.44.630 of the LIP (County 2018b).

Wild oat and annual brome grasslands are primarily located at the southeastern portion of the Study Area. The alliance is somewhat disturbed in this area where the vegetation is subject to regular mowing and weed abatement for the pedestrian trail and existing unpaved access road. Slender wild oats, soft brome (*Bromus hordeaceus*) and ripgut brome dominate this alliance, bordered by coast live oak woodland in the overstory, and coyote brush scrub and upland mustards interspersed throughout the herbaceous layer. Approximately 0.46-acre of wild oat and annual brome grasslands are present in the Study Area.

Wild Oat and Annual Brome Grassland with Herbaceous Natives

The wild oat and annual brome grasslands with herbaceous natives alliance mostly follows the description presented above, but on site conditions indicate that there are more native species than typically defined. As such, this alliance is considered H2 habitat as defined by Section 22.44.630 of the LIP (County 2018b).

This alliance is primarily located at the northwestern portion of the Study Area, south of the shoulder of the access road to Tapia WRF. Based on observations of the current County Biologist for the Regional Planning Department, this alliance contains forbs and subshrubs such as *Elymus glaucus*, *Sanicula crassicaulus*, *Galium angustifolium*, *Eriogonum elongatum*, and *Clarkia* sp. This alliance is bordered by coast live oak woodland to the south. Approximately 0.15-acre of this alliance are present in the Study Area.

3.3 General Wildlife

During the field surveys, wildlife use throughout the Study Area was dominated by bird species found in woodland and grassland habitat including mallard (*Anas platyrhynchos*), California scrub-jay (*Aphelocoma californica*), red-shouldered hawk (*Buteo lineatus*), Anna's hummingbird (*Calypte anna*), common raven (*Corvus corax*), Nuttall's woodpecker (*Dryobates nuttallii*), Pacific-slope flycatcher (*Empidonax difficilis*), house finch (*Haemorhous mexicanus*), acorn woodpecker (*Melanerpes formicivorus*), song sparrow (*Melospiza melodia*), California towhee (*Melospiza crissalis*), spotted towhee (*Pipilo maculatus*), bushtit (*Psaltirparus minimus*), white-breasted nuthatch (*Sitta carolinensis*), and mourning dove (*Zenaida macroura*). In addition, western fence lizard (*Sceloporus occidentalis*), Lorquin's Admiral (*Limenitis lorquini*), and cabbage butterfly (*Pieris rapae*) were observed within the Study Area. Signs of several mammal species were observed, including scat of coyote (*Canis latrans*) and California mule deer (*Odocoileus hemionus californicus*),

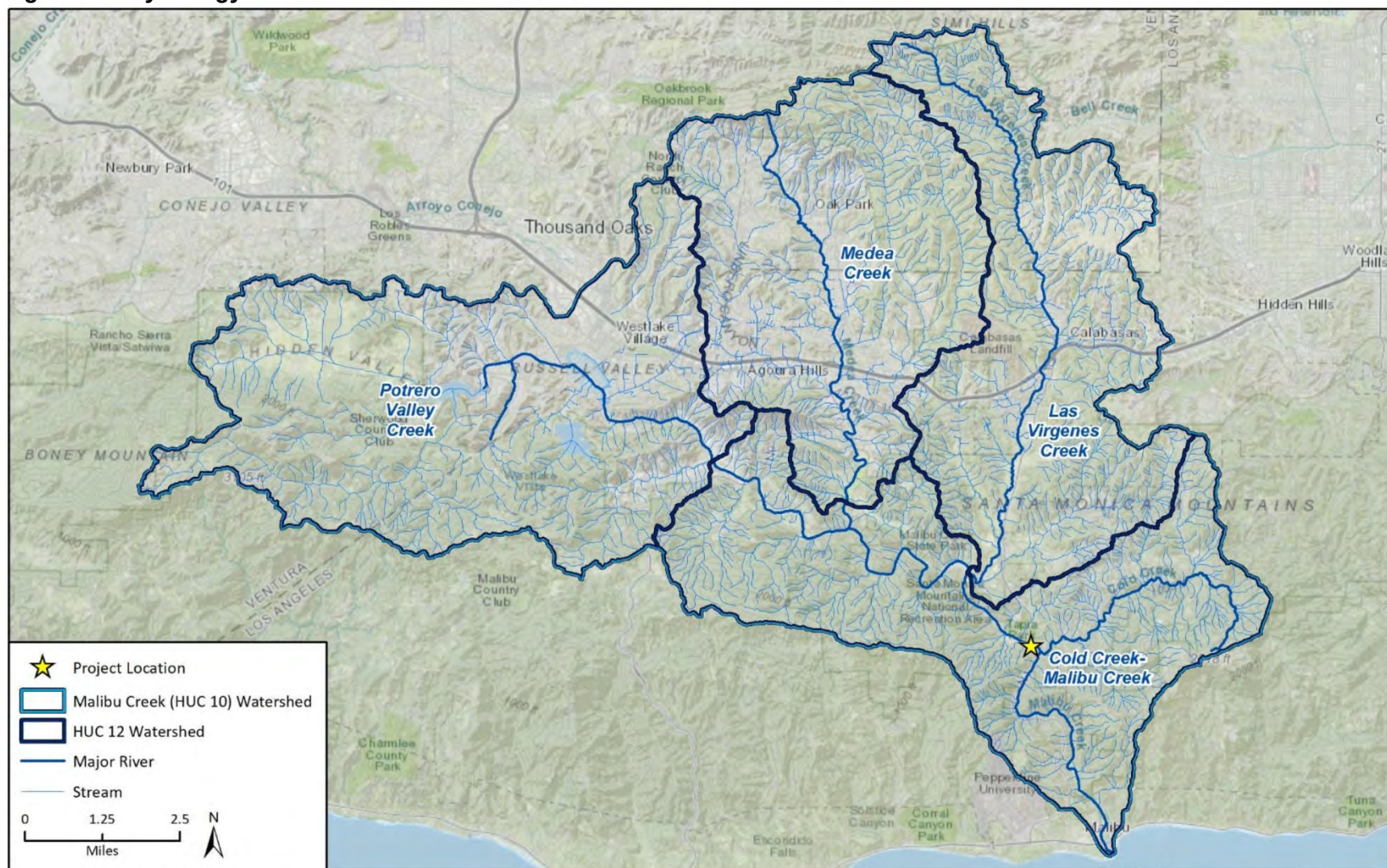
burrows of Botta's pocket gopher (*Thomomys bottae*), and a woodrat midden. Based on size, location, and components of the midden, this was determined to be sign of the common big-eared woodrat (*Neotoma macrostis* [previously the dusky-footed woodrat *N. fuscipes*]).

Three special-status wildlife species were observed during the surveys; two of these species were observed in the Study Area while the third species was observed soaring over the Study Area. Yellow warbler (*Setophaga petechia*) and oak titmouse (*Baeolophus inornatus*) were observed in the Study Area. Turkey vultures (*Cathartes aura*) were observed soaring approximately 200 feet above the Study Area. These observations are discussed further in Section 4.1.2 below. Common wildlife species not observed, but likely to occur, include Virginia opossum (*Didelphis virginiana*), striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), and a variety of other songbirds and small mammals. Refer to a complete list of observed wildlife species in Appendix D.

3.4 Hydrology

The Study Area is located within the South Coast Hydrological Unit, in the Cold Creek-Malibu Creek Subwatershed Hydrologic Unit Code (HUC) (HUC-12 No. 180701040104) and the Malibu Creek Watershed (HUC-10 No. 1807010401) (Figure 6). The main drainage feature intersecting the Study Area is Malibu Creek, a perennial drainage which flows across the northern portion of the Study Area from the west to the east. Malibu Creek flows southward into Malibu Lagoon and enters the Pacific Ocean at Santa Monica Bay approximately 3.5 miles south of the Study Area. Malibu Creek is a perennial system maintained by groundwater, storm flows, and water discharges by the Las Virgenes Municipal Water District. Water is discharged year-round as required by the National Marine Fisheries Service to support aquatic ecosystems and species. In the Study Area, Malibu Creek is mapped by the USFWS NWI as a riverine system with associated freshwater forested/shrub wetlands on each bank (USFWS 2021c) which largely coincides with what was observed in the field as further described in Section 4.3 below. The NHD and NWI also indicate three hydrologic features that flow north to Malibu Creek, which only limitedly coincides with what was observed in the field as further described below (Figure 7). Mapping presented in the NHD and NWI provides useful context but is not a completely accurate depiction of current existing conditions nor the extent of jurisdiction in the Study Area.

Within the Study Area, Malibu Creek flows from north to south and conveys surface water under the elevated Las Virgenes Road. An ephemeral drainage and an ephemeral ditch flow into Malibu Creek, further discussed in Section 4.3. A separate jurisdictional delineation report (Rincon 2021) has been prepared concurrent with this report detailing agency jurisdiction (USACE, RWQCB, CDFW, and LACDRP), including acreages of Malibu Creek, the ephemeral drainage, and the ephemeral ditch within the Study Area.

Figure 6 Hydrology Overview

Imagery provided by Esri and its licensors © 2021.
Additional data provided by USGS, 2021.

Fig 3 Hydro Overview

Figure 7 NWI and NHD Water Resources within the Study Area



Imagery provided by Microsoft Bing and its licensors © 2023.
Additional data provided USGS, 2023.

20-10352 BIO BRA
Fig 6 NHD NWI

4 Sensitive Biological Resources

Local, state, and federal agencies regulate special-status species and other sensitive biological resources, such as, but not limited to, sensitive natural vegetation communities, riparian habitats and aquatic resources, native trees, and wildlife movement corridors.

This section discusses the presence or potential for special-status and sensitive biological resources to occur within the Study Area. 'Potential to occur' is based on the presence or absence of suitable habitat for each special-status species reported in the scientific database queries conducted for the proposed Study Area.

Assessments for the potential occurrence of special-status species are based upon known ranges, habitat preferences for the species, species database records, and species records in the region of the Study Area. As discussed in Section 2, an analysis was conducted to determine which special-status species have potential to occur within the Study Area. The results are summarized in Appendix E. The potential for each special-status species to occur in the Study Area was evaluated according to the following criteria:

- **Not Expected.** Habitat on and adjacent to the Study Area is clearly unsuitable for the species requirements (e.g., foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime), and species would have been identifiable within the Study Area if present (e.g., oak trees).
- **Low Potential.** Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found in the Study Area.
- **Moderate Potential.** Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the Study Area is unsuitable. The species has a moderate probability of being found in the Study Area.
- **High Potential.** All the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the Study Area is highly suitable. The species has a high probability of being found in the Study Area.
- **Present.** Species was observed in the Study Area or has been recorded (e.g., CNDDDB, other reports) in the Study Area recently (within the last five years).

Plant or animal taxa may have "special-status" due to declining populations, vulnerability to habitat change, or because they have restricted ranges. Some are listed as threatened or endangered by USFWS or by CDFW and are protected by the ESA and CESA. Others have been identified as sensitive or as special-status species by USFWS, CDFW, or by private conservation organizations, including the CNPS.

For the purpose of this report, special-status species are those plants and animals listed, proposed for listing, or candidates for listing as Threatened or Endangered by USFWS under the ESA; those listed or candidates for listing as Rare, Threatened, or Endangered by CDFW under the CESA or Native Plant Protection Act; those identified as Fully Protected under Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code (CFGC); those identified on watch lists (WL) as important resources to identify and conserve; those identified by the Audubon Society's 'Los Angeles County Sensitive Bird List' (County Sensitive Species Working Group 2009); those

recognized as Species of Special Concern (SSC) by CDFW; and plants occurring on lists 1 through 4 of the CNPS CRPR system, per the following definitions:

- **CRPR 1A** = Plants presumed extinct in California
- **CRPR 1B.1** = Rare or endangered in California and elsewhere; seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)
- **CRPR 1B.2** = Rare or endangered in California and elsewhere; fairly endangered in California (20-80% occurrences threatened)
- **CRPR 1B.3** = Rare or endangered in California and elsewhere, not very endangered in California (<20% of occurrences threatened or no current threats known)
- **CRPR 2** = Rare, threatened or endangered in California, but more common elsewhere
- **CRPR 3** = Review List: Plants about which more information is needed
- **CRPR 4** = Watch List: Plants of limited distribution

In addition, special-status species are ranked globally (G) and subnationally (S) 1 through 3 based on NatureServe's (2010) methodologies:

- **G1 or S1** - Critically Imperiled Globally or State-wide
- **G2 or S2** - Imperiled Globally or State-wide
- **G3 or S3** - Vulnerable to extirpation or extinction Globally or State-wide

Plant communities are also considered special-status biological resources if they have limited distributions, have high value for sensitive wildlife, contain special-status species, or are particularly susceptible to disturbance. Additionally, the current Sensitive Natural Communities List was referenced to determine the current sensitivity status of the vegetation alliances found within the Study Area. The list provides the current G and S rank for each community and indicates whether CDFW considers the community to be sensitive (CDFW 2022).

4.1 Special-Status Species

4.1.1 Special-Status Plant Species

Based on the database and literature review, 54 special-status plant species have been recorded or have the potential to occur within the vicinity of the Study Area. Known occurrences within the vicinity of the Study Area were considered in this analysis (Appendix E). Of these 54 species, two species were observed in the Study Area: Fish's milkwort and southern California black walnut (Figure 5), two species have a moderate potential to occur, and 10 species have a low potential to occur within the Study Area based on the criteria presented above (Table 2). Potential to occur conclusions are further discussed in Appendix E. The remaining 40 special-status species not addressed in Table 2 are not expected to occur based on range, habitat requirements, and Study Area conditions.

Table 2 Special-Status Plant Species Present or with Potential to Occur in the Study Area

Species	Status ¹	Low	Moderate	High	Present
Malibu baccharis (<i>Baccharis malibuensis</i>)	CRPR 1B.2	X			
Catalina mariposa-lily (<i>Calochortus catalinae</i>)	CRPR 4.2	X			
club-haired mariposa lily (<i>Calochortus clavatus</i> var. <i>clavatus</i>)	CRPR 4.3	X			
Plummer's mariposa lily (<i>Calochortus plummerae</i>)	CRPR 4.2		X		
Lewis' evening-primrose (<i>Camissoniopsis lewisii</i>)	CRPR 3	X			
western dichondra (<i>Dichondra occidentalis</i>)	CRPR 4.2	X			
southern California black walnut (<i>Juglans californica</i>)	CRPR 4.2				X
Humboldt lily (<i>Lilium humboldtii</i> ssp. <i>humboldtii</i>)	CRPR 4.2	X			
ocellated Humboldt lily (<i>Lilium humboldtii</i> ssp. <i>ocellatum</i>)	CRPR 4.2	X			
white-veined monardella (<i>Monardella hypoleuca</i> ssp. <i>hypoleuca</i>)	CRPR 1B.3	X			
Ojai navarretia (<i>Navarretia ojaiensis</i>)	CRPR 1B.1	X			
Lyon's pentachaeta (<i>Pentachaeta lyonii</i>)	FE, SE, CRPR 1B.1		X		
Fish's milkwort (<i>Polygala cornuta</i> var. <i>fishiae</i>)	CRPR 4.3				X
Sonoran maiden fern (<i>Theylypteris puberula</i> var. <i>sonorensis</i>)	CRPR 2B.2	X			

¹ Notes:

FE = Federally Endangered, FT = Federally Threatened, SE = State Endangered, SR= State Rare

CRPR: CNPS California Rare Plant Rank

1A=Presumed Extinct in California

1B=Rare, Threatened, or Endangered in California and elsewhere

2A=Plants presumed extirpated in California, but more common elsewhere

2B=Plants Rare, Threatened, or Endangered in California, but more common elsewhere

California Rare Plant Rank Threat Code Extension

.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)

Below is a discussion of the two special-status plant species with a moderate potential to occur in the Study Area, Plummer's mariposa lily (*Calochortus plummerae*) and Lyon's pentachaeta (*Pentachaeta lyonii*), and the two species that were observed in the Study Area, southern California black walnut and Fish's milkwort. Special-status plant species with a low potential to occur are not discussed further.

Plummer's Mariposa Lily

Plummer's mariposa lily is a CRPR 4.2 species that is endemic to California (Calflora 2021). This species has a moderate potential to occur within the Study Area within the cismontane woodland and grassland communities on rocky and alluvial soils. Specifically, the species may occur within California sycamore woodlands, coast live oak woodland and forest, upland mustards, and creeping ryegrass turfs communities within the Study Area. This species has been observed multiple times within 5 miles of the Study Area, including an occurrence recorded in 1992 that is located approximately 2.1 miles to the north (CDFW 2021a).

Southern California Black Walnut

Southern California black walnut is a CRPR 4.2 species that is endemic to California (Calflora 2021). This species grows in a variety of habitats including chaparral, cismontane woodland, coastal scrub, and riparian woodlands (CNPS 2021b). One individual was observed in the coast live oak woodland and forest near the southern extent of the Study Area (Figure 5).

Lyon's Pentachaeta

Lyon's Pentachaeta is a CRPR 1B.1 species, is federally and state endangered, and is endemic to California (Calflora 2021). This species has a moderate potential to occur within the Study Area within the upland mustards, creeping ryegrass turfs, and open areas in the oak woodland in the Study Area. There are multiple CNDDDB occurrences recorded within 5 miles of the Study Area, including an occurrence from 2017 located approximately 2.8 miles to the east (CDFW 2021a).

Fish's Milkwort

Fish's milkwort is a CRPR 4.3 species that is native to California and Baja California (Calflora 2021). The species grows in chaparral, cismontane woodland, and riparian woodland (CNPS 2021b). Within the Study Area, three individuals were observed clustered within the California sycamore – coast live oak woodlands in the western portion of the Study Area (Figure 5).

4.1.2 Special-Status Wildlife Species

Based on the database and literature review, 28 special-status wildlife species have the potential to occur near the Study Area (Appendix E). Of these 28, two species were observed in the Study Area (i.e., yellow warbler and oak titmouse), five species have high potential to occur, 11 species have moderate potential to occur, and four species have a low potential based on the criteria presented above (Table 3). Potential to occur conclusions are further discussed in Appendix E. The remaining six special-status species not addressed in Table 3 are not expected to occur based on range, habitat requirements, and Study Area conditions.

Table 3 Special-Status Wildlife Species Present or with Potential to Occur in the Study Area

Species	Status ¹	Low	Moderate	High	Present
Wawona riffle beetle (<i>Atractelmis wawona</i>)	None	X			
Crotch bumble bee (<i>Bombus crotchii</i>)	None			X	
Gertsch's socalchemmis spider (<i>Socalchemmis gertschi</i>)	None	X			
arroyo chub (<i>Gila orcuttii</i>)	SSC		X		
southern California legless lizard (<i>Anniella stebbinsi</i>)	SSC		X		
coastal whiptail (<i>Aspidoscelis tigris stejnegeri</i>)	SSC			X	
San Bernardino ringneck snake (<i>Diadophis punctatus modestus</i>)	None			X	
western pond turtle (<i>Emys marmorata</i>)	SSC			X	
coast horned lizard (<i>Phrynosoma blainvillii</i>)	SSC		X		
two-striped gartersnake (<i>Thamnophis hammondi</i>)	SSC		X		
yellow warbler (<i>Dendroica petechia</i>)	SSC				X
oak titmouse (<i>Baeolophus inornatus</i>)	LACWL, BCC				X
golden eagle (<i>Aquila chrysaetos</i>)	FP	X			
turkey vulture (<i>Cathartes aura</i>)	SBL			X	
American peregrine falcon (<i>Falco peregrinus anatum</i>)	FD, SP, FP	X			
least Bell's vireo (<i>Vireo bellii pusillus</i>)	FE, SE		X		
spotted bat (<i>Euderma maculatum</i>)	SSC, WBWG High Priority		X		
western mastiff bat (<i>Eumops perotis californicus</i>)	SSC, WBWG High Priority		X		
western red bat (<i>Lasiurus blossevillii</i>)	SSC, WBWG High Priority		X		
hoary bat (<i>Lasiurus cinereus</i>)	WBWG Moderate Priority		X		
western small-footed myotis (<i>Myotis ciliolabrum</i>)	WBWG Moderate Priority		X		
Yuma myotis (<i>Myotis yumanensis</i>)	WBWG Low Priority		X		
¹ Notes:					
FT = Federally Threatened		SA= State Special Animal			
FP= Fully Protected		SBL = Los Angeles County Sensitive Bird List			
SSC = CDFW Species of Special Concern		WBWG = Western Bat Working Group (2021)			
WL= Watch List		BCC = USFWS Birds of Conservation Concern			

Below is a discussion of the 18 special-status wildlife species present in the Study Area or with a high or moderate potential to occur. The four special-status wildlife species with a low potential to occur are not discussed further. The remaining six special-status species are not expected to occur based on the published ranges of the species, and the type, extent, and condition of habitat available at the Study Area.

Crotch Bumble Bee

The Crotch bumble bee is a state candidate for listing (Endangered) that inhabits grassland and scrub areas, requiring a hotter and drier habitat than many other bumble bee species. This species nests underground, often in abandoned rodent dens. It visits a wide range of host plants and is therefore considered a dietary generalist. There is a high potential for the Crotch bumble bee to occur at the project site, as there is suitable foraging habitat that may contain suitable host plants. Multiple CNDDDB occurrences are located within 5 miles of the Study Area, including one from 2020 approximately 1.45 miles to the north (CDFW 2021a).

Arroyo Chub

Arroyo chub is a CDFW SSC that has moderate potential to occur within the Study Area. This freshwater fish species is most common in slow-flowing streams characterized by a substrate of sand or mud but can also occur in faster-flowing streams with coarse substrate. Spawning generally occurs between February and August. This species has a varied diet that includes algae, aquatic plants, and invertebrates (Calfish 2021). In the Study Area, this species may occur in Malibu Creek. A CNDDDB occurrence of this species from 1975 overlaps with the Study Area (CDFW 2021a), and the presence of suitable habitat was confirmed during field surveys. Therefore, this species has a moderate potential to occur in the Study Area.

Southern California Legless Lizard

Southern California legless lizard is a CDFW SSC. This reptile species is most commonly found in a variety of interior moisture-rich habits, including sandy washes and alluvial fans, including within sandy soils at elevations between 400 and 900 meters in oak woodlands and mixed conifer forests. The species has a diet that primarily consists of larval insects, beetles, termites, and spiders (California Herps 2023). In the Study Area, Southern California legless lizard has a moderate potential to occur within the reaches of Malibu Creek, or within the oak woodlands surrounding the site. According to iNaturalist, one occurrence within 2 miles of the site was recorded in 2022 (iNaturalist 2023).

Coastal Whiptail

Coastal whiptail is a CDFW SSC. This species inhabits deserts and semi-arid areas within sparse vegetation and open areas, woodlands, and riparian areas. The species may occur throughout the Study Area, i.e., in any of the natural vegetation communities. Typically, the breeding period is from May to August (California Herps 2021). The closest CNDDDB occurrence is from 2009 and is located approximately 1.7 miles to the northwest of the Study Area (CDFW 2021a). Therefore, coastal whiptail has a high potential to occur within the Study Area due to the presence of suitable habitat.

San Bernardino Ringneck Snake

San Bernardino ringneck snake is a CDFW Special Animal that inhabits open, relatively rocky areas. It often occurs in relatively moist microhabitats near intermittent streams. The species avoids moving through open or barren areas by restricting movements to areas of surface litter or herbaceous vegetation. San Bernardino ringneck snake may occur within suitable riparian vegetation along Malibu Creek in the Study Area. The only CNDDDB occurrence within 5 miles is from 1999 and is located approximately 1.1 miles to the south. San Bernardino ringneck snake has a high potential to

occur within the Study Area due to the presence of suitable habitat and a close recorded occurrence.

Coast-Horned Lizard

Coast-horned lizard is a CDFW SSC that has a moderate potential to occur within the Study Area. The species inhabits open areas of sandy soil and low vegetation in valleys, foothills and semi-arid mountains. It can be found in grasslands, coniferous forests, woodlands, and chaparral with open areas and patches of loose soil. This lizard has a diet of ants and is often found near ant hills. The Study Area has suitable habitat within the oak woodland and grassland habitats surrounding the project. According to the CNDDDB, there are several occurrences within 5 miles of the Study Area.

Two-Striped Gartersnake

Two-striped gartersnake is a CDFW SSC that has a moderate potential to occur within the Study Area. The species is generally found near water sources such as pools, creeks, cattle tanks, and often rocky areas. It is associated with oak woodland, willow, coastal sage scrub, scrub oak, sparse pine, chaparral, and brushland habitat, but needs a nearby perennial freshwater source. Its diet consists of fish and fish eggs, tadpoles, newt larvae, small frogs and toads, leeches, and earthworms. Malibu Creek and the adjacent riparian vegetation may provide suitable habitat for this species in the Study Area. According to iNaturalist there are several recorded occurrences within 5 miles of the Study Area in the last five years (iNaturalist 2023).

Western Pond Turtle

Western pond turtle is a CDFW SSC with a high potential to occur within the Study Area. The species is highly aquatic and found in or near ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches. Specifically, the species may occur within the riparian woodlands associated with Malibu Creek. The species breeds between March and June (California Herps 2021). In addition, potentially suitable basking sites of grassy open fields are present within the Study Area. There are multiple CNDDDB occurrences recorded within 5 miles of the Study Area, including upstream and on tributaries to Malibu Creek (CDFW 2021a).

Yellow Warbler

Yellow warbler is a CDFW SSC and was observed during the field survey within the Study Area, specifically along the riparian corridor of Malibu Creek. This species breeds in shrubby thickets and woods, along watercourses. Yellow warbler may nest or forage within the riparian habitat in the Study Area. The species breeds from March to August.

Oak Titmouse

Oak titmouse is a species identified on the Watch List by the Audubon Society's Los Angeles County Sensitive Bird List (County Sensitive Species Working Group 2009) and a USFWS Bird of Conservation Concern (BCC). This species was observed throughout the Study Area during the field survey. The species prefers oak woodlands (CDFW 2021a). Specifically, oak titmice may nest or forage within the coast live oak woodland and forest habitat in the Study Area. The species breeds from March to August.

Least Bell's Vireo

Least Bell's vireo is a USFWS federally and state endangered species identified by the Audubon Society's 'Los Angeles County Sensitive Bird List' (County Sensitive Species Working Group 2009). This species is associated with low dense riparian habitat containing willow thickets or other low shrubs. The species is usually found near water but also inhabits thickets along dry intermittent streams, and woodlands with a dense canopy overstory layer. Nests are open-cup and built in dense shrubs along the edge of riparian habitat. This special-status species lives off of a diet of primarily insects and its nesting season is typically April through July (USFWS 2023). The California sycamore – arroyo willow woodlands and perennial Malibu Creek provide suitable habitat for the species. No CNDDDB occurrences, however, have been documented within 5 miles of the study area. This species was documented in two citizen science database records (eBird 2023), one of which is approximately 3 miles north of the Study Area in 2022, and one of which was a banded individual approximately 5 miles southeast in Malibu in 2020. No records have been documented by iNaturalist within 5 miles of the Study Area (iNaturalist 2023). Therefore, the species has a moderate potential to occur in the Study Area.

Turkey Vulture

Turkey vulture is a species identified by the Audubon Society's 'Los Angeles County Sensitive Bird List' (County Sensitive Species Working Group 2009) and was observed soaring approximately 200 feet above the Study Area. The species is widespread over open country, woodlands, deserts, and foothills and nests in sheltered areas such as hollow trees or logs, crevices in cliffs, under rocks, in caves, within dense thickets, or in decrepit infrastructure (Audubon 2021). Specifically, the species may forage throughout the Study Area and nest in riparian and upland woodlands. This species breeds from March through June (Animal Diversity Web 2021).

Spotted Bat

Spotted bat is a WBWG High Priority species with moderate potential to occur in the Study Area. This species has a patchy distribution throughout much of western North America, and can be found foraging in many different habitats, especially large open areas. Spotted bats feed on large flying insects, primarily moths, and generally forage within 10 kilometers (km) (6.2 miles) of their roost. The generally solitary species roost in cracks in cliffs and rocky outcrops (Animal Diversity Web 2021). No suitable roosting habitat is present in the Study Area, though rocky outcrops and cliffs are present within 10 km of the Study Area, therefore the species could forage in the Study Area. The open water, riparian woodlands, and upland mustards in the Study Area may provide suitable foraging habitat. The spotted bat was observed approximately 1.7 miles northwest of the Study Area in 2003, in an area with suitable roosting habitat (CDFW 2021a).

Western Mastiff Bat

Western mastiff bat is a WBWG High Priority species with moderate potential to occur in the Study Area. This species has a patchy distribution in the southwestern U.S. and Central America. Diurnal roosts are generally in crevices in rocky outcrops, cliffs, tall buildings, and tunnels. The western mastiff bat can be found foraging in a variety of habitats including scrublands, grasslands, woodlands, agricultural areas, and open water, at least 24 km (15 miles) from roost locations. This species is an insectivore, and their diets include a wide variety of small flying and flightless insects (Animal Diversity Web 2021). The Study Area does not contain suitable roosting habitat; however, this species may forage over the open water, woodlands, and upland mustards present in the Study

Area. Western mastiff bat has been observed multiple times within 5 miles of the Study Area, including in areas with suitable roosting habitat (CDFW 2021a).

Western Red Bat

Western red bat is a WBWG High Priority species with moderate potential to occur in the Study Area. This species has a wide distribution that spans throughout much of western North America, Central America, South America, and the Caribbean. The western red bat generally occupies solitary roosts in riparian trees and shrubs and feeds on flying insects in rural and urban areas. This species mates in the late summer or early fall, and young are born in the spring (Animal Diversity Web 2021). The Study Area contains potentially suitable roosting habitat in the riparian woodlands along Malibu Creek and potentially suitable foraging habitat in the open water, riparian and upland woodlands, and grasslands. This species has been observed multiple times within 5 miles of the Study Area during acoustic surveys in 2004 (CDFW 2021a).

Hoary Bat

Hoary bat is a WBWG Moderate Priority species with a moderate potential to occur in the Study Area. This is a widespread migratory species that winters in southern California. Solitary roosts are generally in trees with dense leaf coverage over an open area. This species mates in autumn, around the time of their migration. Their diet consists primarily of moths, though other insects are eaten as well (Animal Diversity Web 2021). In the Study Area, suitable roosting habitat is found in California sycamore woodlands and coast live oak woodland and forest, and foraging habitat is throughout the Study Area. The only CNDDDB occurrence within 5 miles of the Study Area is from 2004 and is located approximately 4.8 miles to the northwest (CDFW 2021a).

Western Small-Footed Myotis

Western small-footed myotis is a WBWG Moderate Priority species with a moderate potential to occur in the Study Area. This species roosts primarily on cliff faces and rocky outcroppings, or on human-made structures. This species eats a variety of flying terrestrial insects, and their foraging range is generally restricted to within one kilometer of a water source (Animal Diversity Web 2021). Limited roosting habitat is present in the Study Area; however, nearby rocky cliffs may be utilized. This species may also forage near Malibu Creek. The only CNDDDB occurrence within 5 miles of the Study Area is from 2004 and is located approximately 1.7 miles to the northwest (CDFW 2021a).

Yuma Myotis

Yuma myotis is a WBWG Low Priority species with moderate potential to occur in the Study Area. This species can be found throughout much of western and midwestern North America and Central America. Yuma myotis occupies a variety of habitats, including riparian woodlands and open areas near water. The species roosts in caves and human structures including buildings, mines, and bridges. Yuma myotis is an insectivore which feeds primarily over open water and catches small flying insects (Animal Diversity Web 2021). The Study Area does not contain suitable roosting habitat, however potentially suitable foraging habitat is present in Malibu Creek and the nearby riparian and upland woodlands. This species has been observed multiple times within 5 miles of the Study Area during acoustic surveys in 2004 (CDFW 2021a).

Nesting Birds

Under the provisions of the MBTA, it is unlawful “by any means or manner to pursue, hunt, take, capture (or) kill” any migratory birds except as permitted by regulations issued by USFWS. The term “take” is defined by the USFWS regulation to mean to “pursue, hunt, shoot, wound, kill, trap, capture or collect” any migratory bird or any part, nest, or egg of any migratory bird covered by the conventions, or to attempt those activities. In addition, the CFGC (State of California 2017) extends protection to non-migratory birds identified as resident game birds and any birds in the orders Falconiformes or Strigiformes (birds-of-prey) (CFGC Sections 3500 et seq.). Habitat is present within the Study Area that has the potential to support numerous nesting bird species.

4.2 Sensitive Plant Communities

Four CDFW sensitive natural communities are present in the Study Area: black cottonwood forest and woodland, California sycamore – coast live oak woodlands, California sycamore – arroyo willow woodlands, and creeping ryegrass turfs.

Habitats and trees that meet the County’s protection policies were observed throughout the Study Area and are further discussed below in Section 4.5.

4.3 Jurisdictional Waters and Streambeds

As discussed in Section 3.4 above, the Study Area is located within the Malibu Creek watershed. Malibu Creek flows from north to south through the Study Area with one ephemeral drainage and one ephemeral ditch draining into Malibu Creek.

Rincon regulatory specialists assessed waters, streambeds, and wetlands potentially subject to the USACE pursuant to Section 404 of the Clean Water Act, RWQCB pursuant to Section 401 of the Clean Water Act and the California Water Code (Porter-Cologne Water Quality Control Act), CDFW pursuant to California Fish and Game Code 1600, and the LACDRP under authority of the California Coastal Commission (CCC) per Section 13577(b) of Title 14 of the California Code of Regulations. Results of the research and field visits determined that Malibu Creek is likely subject to USACE, RWQCB, CDFW, and LACDRP jurisdiction, and the ephemeral drainage and ditch are likely subject to RWQCB jurisdiction. Within the Study Area, a total of 0.29 acre (421 lin.ft.) are within USACE jurisdiction, 0.30 acre (743 lin.ft.) are within RWQCB jurisdiction, 1.51 acres (706 lin.ft.) are within CDFW jurisdiction, and 1.51 acres (694 lin.ft.) are within LACDRP protection (Table 4, Figure 8).

Section 5.3 provides a summary of jurisdictional resources that may be impacted by the project activities.

Table 4 Potential Jurisdictional Resources within the Study Area

Jurisdictional Area	USACE		RWQCB		CDFW	CCC/LACDRP
	Non-Wetland Waters of the U.S.	Wetland Waters of the U.S.	Non-wetland Waters of the State	Wetland Waters of the State	CDFW Jurisdictional Streambed	Coastal Wetlands
Malibu Creek	0.29 acre (421 lin.ft.)	–	0.29 acre (454 lin.ft.)	–	1.51 acres (694 lin.ft.)	1.51 acres (694 lin.ft.)
Ephemeral Drainage	–	–	0.01 acre (201 lin.ft.) ¹	–	<0.001 (12)	–

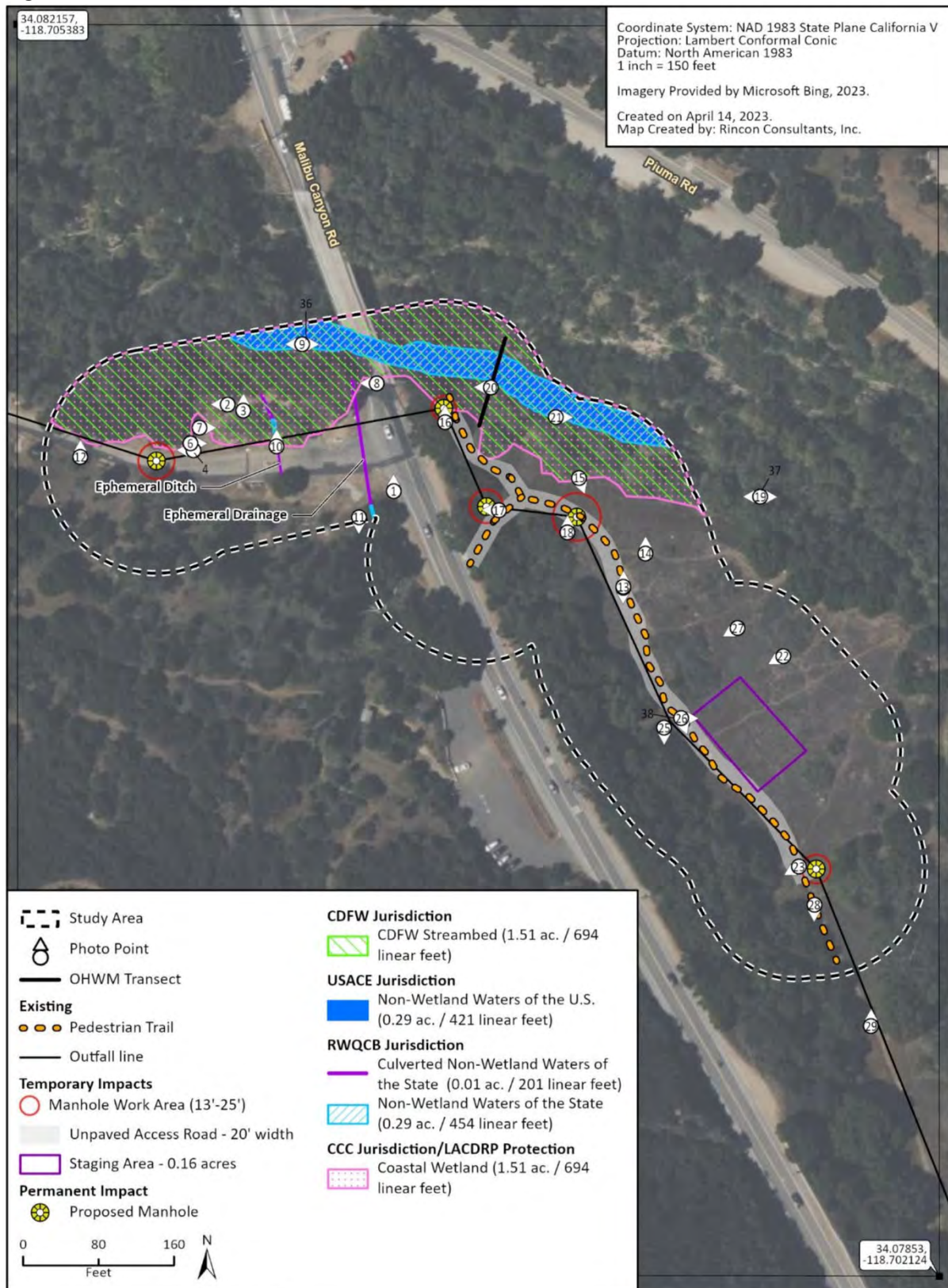
Ephemeral Ditch	—	—	0.003 acre (88 lin.ft.) ²	—	— ³	—
Total	0.29 acre (421 lin.ft.)	—	0.30 acre (743 lin.ft.)	—	1.51 acres (706 lin.ft.)	1.51 acres (694 lin. ft.)

¹ 0.006 acre (134 lin. ft.) of the RWQCB non-wetland waters of the State are culverted.

² 0.002 acre (66 lin. ft.) of the RWQCB non-wetland waters of the State are culverted.

³ Although the ephemeral ditch itself is not a CDFW-jurisdictional streambed, notably, the northern extent of the ditch is located in the CDFW-jurisdictional streambed of Malibu Creek as riparian canopy is present above the ditch.

Figure 8 Jurisdictional Waters



4.4 Wildlife Movement

The Study Area supports localized wildlife movement and contributes to larger scale wildlife movement within the Santa Monica Mountains. The Study Area is located within the Santa Monica Mountains Coastal Zone boundary in an area subject to LCP regulations. The LCP protects wildlife movement throughout the Study Area (County 2018a). The LCP prohibits structures that prevent the movement of wildlife through developed areas to access adjacent open space resources. According to the LCP, development should be designed to avoid wildlife movement corridors to the maximum extent feasible to ensure the areas are left in a natural state.

The Study Area is located within a *Natural Landscape Block* and an *Essential Connectivity Area*, as determined by the California Essential Habitat Connectivity (CEHC). Areas which are determined to be an *Essential Connectivity Area* are defined as large remaining blocks of intact habitat or natural landscape that need to be maintained, particularly as corridors for wildlife (Spencer, et. al. 2010). The Study Area is described by the CEHC as an area that is an irreplaceable and essential corridor, which is a priority species movement corridor.

The *Essential Connectivity Area* which overlaps the Study Area extends from the Santa Monica Mountains northward through the Simi Hills and Santa Susana Mountains to connect to both the Los Padres National Forest in the Santa Ynez Mountains and the Angeles National Forest in the western San Gabriel Mountains. This *Essential Connectivity Area* encompasses approximately 45 square miles in the Santa Monica Mountains and crosses multiple major freeways and urban areas to connect large-scale natural areas. The Study Area is within the Santa Monica Mountains and does not constitute a corridor to natural areas outside the Santa Monica Mountains.

Malibu Creek, the main drainage feature within the Study Area, likely functions as a localized wildlife travel route for common wildlife species and may act as a wildlife movement corridor. In particular, Malibu Creek passes under an elevated portion of Las Virgenes Road, likely providing a valuable wildlife passage. In addition, wildlife likely utilizes the riparian and upland woodlands and open space areas in the Study Area as localized wildlife travel routes. The Study Area is located adjacent to both open space and previously developed areas and roads.

4.5 Resources Protected by Local Policies and Ordinances

The Study Area is under the local jurisdiction of the County of Los Angeles. Special-status resources are protected in accordance with the LCP LIP and LUP (County 2018a, 2018b), and County of Los Angeles Oak Woodlands Conservation Management Plan Guide. Below is a discussion of resources protected by the policies in these programs.

4.5.1 Protected Trees

Pursuant to Section 22.44.1870 of the LCP (County 2018b), all new developments shall be sited and designed to preserve oak, walnut, sycamore, bay, or other individual native trees to the maximum extent feasible. Native trees include those that have at least one trunk measuring a total of 6 inches or more in diameter, or a combination of any two trunks measuring a total of eight inches or more in diameter at breast height. A tree survey has been completed for the project and the findings of this survey documented in the Oak and Native Tree Report included in Appendix F. This report fulfills the oak tree report and native tree report requirements described in the LIP (County 2018b).

Although a 200-foot survey buffer is identified in the LIP (County 2018b), this project does not include development of any occupied structures and therefore no fuel modification zones are required. As a result, the tree survey was limited to the area in which trees may potentially be impacted by the project, that is, the project components and a 25-foot buffer.

Details regarding the locations, measurements, and conditions of the protected trees are provided in the Oak and Native Tree Report prepared by Rincon in April 2023. The Oak and Native Tree Report documents 49 protected trees located within the project site boundaries that includes a 25-foot buffer, and describes their species size, condition, and location (Appendix F). Of the 49 protected trees, 32 are coast live oak trees, two are southern California black walnut trees, seven are California sycamore trees, one is a blue elderberry (*Sambucus nigra* ssp. *cerulea*), one is boxelder maple tree, and six are arroyo willow trees.

4.5.2 Coast Live Oak Woodland

Coast live oak woodland, which is protected by the County Oak Woodlands Conservation Management Plan Guide, is present within the Study Area and is further described in Section 3.2.

4.5.3 Sensitive Environmental Resource Areas

Broad-scale mapping of SERAs are depicted in the County’s Biological Resources Map (County 2018a) and displayed in Figure 9 for reference. This map was consulted and refined mapping of SERAs showing proposed adjustments to habitat designations based on the field survey assessments is presented in Figure 5, and difference in acreages of each habitat type are outlined in Figure 10. Table 5 displays the acreage and percent area for each habitat designation as it appears in the SMM LUP in relation to what was observed during the field assessment.

Table 5 Habitat Mapping Comparison

Habitat Type	SMM LUP Mapped Habitats		Mapping Based on Field Surveys	
	Acreage	Approximate Percent Area	Acreage	Approximate Percent Area
H1 SERA	5.64	87%	3.83	58%
H2 SERA	0.10	1%	0.48	7%
H3	0.78	12%	2.28	35%

H1 habitat consists of areas of highest biological significance, rarity, and sensitivity and include riparian, native oak woodlands, rock outcrop habitat types, wetlands, and sensitive plant and animal species. Development is prohibited in H1 habitat. New development must provide a buffer of 100 feet from H1 habitat where no development is allowed except resource-dependent uses and limited circumstances. The proposed project is considered reconstruction equivalent to maintenance and repair and therefore is an allowable use. The project would not install new infrastructure and would not alter or expand the existing pipeline; rather, the project is considered necessary maintenance and repair of existing infrastructure and would have no effect on the capacity or condition of the existing pipeline or roadways within which the pipeline to be inspected and repaired is located. As a result, no fuel modification is required.

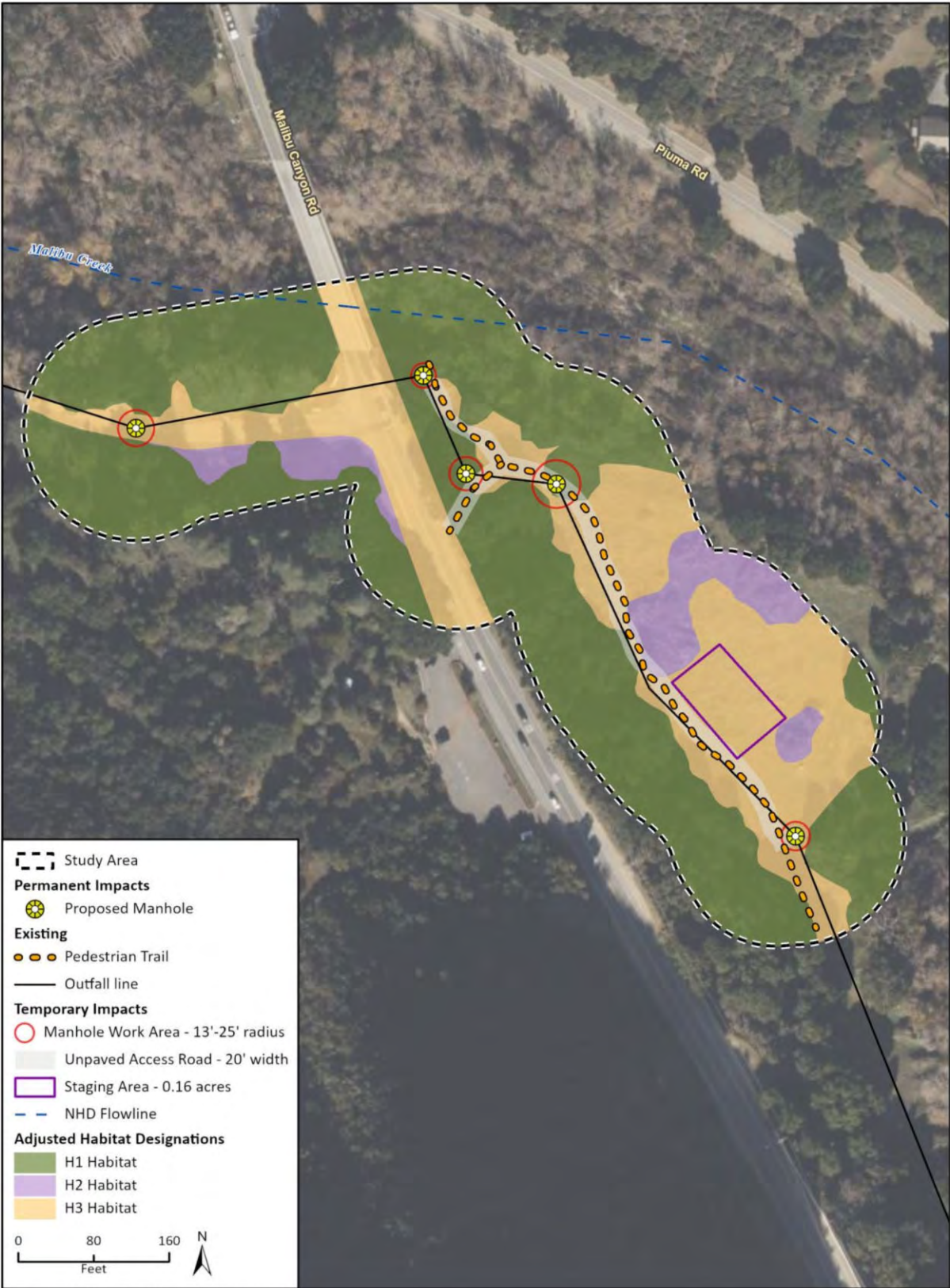
Figure 9 SMM LUP Mapped SERAs in the Study Area



Imagery provided by Microsoft Bing and its licensors © 2023.
Additional data provided by Los Angeles County, 2014.

20-10352 BIO BRA
Fig 8 LUP Bio Resources

Figure 10 Proposed Adjustments to SERAs in the Study Area



Imagery provided by Microsoft Bing and its licensors © 2023.
Additional data provided by Los Angeles County, 2021; USGS, 2021.

20-10352 BIO BRA
Fig 9 Adjust to SERA

New development must avoid H2 habitat, as feasible. H3 habitat consists of areas that would otherwise be designated as H2 habitat, but the native vegetation communities have been significantly disturbed or removed as part of lawfully established development (County 2018b).

Resource-dependent uses are only allowed in H1 and H2 habitats where sited and designed to avoid significant disruption of habitat values, consistent with the policies of the LUP. Resource-dependent uses are those that are dependent on SERAs to function. Resource-dependent uses include nature observation, research/education, habitat restoration, interpretive signage, and passive recreation, including horseback riding, low-impact campgrounds, picnic areas, public accessways, and hiking trails, but excluding trails for motor vehicles as defined by Section 22.44.1920.M of the LIP (Los Angeles County 2018a).

H1 habitat is present throughout the Study Area and consists of native riparian and upland woodlands and a native grassland. The California sycamore – coast live oak woodlands associated with Malibu Creek west of Las Virgenes Road is considered a sensitive natural community (CDFW 2022c) and meets the criteria of H1 habitat as a native riparian woodland. Similarly, the black cottonwood forest and woodlands and California sycamore – arroyo willow woodlands along Malibu Creek east of Las Virgenes Road are sensitive natural communities and H1 habitat. The coast live oak woodland and forest located east of Las Virgenes Road is not a CDFW sensitive community; however, it meets the criteria of H1 habitat as a native oak woodland. Finally, the creeping ryegrass turfs located in the center of the Study Area is a sensitive natural community (CDFW 2022c) and is considered H1 habitat as a native grassland. Coyote brush scrub and wild oat and annual brome grassland with herbaceous natives are classified as H2 habitat.

The remaining wild oats and annual brome grasslands, upland mustards community, and developed areas within the Study Area are consistent with H3 habitat and are not classified as sensitive.

4.5.4 Los Angeles County General Plan

The Los Angeles County General Plan 2035 (County 2015) was adopted on October 6, 2015. The policies in the General Plan cover land use, mobility, air quality, conservation and natural resources, parks and recreation, noise, safety, public services and facilities, and economic development. Biological Resources Policies C/NR 3.1 through 3.7 address protection of biological resources; Policies C/NR 3.8 through 3.11 address Study Area sensitive design in respect to biological resources; and Policies C/NR 4.1 addresses the topic of woodland conservation.

4.5.5 Santa Monica Mountains SEA

The Study Area is located within the Santa Monica Mountains Significant Ecological Area (SEA). The Santa Monica Mountains SEA extends throughout most of the Santa Monica Mountain range. The County describes the Santa Monica Mountains SEA as follows:

Although wildlife movement is hampered by rural development in the SEA, animals are still able to move through the Santa Monica Mountains in many areas. Due to its large size and topographic complexity, many linkages are certain to occur within the SEA at various bottlenecks. These linkages allow movement between large open space areas within the SEA as well as between areas outside the SEA such as the Simi Hills and the western extent of the Santa Monica Mountains in Ventura County. The genetic flow through these areas is crucial in maintaining the diversity and viability of certain species within the Santa Monica Mountains. Open space linkages between Kanan Road and Calabasas Parkway along Highway 101, as indicated by the National Park Service, are of particular importance for continued wildlife

movement, due to the lack of alternative routes and encroachment of development. Although there are significantly large open spaces within the SEA, contiguous habitat linkages between them are critical in reducing bottlenecks and providing for long- term sustainability. (County 2021).

The County defines a SEA as ecologically important or fragile land and water areas that are valuable as plant and animal communities. These areas are classified as one or more of the following:

- Habitats for rare and endangered species of plants and animals
- Restricted natural communities – ecological areas that are scarce on a regional basis
- Habitat restricted in distribution in the county
- Breeding or nesting grounds
- Unusual biotic communities
- Sites with critical wildlife and fish value
- Relatively undisturbed habitat

4.6 Conservation Plans

The Study Area is not subject to any Habitat Conservation Plans, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

5 Impact Analysis and Recommended Measures

This section discusses potential adverse impacts to biological resources that may occur from implementation of the proposed project and suggests potential avoidance, minimization, and mitigation measures that would reduce the project's impacts on biological resources.

5.1 Special-Status Species

5.1.1 Special-Status Plant Species

Two special-status plant species were observed within the survey area during field surveys: southern California black walnut and Fish's milkwort. The Fish's milkwort individuals are outside the impact areas associated with proposed project, and direct impacts to this species due to injury or mortality during construction are not anticipated. Up to 10 percent of impacts to the southern California black walnut's tree protection zone (TPZ) is expected during construction of a manhole, but work activities are not expected to result in mortality of this tree. Indirect impacts could result from habitat modifications by the introduction of invasive plants from construction equipment, contamination of soils, and habitat degradation due to accidental fuel spills during construction.

In addition, there is moderate potential for Plummer's mariposa lily and Lyon's pentachaeta to occur in the Study Area. These species may occur in the California sycamore woodlands, coast live oak woodland and forest, upland mustards, and creeping ryegrass turfs habitat in the Study Area. Should special-status plant species be encountered within the project footprint, direct impacts could occur through injury or mortality to individuals by heavy equipment during construction. Indirect impacts to special-status plant species in the Study Area could result from habitat modifications, such as by the introduction of invasive plants disseminated from construction equipment, contamination of soils, and habitat degradation due to accidental fuel spills during construction. Potential direct and indirect impacts to special-status plants would be reduced to less than significant through adherence to Measures BIO-1 through BIO-3, BIO-5, and BIO-7, which will reduce the likelihood of special-status plants being impacted as described below. Additionally, implementation of Measures BIO-4 and BIO-10 would minimize direct and indirect impacts to these species and provide compensatory mitigation if special-status plants are impacted.

5.1.2 Special-Status Wildlife Species

The proposed project may impact special-status wildlife species if they are present on-site during construction, or through habitat modification.

Direct impacts to fully aquatic species such as arroyo chub would not occur, as ground disturbance will not occur within the water and will be confined to uplands outside of Malibu Creek, beyond the top of bank. Potentially significant indirect impacts to water quality may occur due to sedimentation or erosion during construction. These potential impacts will be reduced to a less than significant level through adherence to Measures BIO-1, BIO-2, and BIO-7, which will minimize indirect impacts to Malibu Creek.

Special-status wildlife species, including Crotch bumble bee, coastal whiptail, San Bernardino-ringneck snake, western pond turtle, coast horned lizard, two-striped gartersnake, southern California legless lizard, spotted bat, western mastiff bat, western red bat, hoary bat, western small-footed myotis, and Yuma myotis, may be impacted if individuals are present during project initiation or at any time during construction activities. However, adherence to Measures BIO-1, BIO-2, BIO-5, BIO-7, and BIO-8 will avoid and/or minimize impacts if these species are present, therefore reducing potential direct and indirect effects to these species to a less than significant level.

The project site contains habitat with the potential to support special-status birds, including federally and state endangered least Bell's vireo, yellow warbler, oak titmouse, turkey vulture, and other resident and migrant passerine species and raptors protected under the CFGC and the MTBA. Although no nests were observed, bird nesting habitat is present in the trees and shrubs occurring in and adjacent to the site, and raptors could nest within the taller trees in the area. Direct impacts to least Bell's vireo could occur from removal of riparian vegetation where the birds could be nesting to allow for equipment access and manhole construction. Impacts, however, are anticipated to be minor, as less than 0.01-acre of California sycamore – arroyo willow vegetation community would be temporarily impacted. Indirect impacts to least Bell's vireo could occur from construction noise, vibrations, and dust adjacent to riparian nesting habitat. The project could also result in direct or indirect impacts to other non-listed special status bird species. Direct impacts may include mortality from vehicle or equipment strikes as foraging birds move through the project site and physical impacts to active nests within vegetation in the project site. Indirect impacts could result from noise, vibrations, and dust from construction activities throughout the project site. Noise, vibrations, and dust can cause birds to flush out of cover and become exposed to predators or vehicle strikes. Adults may not return to nests, predators may feed on eggs or chicks in unprotected nests, or vibrations could cause eggs to fall out of nests. Noise, dust, and vibrations may also cause avian species to leave regular foraging areas that are within and adjacent to the project site. If construction activities occur during the nesting season (generally February 1 to September 15), noise, vibrations, and dust can also cause nest failures. Implementation of Measure BIO-6 would ensure that no potential direct and indirect effects occur to nesting special-status birds, and implementation of BIO-1, BIO-2, BIO-5, and BIO-7 would ensure that impacts are avoided through the duration of construction activities. With the successful implementation of these Measures, impacts to special-status nesting birds would be less than significant.

Impacts to special-status bat species may occur if individuals are roosting within the project site during project activities. Direct project impacts could include the removal of roost trees and mortality or harassment of bats through noise, light, and dust pollution. Indirect impacts could include a degradation of riparian habitat which provides foraging opportunities for special-status bat species. These potential direct and indirect impacts would be reduced to a less than significant level through implementation of Measures BIO-1, BIO-2, BIO-7, and BIO-8, which will reduce the potential for bats to be present in the project area and minimize impacts if these species are present.

5.1.3 Nesting Birds

Birds that are protected in accordance with the CFGC and the MTBA could nest within the Study Area or adjacent areas in native and nonnative habitats, including riparian and upland trees, shrubs, and ground vegetation. Depending on the distance from construction activities, nesting birds could be directly or indirectly affected by project implementation. Noise and human presence may cause disturbance if active nests are within the vicinity of construction and could result in nest failure.

However, adherence to Measure BIO-6 would ensure that no potential direct and indirect effects occur to nesting birds, and implementation of BIO-1, BIO-2, BIO-5, and BIO-7 would ensure that impacts are avoided and/or minimized through the duration of construction activities.

5.1.4 Recommended Avoidance and Minimization Measures

BIO-1 Worker Environmental Awareness Program

Prior to initiation of all construction activities (including staging and mobilization), all personnel associated with project construction shall attend a Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist, to assist workers in recognizing special-status biological resources with the potential to occur in the project site. This training will include information about all special-status species determined to be present or to have a moderate or high potential to occur on-site. Training will also address protected nesting birds, special-status plants, sensitive natural communities, SERAs, resources protected by local policies, as well as other special-status species potentially occurring on the project site.

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

BIO-2 General Best Management Practices

General requirements which shall be followed by construction personnel are listed below.

- No project construction, activities, and equipment staging shall occur within the bed and banks of the stream channel. Any work, including operation of loaders, dozers, drilling rigs, cranes, and vehicles, that occurs within 30 feet from the top of stream banks will be minimized to the extent practicable to reduce impacts to special-status wildlife species that may occur within the riparian habitat. Only work that is required to occur within this buffer (e.g., construction of manholes) may be performed. Fencing and signage shall be installed 30 feet from the stream banks to exclude entry into the stream channel for the duration of the project. Fencing and signage shall not be moved (except to facilitate work that is required to occur within 30 feet of the stream banks) and must be maintained for the duration of the project. The contractor shall advise all workers of the intent of the protection measures prior to the start of project construction and activities. No living native vegetation shall be removed from the channel, bed, or banks of Malibu Creek.
- Project-related vehicles shall observe a 5-mile-per-hour speed limit within the unpaved limits of construction.
- All open trenches shall be fenced and sloped to prevent entrapment of wildlife species.

- All hollow posts and pipes shall be capped, and metal fence stakes shall be plugged with bolts or other plugging materials to prevent wildlife entrapment and mortality.
- All food-related trash items such as wrappers, cans, bottles, and food scraps generated during proposed project construction shall be disposed of in closed containers and removed daily from the project site.
- No deliberate feeding of wildlife shall be allowed.
- No pets shall be allowed on the project site.
- No firearms shall be allowed on the project site.
- If vehicle or equipment maintenance is necessary, it shall be performed in the designated staging areas.
- During construction, heavy equipment shall be operated in accordance with standard Best Management Practices (BMPs). All equipment used on-site shall be properly maintained to avoid leaks of oil, fuel, or residues. The contractor shall prevent oil, petroleum products, or any other pollutants from contaminating the soil or entering a watercourse (dry or otherwise). When vehicles or equipment are stationary, mats or drip pans shall be placed below vehicles to contain fluid leaks. Provisions shall be in place to remediate any accidental spills.
- No changing of oil or other fluids or discarding of any trash or other construction waste materials shall occur on the project Site. Vehicles carrying supplies, such as concrete, shall not be allowed to empty, clean out, or otherwise place materials into natural areas on or immediately adjacent to the site.
- Refueling of any equipment shall only occur in designated staging areas. Designated areas shall not be located near any storm drain inlets, drainage swales, or surface waterways. When refueling gas powered equipment or mixing herbicide, workers shall refuel or mix over drip pan which is appropriately sized to catch any spillage. The designated refueling area shall be inspected frequently to ensure no spill of hazardous materials have occurred and could contaminate the ground or water. The Contractor shall advise workers to clean and report spills immediately.
- Materials shall be stored on impervious surfaces or plastic ground covers to prevent any spills or leakage and shall be at least 50 feet from drainage features. Construction materials and spoils shall be protected from stormwater runoff using temporary perimeter sediment barriers such as berms, silt fences, fiber rolls, covers, sand/gravel bags, and straw bale barriers, as appropriate.
- While encounters with special-status-species are not anticipated, any worker who inadvertently injures or kills a special-status species or finds one dead, injured, or entrapped shall immediately report the incident to the construction foreman or biological monitor. The construction foreman or biological monitor shall immediately notify the JPA. The JPA shall follow up with written notification to LACDRP, USFWS and/or CDFW within five working days of the incident, as appropriate. All observations of special-status species shall be recorded on CNDDDB field sheets and sent to CDFW by the JPA or the biological monitor.
- Before starting or moving construction vehicles, especially after a few days of nonoperation, operators shall inspect under all vehicles to avoid impacts to any wildlife that may have sought refuge under equipment. All large building materials and pieces (e.g., sections of the bridge) with crevices where wildlife can potentially hide shall be inspected before moving. If wildlife is detected, a qualified biologist shall move wildlife out of harm's way or temporarily stop activities until the animal leaves the area.

- The construction contractor shall install temporary erosion control measures to reduce impacts to and protect on site drainages from excess sedimentation, siltation, and erosion. These measures shall consist of minimization of existing vegetation removal; the use of temporary soil covers, such as hydroseeding with native species, mulch/binder and erosion control blankets to protect exposed soil from wind and rain erosion; and/or the installation of silt fencing, berms, and dikes to protect storm drain inlets and drainages.
- Gas-powered vehicles and equipment shall not be left idling or operated beyond periods needed to accomplish approved tasks.
- Standard dust control measures of the South Coast Air Quality Management District shall be implemented to reduce impacts on nearby plants and wildlife. This includes a variety of options to reduce dust including replacing ground cover in disturbed areas as quickly as possible, watering active sites regularly, and suspending all excavating and grading operations during periods of high winds.
- Upon completion of construction, the contractor shall be held responsible for restoring any access roads or staging areas that are outside of approved grading limits. This restoration shall be done in consultation with the project biologist.

BIO-3 Blooming Season Protocol Rare Plant Survey

Blooming season protocol rare plant surveys shall be conducted for Plummer's mariposa lily (May-July) and Lyon's pentachaeta (March-August) to determine the presence/absence of these species. The rare plant survey shall also target Malibu baccharis (August), Plummer's baccharis (May-October), Catalina mariposa lily (March-June). Reference sites must be visited to document if target species are detectable prior to site surveys. Valid botanical surveys will be considered current for up to five years; if construction has not commenced within three years of the most recent survey, botanical surveys must be repeated. Plants that are not within the immediate disturbance footprint but are located within 50 feet of disturbance limits will be flagged and fenced off by a qualified biologist before construction activities start, to avoid impacts. If avoidance is not feasible, impacts must be offset through implementation of a restoration plan.

BIO-4 Special-Status Plant Species and Sensitive Community Restoration Plan

Permanent removal of H1 habitat (California sycamore – coast live oak woodlands, California sycamore – arroyo willow woodlands, coast live oak woodland and forest, black cottonwood forest and woodland, and creeping ryegrass turfs) shall be mitigated in accordance with LCP current in-lieu fee schedule for restoration. A restoration plan consistent with County LIP requirements shall be prepared to mitigate impacts to special-status plant species and sensitive communities. The LIP (County 2018b) states that:

- Mitigation for unavoidable permanent impacts to H1 Habitat for one of the non-resource dependent uses allowed by this LCP shall be provided, at a minimum, through the restoration and/or enhancement of like habitat type, at the ratio of 4:1 (acres of restored habitat to each acre of impacted H1 Habitat) for wetland habitat, or the ratio of 3:1 (acres of restored habitat to each acre of impacted H1 Habitat) for all other H1 Habitat types. Priority shall be given to on-site restoration or enhancement, unless there is not sufficient area of disturbed habitat on the project site, in which case off-site mitigation may be allowed. The County shall coordinate with other public agencies and/or qualified non-profit land preservation organizations to establish priorities for offsite restoration and enhancement efforts, where appropriate, for proposed development projects lacking adequate on-site mitigation opportunities.

- If the restoration site is off-site, written evidence that the property owner has irrevocably agreed to allow the restoration work, maintenance and monitoring required by this condition and not to disturb any native vegetation in the restoration area. The area of habitat to be restored shall be permanently preserved through the recordation of an open space deed restriction that applies to the entire restored area. The open space deed restriction shall be recorded free of prior encumbrances other than tax liens, prior to issuance of a Coastal Development Permit (CDP).

To minimize impacts to special-status plants and sensitive communities that may occur in the temporary impact areas, the project should implement topsoil and native vegetation salvage, recontour the land to existing conditions after construction, and re-vegetate using native seeds, as described below.

REMOVAL OF NON-NATIVE SPECIES

Areas of temporary disturbance shall be treated to remove non-native plant species, including invasive plant species, and limit their seed production prior to initiating any earthmoving activity. This shall be completed with the objectives of (1) preventing invasive species from spreading from the disturbance area, and (2) removing weed sources from the salvaged topsoil. The treatment will be completed in advance of the earthmoving for this mitigation to have its intended effect (e.g., the treatment would need to occur prior to target species setting seed). Non-native plants shall be removed primarily using hand removal methods, e.g., hand-held weed whips, loppers, and hoes. If hand removal is not feasible due to the characteristics of the species, such as resistance to hand removal methods, the size of the plants, or the number of plants, perennial invasive non-native species may be treated with herbicides. Herbicide application shall be limited to the smallest extent possible while maintaining effectiveness. Only individual plants shall be treated; no blanket spraying efforts shall be allowed. If herbicide is applied, it shall be applied during dry and low wind conditions when no rain is predicted within a week to prevent conveyance of herbicide into drainages or other non-targeted areas. Herbicide application must be performed by a licensed applicator that can identify the species to be treated and is experienced in the handling and application of herbicides. Herbicides must only be allowed under permit and property conditions. Herbicide use may require notification to the JPA or resource agencies. Only herbicides approved for use near or in water, such as AquaMaster™ or equivalent, shall be used if necessary. Large vegetation with potential to contain bird nests shall not be removed during the breeding bird season (February 1 to September 15) unless a qualified biologist determines that it does not contain active bird nests.

SALVAGE OF NATIVE VEGETATION

After removal of non-native species, the temporary impact areas shall be cleared of vegetation using a bulldozer or scraper as necessary. Tree canopies shall be avoided to the extent practicable. Native plant material shall be crushed and stockpiled for later use in re-vegetation. Plant material shall not be segregated based on plant community. The stockpile(s) shall be covered to prevent loss due to erosion and invasion by non-native plants. Stockpile coverings shall be a natural permeable material such as burlap or jute netting to protect the plant material without solarizing or otherwise damaging the seedbank and propagules. Alternatively, the stockpile(s) may be stored indoors within a warehouse.

SALVAGE OF TOPSOIL

In areas where soil will be disturbed by project activities, the topsoil shall be salvaged and then replaced after disturbance activities are complete. Salvage, storage, and replacement of the topsoil shall be the responsibility of the Contractor, under supervision of a biological monitor. Topsoil salvage may be accomplished using two lifts, the first to remove the upper layer of soil containing the seed bank, and the second to remove the lower layer containing soil biota in the root zone. The depth of topsoil removed shall be determined by the biological monitor based on local soil and vegetation characteristics; however, it is estimated that approximately 6 to 12 inches may be salvaged in two lifts. The two soil layers shall be stockpiled in two areas inside the temporary disturbance footprint and labeled to identify it as containing either the upper or lower layer of topsoil. Stockpiles shall be covered to prevent loss of soil, plant propagules, etc. due to erosion and invasion by non-native plants. Stockpile coverings shall be a natural permeable material such as burlap or jute netting to protect the soil without solarizing or otherwise damaging the seedbank.

SOURCE OF SEEDS

Plant seeds shall be collected by a qualified native nursery contractor, with oversight by a Restoration Specialist. To preserve the integrity of local gene pools, ensure adaptation to site-specific conditions, and avoid inadvertent introduction of inappropriate species or pathogens, seeds used for revegetation shall be collected primarily from the Study Area, or within the Cold Creek-Malibu Creek Subwatershed. If sufficient seeds cannot be collected from these areas alone, plant stock from within the Malibu Creek Watershed may also be acceptable. All plant species to be installed within potentially jurisdictional riparian communities shall be California native plants and under no circumstances shall non-native plants be installed. All seeds obtained from the native plant nursery shall be free of any pests or pathogens.

More specific areas for collection of native plant materials will be defined in the field, considering the following:

- Ecological similarity of the area to the Study Area
- Proximity to the Study Area
- Land ownership
- Accessibility
- Abundance and availability of target species
- Need to ensure genetic diversity of source material (i.e., seed shall be collected from a diverse sample of the parent plants within the collection zone)

See Table 6 for a proposed planting palette. Species found within the Study Area, or species native to the region that are characteristic of the vegetation community, but are not included on the plant palette below, may also be used as substitutes as determined by the Restoration Specialist. The final mix will be determined by source availability.

Table 6 Proposed Seeding Palette

Scientific Name	Common Name	Life Form
California Sycamore – Arroyo Willow Woodlands		
<i>Artemisia douglasiana</i>	California mugwort	herb
<i>Baccharis salicifolia</i> ssp. <i>salicifolia</i>	mulefat	herb
<i>Bromus sitchensis</i> var. <i>carinatus</i>	California brome	herb/grass
<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	golden yarrow	herb
<i>Koeleria macrantha</i>	June grass	herb/grass
<i>Lupinus succulentus</i>	succulent lupine	herb
<i>Melica imperfecta</i>	small flowered melica	herb/grass
<i>Phacelia ramosissima</i>	branching phacelia	herb
<i>Rosa californica</i>	California wild rose	shrub
<i>Rubus ursinus</i>	California blackberry	vine
<i>Salix lasiolepis</i>	arroyo willow	shrub/tree
<i>Sambucus nigra</i> ssp. <i>caerulea</i>	blue elderberry	tree
<i>Solanum americanum</i>	common nightshade	herb
<i>Stachys bullata</i>	California hedgenettle	herb
<i>Trifolium ciliolatum</i>	foothill clover	herb
Coast Live Oak Woodland and Forest		
<i>Bromus sitchensis</i> var. <i>carinatus</i>	California brome	herb/grass
<i>Eriogonum elongatum</i> var. <i>elongatum</i>	long stemmed buckwheat	herb
<i>Koeleria macrantha</i>	June grass	herb/grass
<i>Lupinus succulentus</i>	succulent lupine	herb
<i>Phacelia ramosissima</i>	branching phacelia	herb
<i>Prunus ilicifolia</i> ssp. <i>ilicifolia</i>	holly leaf cherry	shrub
<i>Pseudognaphalium californicum</i>	ladies' tobacco	herb
<i>Quercus agrifolia</i>	coast live oak	tree
<i>Rosa californica</i>	California wild rose	shrub
<i>Rubus ursinus</i>	California blackberry	vine
<i>Salvia leucophylla</i>	purple sage	shrub
<i>Salvia mellifera</i>	black sage	shrub
<i>Solanum americanum</i>	common nightshade	herb
<i>Stachys bullata</i>	California hedgenettle	herb
<i>Trifolium ciliolatum</i>	foothill clover	herb
Creeping Ryegrass Turfs		
<i>Elymus triticoides</i>	creeping wild rye	herb/grass

Scientific Name	Common Name	Life Form
Upland Mustards		
<i>Acmispon americanus</i> var. <i>americanus</i>	American bird's foot trefoil	herb
<i>Artemisia douglasiana</i>	California mugwort	herb
<i>Baccharis pilularis</i> ssp. <i>consanguinea</i>	coyote brush	shrub
<i>Bromus sitchensis</i> var. <i>carinatus</i>	California brome	herb/grass
<i>Corethrogyne filaginifolia</i>	California aster	herb
<i>Elymus condensatus</i>	giant wild rye	herb/grass
<i>Elymus triticoides</i>	creeping wild rye	herb/grass
<i>Eriogonum elongatum</i> var. <i>elongatum</i>	long stemmed buckwheat	herb
<i>Eschscholzia californica</i>	California poppy	herb
<i>Hazardia squarrosa</i>	sawtooth goldenbush	shrub
<i>Madia elegans</i>	common madia	herb
<i>Salvia leucophylla</i>	purple sage	shrub
<i>Salvia mellifera</i>	black sage	shrub

POST-PROJECT RESTORATION

Topsoil will be replaced in the proper layers after final reconfiguration of disturbed areas. The soil will be replaced in a manner that replicates the original contours of the land and does not block or divert the flow of water from its pre-existing flow paths.

The salvaged and stockpiled native vegetative mulch will be spread within the disturbed area to allow seeds and propagules to become established naturally. No soil amendments will be applied. Mulch will be incorporated into the top six inches of soil with hand tools to improve the integration of mulch and native plant propagules into the soil.

Seeds will be installed via hand-seeding in the temporarily impacted areas. Each seeded area will be immediately watered by hand with a water truck or similar set up as conditions allow. The Restoration Specialist shall oversee the contractor during site installation activities. Long-term irrigation and weeding will not be required.

BIO-5 Pre-Activity Surveys

No more than two weeks prior to initiation of each phase of ground disturbance and vegetation removal, a qualified biologist shall conduct a pre-construction survey for potential rare, listed, or other special-status wildlife species. Should a special-status species be located on the project site during pre-activity surveys all individuals shall be flagged or relocated, with the concurrence of the LACDRP, USFWS, and/or CDFW, as appropriate, to an approved site with suitable habitat.

BIO-6 Nesting Bird Surveys

If feasible, removal of vegetation within suitable nesting bird habitats will be scheduled to occur in the fall and winter (between September 1 and February 14), after fledging and before the initiation of the nesting season. If construction activities must occur during the nesting season (generally February 1 to September 15), surveys for nesting birds covered by the CFGC and the MBTA shall be conducted by a qualified biologist no more than 14 days prior to vegetation removal for each phase

of the project. The surveys shall include the disturbance area plus a 500-foot buffer around the site, or to the topographic divide where substantial topography is present in the buffer. If active nests are located, all construction work shall be conducted outside a buffer zone from the nest to be determined by a qualified biologist. The buffer shall be a minimum of 50 feet for non-raptor bird species and at least 300 feet for raptor species. Larger buffers may be required depending upon the status of the nest and the construction activities occurring in the vicinity of the nest. The buffer area(s) shall be closed to construction personnel and equipment until the adults and young are no longer reliant on the nest site. A qualified biologist shall confirm that breeding/nesting is completed, and young have fledged the nest prior to removal of the buffer. If buffer zones are determined to be infeasible, a full-time qualified biological monitor must be onsite to monitor construction within the buffer zones to ensure active nests and nesting birds are not impacted.

Active nests shall be monitored at a minimum of once per week until it has been determined that the nest is no longer being used by either the young or adults. If Project activities must occur within the buffer, they shall be conducted at the discretion of a qualified biologist. If no nesting birds are observed during pre-construction surveys, no further actions would be necessary. If least Bell's vireo or other listed species is identified in the work area, work must be halted and USFWS and/or CDFW must be contacted for additional avoidance and minimization measure guidance. Pre-construction nesting bird and raptor surveys should be conducted during the time of day when birds are active and should be of sufficient duration to reliably conclude presence/absence of nesting birds and raptors onsite and within the designated vicinity.

In addition, if construction must occur within the bird breeding season, low-noise construction equipment shall be used whenever possible to reduce the amount of noise generated during construction activities within 100 feet from the limits of riparian habitat. Low-noise equipment would reduce noise to less than 60dB hourly average or to ambient noise levels. If sound levels exceed 60dB hourly average or ambient noise levels, sound mitigation measures such as sound shields, blankets around smaller equipment, use of mufflers, and minimizing the use of back-up alarms shall be employed (as feasible). If these sound mitigation measures do not reduce noise levels, work activities shall cease and shall not recommence until either new sound mitigation can be employed.

BIO-7 Construction Monitor

A biologist shall be retained by the JPA as a construction monitor to ensure that incidental construction impacts on retained biological resources are avoided or minimized. Responsibilities of the construction monitor shall include the following:

- Attend all pre-grading meetings to ensure that the timing and location of construction activities do not conflict with mitigation requirements.
- Conduct meetings with the contractor and other key construction personnel, describing the importance of restricting work to within the project boundaries and outside of the preserved areas. The monitor shall also work with the contractor to determine the most appropriate staging/storage areas for equipment and materials.
- Guide the contractor in marking/flagging the construction area limits, in accordance with the final approved grading plan.
- Periodically and routinely visit the site during construction to coordinate and monitor compliance with the above provisions.

BIO-8 Bat Surveys and Protection

The presence or absence of any bat roosts shall be confirmed prior to the initiation of project activities. A qualified bat specialist shall conduct bat surveys within the project site and within a 100-foot buffer, as feasible, to identify potential habitat that could provide daytime and/or nighttime roost sites, and any maternity roosts. Acoustic recognition technology shall be used to maximize detection of bats. Night roosts are typically utilized from the approach of sunset until sunrise. Maternity colonies, composed of adult females and their young, typically occur from spring through fall.

If bats are not detected, but the bat specialist determines that roosting bats may be present at any time of year and could roost in trees, trees planned for removal shall be pushed down using heavy machinery rather than felling it with a chainsaw. To optimize the warning for any roosting bats that may still be present, trees shall be pushed lightly two to three times, with a pause of approximately 30 seconds between each nudge to allow bats to become active. The tree shall be initially pushed slowly to allow roosting bats to escape. After a suitable bat roosting tree is felled, it shall remain in place until it is inspected by a bat specialist. Trees that are confirmed to be bat roosts shall not be bucked or mulched immediately, instead, a period of at least 24 hours, and preferably 48 hours, shall elapse prior to such operations to allow bats to escape.

If maternity roosts are found, to the extent feasible, work shall be scheduled between October 1 and February 28, outside of the maternity roosting season when young bats are present but are not yet ready to fly out of the roost (March 1 to September 30).

If maternity roosts are found and trees must be removed during the maternity season, a qualified bat specialist shall conduct a preconstruction survey to identify those trees proposed for disturbance that could provide hibernacula or nursery colony roosting habitat. Acoustic recognition technology shall be used to maximize detection of bats. Each tree identified as potentially supporting an active maternity roost shall be closely inspected by the bat specialist no more than seven days prior to tree disturbance to determine the presence or absence of roosting bats more precisely. If maternity roosts are detected, trees determined to be maternity roosts shall be left in place until the end of the maternity season. Work shall not occur within 100 feet of an active roost and construction shall not occur between 30 minutes before sunset and 30 minutes after sunrise.

5.2 Sensitive Plant Communities

CDFW sensitive natural communities are present within the Study Area: California sycamore – coast live oak woodlands, California sycamore – arroyo willow woodlands, black cottonwood forest and woodland, and creeping ryegrass turfs (Figure 5) and are expected to be directly impacted by project activities, as shown in Table 7.

In addition, excavation, ground clearing, equipment and materials storage, access routes, and other activities could result in indirect impacts on runoff and/or water quality, potentially affecting these sensitive natural communities. For example, excavation, ground clearing, and access routes could result in air quality impacts (dust, exhaust) that could affect adjacent sensitive communities. Equipment or construction-related traffic could introduce hazardous materials or harmful, noxious, and/or invasive species that could damage habitats (such as by tracking in weed seeds). Any of these effects could result in significant impacts on the black cottonwood forest and woodland, California sycamore – coast live oak woodlands, California sycamore – arroyo willow woodlands, and creeping ryegrass turfs in the Study Area. Implementing BMPs and invasive species control would reduce the

potential for substantial adverse effects on the adjacent sensitive communities by avoiding and minimizing indirect impacts. These potential direct and indirect impacts will be reduced to a less than significant level through adherence to Measures BIO-1, BIO-2, BIO-7, BIO-9, and BIO-10, which will reduce the degree of impacts, and Measure BIO-4, which includes compensatory mitigation for temporary and permanent impacts to sensitive natural communities.

Potential project-related impacts to CDFW jurisdictional riparian habitat are discussed in Section 5.3 and potential impacts to SERAs are discussed in Section 5.5 below.

Table 7 provides a summary of approximate plant community acreage occurring within the project impact areas.

Table 7 Permanent and Temporary Impacts to Vegetation and Land Cover Types

Habitat Type	Permanent Impacts (acre [sq. ft.])	Temporary Impacts (acre [sq. ft.])	CDFW Sensitive Status (Yes/No) ¹	LIP Designations ²
Black cottonwood forest and woodland	0	0	Yes	H1 Habitat
California sycamore – coast live oak woodlands	0	0.0013 (57)	Yes	H1 Habitat
California sycamore – arroyo willow woodlands	0	0.0062 (270)	Yes	H1 Habitat
Coast live oak woodland and forest	0	0.0669 (2,914)	No	H1 Habitat
Coyote brush scrub	0	0.0135 (588)	No	H2 Habitat
Creeping ryegrass turfs	0.0002 (7)	0.0300 (1,307)	Yes	H1 Habitat
Developed	N/A	N/A	No	N/A
Upland mustards	0	0.371 (16,161)	No	H3 Habitat
Wild oats and annual brome grasslands	0.0002 acre (7)	0.0667 (2,906)	No	H3 Habitat
Total	0.0004 (14)	0.5556 (24,203)	–	–

¹ Based on CDFW Sensitive Natural Communities List (CDFW 2022c).

² Based on vegetation alliances pursuant to the LIP (County 2018a).

Recommended Avoidance and Minimization Measures

BIO-9 Sensitive Community Avoidance

California sycamore – coast live oak woodlands, California sycamore – arroyo willow woodlands, and creeping ryegrass turfs shall be avoided to the extent feasible. CDFW sensitive natural communities not within the immediate disturbance footprint but located within 50 feet of disturbance limits shall be flagged and fenced off by a qualified biologist before construction activities start, to avoid impacts. Where avoidance is not feasible, impacts shall be offset through implementation of a restoration plan (BIO-4).

BIO-10 Protection Against Spread of Non-Native Seeds and Pathogens

Prior to entering the project site, workers shall inspect their clothing, including shoes, all vehicles, and equipment for invasive plant seeds or plant parts. The undercarriage and tires of loaders, dozers, drilling rigs, cranes, and vehicles, power tools, and other equipment, shall be power washed and clean from any seeds, pathogens, and mud before entering the project site for the first time. All soil and fill material shall be inspected and determined free of any invasive plant seed prior to leaving the facility where the material is coming from. Any straw, wood, or other mulch shall be purchased from a certified weed-free vendor.

Excavated soil containing non-native plants shall be stored in a previously disturbed area or staging area at least 50 feet from potentially jurisdictional features. Any soil contaminated by non-native species shall be placed at the bottom of the trench or spoils pile to reduce the spread of non-native

species. Pruning and power tools shall be cleaned and disinfected before use on site to prevent introducing pathogens, and after use to prevent spread of pathogens to new areas.

5.3 Jurisdictional Waters and Wetlands

Potential jurisdictional waters are present within the Study Area (Figure 8) and may be directly and indirectly impacted by project activities. Potentially jurisdictional waters include a perennial waterway (Malibu Creek), an ephemeral drainage, and an ephemeral ditch. Table 8 shows the extent of proposed impacts within potential resource agency jurisdiction. Table 9 shows the extent of proposed temporary and permanent impacts to vegetation communities within potential resource agency jurisdiction.

Table 8 Anticipated Impacts to Potentially Jurisdictional Areas

Jurisdictional Area	USACE		RWQCB		CDFW	CCC/LACDRP
	Non-Wetland Waters of the U.S. (acres [lin. ft.])	Wetland Waters of the U.S. (acres [lin. ft.])	Non-wetland Waters of the State (acres [lin. ft.])	Wetland Waters of the State (acres [lin. ft.])	CDFW Jurisdictional Streambed (acres [lin. ft.])	Coastal Wetlands (acres [lin. ft.])
Permanent	0 (0)	0 (0)	0 (0)	0 (0)	0.0001 (3)	0.0001 (3)
Temporary	0 (0)	0 (0)	0 (0)	0 (0)	0.002 (37)	0.002 (37)

Table 9 Anticipated Impacts to Vegetation Communities within Potentially Jurisdictional Areas

Impact Type	California Sycamore – Arroyo Willow Woodlands (acres [sq. ft.])	
	California Sycamore – Coast Live Oak Woodlands	California Sycamore – Arroyo Willow Woodlands (acres [sq. ft.])
Permanent	0 (0)	0 (0)
Temporary	0 (0)	0.0062 (270)

All temporary and permanent impacts are located outside the top of bank of potentially jurisdictional features. Permanent impacts are limited to the footprint of the one 3-ft diameter circular manhole located within potentially CDFW and LACDRP jurisdictional riparian habitat.

Temporary impacts to potentially jurisdictional riparian vegetation will be limited to trimming of riparian tree canopies, removal of ground vegetation, soil compaction, and excavation to facilitate the construction of manholes along the 003 outfall pipeline. Impacts to protected riparian trees are expected to consist of the trimming of branches near manhole locations, the severing of root tips during manhole construction, and/or insignificant compaction from vehicle access for maintenance of the pipeline.

These expected impacts to potentially jurisdictional CDFW riparian vegetation may require a Streambed Alteration Agreement, which shall be obtained prior to ground disturbance or issuance of a grading permit. In addition, adherence to Measures BIO-1, BIO-2, BIO-7, BIO-9, and BIO-10 would reduce potential direct impacts to a less than significant level by minimizing the degree of impacts, and BIO-4, which would provide compensatory mitigation for temporary impacts to CDFW riparian habitat.

In the Study Area, Malibu Creek may be impacted by means of indirect effects (e.g., increased turbidity, altered pH, decreased dissolved oxygen levels, etc.) after a rain event. In addition, if

groundwater is encountered during excavation, dewatering may be necessary. This could lower the water table in the project site and potentially result in increased drought stress on nearby vegetation. Moreover, this could cause a decline in the health of riparian and upland vegetation adjacent to the project site. Adherence to Measures BIO-1, BIO-2, BIO-7, BIO-9, and BIO-10 (and adherence to agency permits and existing regulations) would reduce potential indirect impacts to jurisdictional waters to a less than significant level.

5.4 Wildlife Movement

The proposed project is located within a *Natural Landscape Block* and an *Essential Connectivity Area*, and the portion of Malibu Creek in the Study Area is likely utilized as a local wildlife movement passage under Las Virgenes Road. Wildlife is expected to utilize the riparian corridor associated with Malibu Creek and the adjacent upland habitats.

No alterations will be made in the creek channel and once installed, the manholes are not expected to impede wildlife movement. Wildlife movement may be temporarily disrupted due to construction activities (e.g., noise, light, dust, human presence). Wildlife present in the project site during construction may become entrapped or crushed. In addition, the long-term maintenance of the manholes may necessitate increased human presence in the area which may negatively impact wildlife movement in the area for species active in daylight hours. Implementation of Measures BIO-1, BIO-2, BIO-8, and BIO-11 will reduce the potential for wildlife to be trapped or otherwise adversely affected, therefore reducing the potential impacts to wildlife movement to a less than significant than significant level.

Avoidance, Minimization and Mitigation Measures

BIO-11 Protection Against Impacts to Wildlife Movement

- Work shall be limited to daylight hours. The project shall avoid non-essential lighting and artificial lighting. Any artificial lighting shall be of the lowest illumination, be selectively placed, and shielded and directed downward to minimize light spillage into the adjacent natural habitats.
- Gates, walls, fences, barriers, or other structures that prevent the movement of wildlife through developed areas to access adjacent open space resources shall be avoided, as feasible.
- If gates are necessary, the gates shall be wildlife-permeable and shall only be constructed on roads or driveways that provide access to the development on the parcel.
- Development shall avoid all known wildlife movement corridors, as feasible.
- If development must occur in known wildlife movement corridors, the development shall not be blocking wildlife 'chokepoints' (within Malibu Creek) and shall allow wildlife to pass through these areas.
- Roads, vehicle access routes, and fencing shall avoid impacts to wildlife movement corridors, if feasible. If road, vehicle access routes, and fencing must occur in wildlife movement corridors, the development footprint shall be the minimized to the smallest extent feasible and the development shall avoid blocking 'chokepoints' within wildlife movement corridors.

5.5 Resources Protected by Local Policies and Ordinances

Native trees, protected SERAs, and CDFW jurisdictional riparian habitat are present within the Study Area and may be directly or indirectly impacted by project activities.

Protected Trees

A total of 49 protected trees have been documented within 25 feet of the project components, consisting of 32 coast live oak trees, two southern California black walnut trees, seven California sycamore trees, one blue elderberry, one boxelder maple tree, and six arroyo willow trees. According to the 2023 Oak and Native Tree Report (Appendix E), 13 trees are expected to require mitigation due to an encroachment of the tree protection zone (TPZ) of more than 10 percent. The SMM LIP defines the TPZ as the dripline plus five feet, or 15 feet from the trunk, whichever is greater (County 2018b). One protected coast live oak tree is expected to be sustain impacts of greater than 30 percent due to manhole construction and vehicle use on unpaved roadways, 12 trees are anticipated to have impacts between 10 and 30 percent, and five trees are expected to have less than 10 percent encroachment of their TPZs impacted by the project. The remaining 31 trees are not anticipated to be impacted or encroached upon. None of the trees are proposed to be removed.

Other protected trees may potentially be indirectly impacted by the project due to soil compaction by heavy equipment and accidental spills of hazardous material, such as hydraulic fluid from heavy equipment. These potential direct and indirect impacts would be significant.

Necessary permits and authorizations from the county for the removal and trimming of trees within the project footprint would be required prior to Project construction activities. In accordance with SMM LIP Section 22.44.950, the project's Coastal Development Permit will be conditioned to require the applicant to submit an oak tree replacement program prepared by a qualified biologist, arborist, or other resource specialist. Additionally, through adherence to Measures BIO-1, BIO-2, BIO-12, and BIO-13, the project would maintain compliance with the County's tree protection policies and ordinances, and potential impacts to protected trees would be reduced to a less than significant level.

SERAs

Approximately 0.0002 acre (7 square feet) of H1 Habitat will be permanently impacted and 0.104 acre (4,548 square feet) will be temporarily impacted. No permanent impacts to H2 Habitat are anticipated, but 0.0135 acre (588 square feet) will be temporarily impacted (Table 7). In addition, indirect impacts to SERAs could be caused by excavation, ground clearing, equipment and materials storage, runoff, and utilization of access routes. These project-related activities could result in air quality impacts (e.g., via dust or exhaust emissions) that could affect adjacent H1 and H2 Habitats. Equipment or construction-related traffic could introduce hazardous materials or harmful, noxious, and/or invasive species that could damage habitats (such as by tracking in weed seeds).

Impacts to resources protected by local policies and ordinances resulting from implementation of the proposed project would be potentially significant, but Measures BIO-1, BIO-2, BIO-7, BIO-9, BIO-10, and BIO-14 will minimize direct and indirect impacts to SERAs, while Measure BIO-4 includes compensatory mitigation for temporary and permanent impacts to SERAs. Implementation of these measures will reduce potential impacts to a less than significant level.

Recommended Avoidance and Minimization Measures

BIO-12 Minimize Impacts to Protected Trees

The following tree protection measures adhere to section 22.44.1920 of the County Code of Ordinances:

- Protective fencing shall be used around the outermost limits of the protected zones of the native trees within or adjacent to the construction area that may be disturbed during construction or grading activities. Before the commencement of any clearing, grading, or other construction activities, protective fencing shall be placed around each applicable tree. Fencing shall be maintained in place for the duration of all construction. No construction, grading, staging, or materials storage shall be allowed within the fenced exclusion areas, or within the protected zones of any on site native trees
- Any approved development, including grading or excavation, that encroaches into the protected zone of a native tree shall be constructed using only hand-held tools
- The JPA shall retain the services of a qualified independent biological consultant or arborist, approved by the Director to monitor native trees that are within or adjacent to the construction area. Public agencies may utilize their own staff who have the appropriate classification. If any breach in the protective fencing occurs, all work shall be suspended until the fence is repaired or replaced

In addition, the following tree protection guidelines adhere to current International Society of Arboriculture (ISA) standards for tree preservation during construction activities:

- Tree protection shall be established at the TPZ or at the greatest distance feasible from all protected trees not proposed for removal
- The limits of the TPZ should be staked in the field prior to commencement of construction activities
- Any brush clearing or pruning required within the TPZ should be accomplished with hand-operated equipment
- All trimming, pruning or removal of protected trees should be performed by or directly monitored by an ISA Certified Arborist in accordance with current ISA Standards
- No materials, equipment, spoil, waste or washout water should be deposited, stored or parked within the TPZ
- Construction activities should be completed using the smallest equipment feasible and shall operate outside the TPZ
- If equipment placement within the TPZ is necessary for construction activities, ground protection should be placed (2 inches of mulch, plywood) to prevent soil compaction
- Any roots of a protected tree over 1 inch in diameter exposed during construction activities should be exposed to sound tissue and cut cleanly with a saw
- For any single native protected tree, no more than 20% of live foliage should be removed or greater than 20% of the ground under a tree be disturbed during the extent of construction activities for this project

BIO-13 Oak Tree Replacement and Monitoring

In accordance with Section 22.44.950, Section O, of the SMM LIP, for development encroaching less than 30 percent of the TPZ of and oak or native tree, each affected tree shall be monitored annually for a period of no less than 10 years, and an annual monitoring report shall be submitted to the Director for review by the County for 10 years.

If any of the protected trees impacted are lost or suffer worsened health and vigor as a result of proposed development, seedling-sized mitigation trees shall be planted at a 10:1 ratio. Where on-site mitigation is not feasible, off-site mitigation shall be provided at a suitable site restricted from development or within public parkland. The project will encroach over 30 percent of the TPZ of one protected coast live oak tree, which requires a replacement ratio of 10:1. In addition, the project will encroach between 10 and 30 percent of the TPZ of 12 protected trees, which requires a replacement ratio of 5:1 and monitoring for a 10-year period. Seventy (70) trees should be planted on site, or if not feasible, off site within the same watershed as the encroached trees. According to the LIP, any off-site mitigation that is outside of the watershed of the encroached trees shall require an additional two mitigation trees per removed or encroached tree; therefore, a total of 96 replacement trees should be planted off-site outside of the watershed. Replacement trees shall be indigenous oaks sourced from acorns collected from the existing oak trees within the project site or from nearby locations in Los Angeles or Ventura Counties. In addition, an acorn derived from a locally sourced tree of the same species that is impacted shall be planted within the watering zone of the replacement trees.

In addition, in accordance with SMM LIP Section 22.44.950, Section O, when development encroaches less than 10 percent of the TPZ of native trees, each affected tree shall be monitored annually for a period of no less than 10 years, and an annual monitoring report shall be submitted for review by the County for each of the 10 years.

The precise location of trees to be installed on-site shall be determined by a qualified restoration specialist and will address existing groundcover species, level of soil disturbance, and other factors that may influence tree growth. If considered necessary by the restoration specialist, soil may be decompacted using hand tools to encourage root growth.

If the project site is unsuitable for planting one or more of the replacement trees, the County Forester may approve other options as follows:

- Planting replacement oak trees within the same watershed as the removed or encroached trees, where feasible. Any off-site mitigation not located within the project watershed shall require an additional two mitigation trees per removed or encroached tree.
- Payment into the Oak Forests Special Fund in the amount equivalent to the oak resource value as calculated by the applicant and approved by the County Forester in alignment with the International Society of Arboriculture's "Guide to Establishing Values for Trees and Shrubs."

For the 13 oak/native trees that will be encroached by 10 percent or more from the proposed project activities, on-site or off-site mitigation within the same watershed will include 70 mitigation oak/native trees. Off-site mitigation for the encroached trees outside of the same watershed will include 96 mitigation oak/native trees. Mitigation for impacts to oak trees shall be determined and approved by the County prior to receiving a grading permit.

BIO-14 Avoidance and Minimization of Impacts to SERAs

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

laydown areas shall be limited to unvegetated, previously disturbed and/or developed areas (areas consisting of non-native vegetation and outside of the TPZ of protected trees and native plant communities).

5.5.1 Conservation Plans

The proposed project does not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan. Therefore, no mitigation measures are recommended.

6 Limitations, Assumptions, and Use Reliance

This Biological Resources Assessment has been performed in accordance with professionally accepted biological investigation practices conducted at this time and in this geographic area. The biological investigation is limited by the scope of work performed. Biological surveys for the presence or absence of certain taxa have been conducted as part of this assessment but were not performed during a particular blooming period, nesting period, or particular portion of the season when positive identification would be expected if present, and therefore, cannot be considered definitive. The biological surveys are limited also by the environmental conditions present at the time of the surveys. In addition, general biological (or protocol) surveys do not guarantee that the organisms are not present and will not be discovered in the future within the Study Area. In particular, mobile wildlife species could occupy the Study Area on a transient basis or re-establish populations in the future. Our field studies were based on current industry practices, which change over time and may not be applicable in the future. No other guarantees or warranties, expressed or implied, are provided. The findings and opinions conveyed in this report are based on findings derived from Study Area reconnaissance, jurisdictional areas, review of CNDDDB RareFind5, and specified historical and literature sources. Standard data sources relied upon during the completion of this report, such as the CNDDDB, may vary regarding accuracy and completeness. In particular, the CNDDDB is compiled from research and observations reported to CDFG that may or may not have been the result of comprehensive or Study Area-specific field surveys. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary research and analysis.

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Appendix A

Santa Monica Mountains Biological Assessment Checklist

Santa Monica Mountains Biological Assessment Checklist	Page(of Report)	Initials
Title Page	Cover	YH
A. Project name.	Cover	YH
B. County identification numbers (Project number, Permit number, APNs)	3	YH
C. Applicant name and contact information	Cover	YH
D. Name and affiliation of preparer.	Cover	YH
E. Date.	Cover	YH
I. Project and Survey Description	3-9	YH
A. Project description.	6	YH
1. Project name, type of report, address of project.	3, 6	YH
2. County application identification numbers including APNs.	3	YH
3. Applicant name and contact information.	Cover	YH
4. Parcel and acreage information.	6, 11	YH
5. Location.	6	YH
a. Map of regional features showing project location, including watershed boundaries, proximity to public lands, streams, drainages, and roads in region.	4, 5, 12, 23	YH

Santa Monica Mountains Biological Assessment Checklist	Page	Initials
b. Color aerial photograph(s) showing regional context of project, project parcel(s), existing development, open space, etc.	4, 5	YH
6. Detailed description of proposed project, including area of vegetation removal, modification, or disturbance, grading volumes, etc.	6	YH
B. Description of major natural features.	11-36	YH
1. Landforms and geomorphology.	11	YH
2. Drainage and wetland features.	34-36	YH
3. Soils (soil/geological map optional).	13-14	YH
C. Methodology of biological survey.	7-9	YH
1. Date(s) of survey(s).	9	YH
2. Detailed description of survey methods.	9	YH
II. Biological Characteristics of the site	15-40	YH
A. Flora.	15-21	YH
1. Map of vegetation communities, specifying system used (the use of Sawyer et al. 2009 is recommended)	18	YH
2. Map of project site showing the habitat areas (H1, H2, H2 "High Scrutiny", H3 Habitat) from the LUP Biological Resources map.	18, 39-40	YH

Santa Monica Mountains Biological Assessment Checklist	Page	Initials
3. Vegetation cover table, with acreages of each vegetation type (can be a legend in map)	16	YH
4. Location, trunk, diameter, and canopy extent mapped for each protected tree (oak, sycamore, walnut, bay) that is within 25 feet of any portion of the proposed development (on-site or off-site). Note: for protected oaks (>5" DBH) on or within 200' of property, an oak tree report is required. Include oak tree reports in an appendix	Appendix F	YH
B. Fauna.	21	YH
1. Discussion of species observed; description of wildlife community.	21	YH
C. Sensitive species.	25-	YH
1. Table of possible sensitive species and possible sensitive vegetation, including brief description of potential impacts to any sensitive species.	27, 29, 44-45	YH
2. Maps of occurrence for sensitive species observed	18	YH
D. List of flora and fauna observed or known from site	Appendix D	YH
E. Survey Checklist (see Part B, Survey Checklist, above)	Appendix A	YH
III. Bibliography	65-67	YH
A. Bibliography of references cited in text	65-67	YH
IV. Appendices	Appendices A-F	YH
A. Site photographs (color)	Appendix C	YH

Santa Monica Mountains Biological Assessment Checklist	Page	Initials
B. Qualifications of biologists and other contributors	70	YH
C. Oak tree report for sites with jurisdictional native oak trees (if applicable)	Appendix F	YH
Digital copies of biological assessments must be provided to DRP as .pdf for final version, including georeferenced files of vegetative data and sensitive species occurrences.		

Appendix B

Regulatory Setting

Regulatory Setting

Special-status habitats are vegetation types, associations, or sub-associations that support concentrations of special-status plant or animal species, are of relatively limited distribution, or are of particular value to wildlife.

Listed species are those taxa that are formally listed as endangered or threatened by the federal government (e.g., U.S. Fish and Wildlife Service [USFWS]), pursuant to the Federal Endangered Species Act (FESA) or as endangered, threatened, or rare (for plants only) by the State of California (i.e. California Fish and Game Commission), pursuant to the California Endangered Species Act or the California Native Plant Protection Act. Some species are considered rare (but not formally listed) by resource agencies, organizations with biological interests/expertise (e.g., Audubon Society, CNPS, The Wildlife Society), and the scientific community.

The following is a summary of the regulatory context under which biological resources are managed at the federal, state, and local levels. Several federal and state statutes provide a regulatory structure that guides the protection of biological resources. Agencies with the responsibility for protection of biological resources within the project site include:

- U.S. Army Corps of Engineers (wetlands and other waters of the United States);
- Los Angeles Regional Water Quality Control Board (waters of the State);
- U.S. Fish and Wildlife Service (federally listed species and migratory birds);
- California Department Fish and Wildlife (riparian areas, streambeds, and lakes; state-listed species; Species of Special Concern; nesting birds);
- County of Los Angeles Santa Monica Mountains Local Coastal Program (LCP) Local Implementation Program (LIP) and Land Use Plan (LUP)
- County of Los Angeles Oak Tree Ordinance
- County of Los Angeles Oak Woodlands Conservation Management Plan Guide
- California Coastal Act

U.S. Army Corps of Engineers

Under Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers (USACE) has authority to regulate activities that could discharge fill of material into wetlands or other “waters of the United States.” Perennial and intermittent creeks are considered waters of the United States if they are hydrologically connected to other jurisdictional waters (typically a navigable water). The USACE also implements the federal policy embodied in Executive Order 11990, which is intended to result in no net loss of wetland value or acres. In achieving the goals of the Clean Water Act, the USACE seeks to avoid adverse impacts and offset unavoidable adverse impacts on existing aquatic resources. Any fill of wetlands that are hydrologically connected to jurisdictional waters would require a permit from the USACE prior to the start of work. Typically, when a project involves impacts to waters of the United States, the goal of no net loss of wetland acres or values is met through avoidance and minimization to the extent practicable, followed by compensatory mitigation involving creation or enhancement of similar habitats.

Regional Water Quality Control Board

The State Water Resources Control Board (SWRCB) and the local Regional Water Quality Control Board (RWQCB) have jurisdiction over “waters of the State,” pursuant to the Porter-Cologne Water Quality Control Act, which are defined as any surface water or groundwater, including saline waters, within the boundaries of the State. The SWRCB has issued general Waste Discharge Requirements (WDRs) regarding discharges to “isolated” waters of the State (Water Quality Order No. 2004-0004-DWQ, Statewide General Waste Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdiction). The RWQCB administers actions under this general order for isolated waters not subject to federal jurisdiction and is also responsible for the issuance of water quality certifications pursuant to Section 401 of the Clean Water Act for waters subject to federal jurisdiction.

United States Fish and Wildlife Service

USFWS implements the Migratory Bird Treaty Act (16 United States Code [USC] Section 703-711) and the Bald and Golden Eagle Protection Act (16 USC Section 668). USFWS and National Marine Fisheries Service (NMFS) share responsibility for implementing the Federal Endangered Species Act (FESA) (16 USC § 153 et seq.). Generally, USFWS implements the FESA for terrestrial and freshwater species, while the NMFS implements the FESA for marine and anadromous species. Projects that would result in “take” of any federally threatened or endangered species are required to obtain permits from USFWS or NMFS through either Section 7 (interagency consultation with a federal nexus) or Section 10 (Habitat Conservation Plan) of the FESA, depending on the involvement by the federal government in permitting and/or funding of the project. The permitting process is used to determine if a project would jeopardize the continued existence of a listed species and what measures would be required to avoid jeopardizing the species. “Take” under federal definition means to harass, harm (which includes habitat modification), pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Proposed or candidate species do not have the full protection of the FESA; however, USFWS and NMFS advise project applicants that they could be elevated to listed status at any time.

California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW) derives its authority from the Fish and Game Code of California. The California Endangered Species Act (CESA) (Fish and Game Code Section 2050 et. seq.) prohibits take of state listed threatened or endangered. Take under CESA is restricted to direct mortality of a listed species and the law does not prohibit indirect harm by way of habitat modification. Where incidental take would occur during construction or other lawful activities, CESA allows CDFW to issue an Incidental Take Permit upon finding, among other requirements, that impacts to the species have been minimized and fully mitigated.

CDFW also enforces Sections 3511, 4700, 5050, and 5515 of the Fish and Game Code, which prohibits take of species designated as Fully Protected. CDFW is not allowed to issue an Incidental Take Permit for Fully Protected species; therefore, impacts to these species must be avoided.

California Fish and Game Code sections 3503, 3503.5, and 3513 describe unlawful take, possession, or destruction of native birds, nests, and eggs. Section 3503.5 of the Code protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs. Section 3513 makes it a state-level offense to take any bird in violation of the federal Migratory Bird Treaty Act. CDFW administers these requirements.

Species of Special Concern (SSC) is a category used by CDFW for those species which are indicators of regional habitat changes or are considered to be potential future protected species. Species of Special Concern do not have any special legal status except that which may be afforded by the Fish and Game Code as noted above. The SSC category is intended by CDFW for use as a management tool to include these species in special consideration when decisions are made concerning the development of natural lands. CDFW also has authority to administer the Native Plant Protection Act (NPPA) (Fish and Game Code Section 1900 *et seq.*). The NPPA requires CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare. Effective in 2015, CDFW promulgated regulations (14 CCR 786.9) under the authority of the NPPA, establishing that the CESA's permitting procedures would be applied to plants listed under the NPPA as "Rare." With this change, there is little practical difference for the regulated public between plants listed under CESA and those listed under the NPPA.

Perennial, intermittent, and ephemeral streams and associated riparian vegetation, when present, also fall under the jurisdiction of CDFW. Section 1600 *et seq.* of the Fish and Game Code (Lake and Streambed Alteration Agreements) gives CDFW regulatory authority over activities that divert, obstruct, or alter the channel, bed, or bank of any river, stream, or lake.

Local Jurisdiction

The County of Los Angeles Department of Regional Planning is responsible for implementing and overseeing the Santa Monica Mountains Coastal Zone LCP, which includes both the Local Implementation Plan (LIP) and the Land Use Plan (LUP), adopted in August 2014, certified by the California Coastal Commission (CCC). and amended in February 2018.

Pursuant to Section 22.44.1870 of the LCP (County 2018b), all new developments shall be sited and designed to preserve oak, walnut, sycamore, bay or other individual native trees to the maximum extent feasible. Native trees include those that have at least one trunk measuring a total of 6 inches or more in diameter, or a combination of any two trunks measuring a total of eight inches or more in diameter at breast height. Rincon understands a tree survey was previously conducted within the Study Area. Therefore, protected tree analysis is not included in this biological resource analysis.

The County of Los Angeles also adopted an Oak Woodlands Conservation Management Plan Guide, dated March 18, 2014. The main goal of this Plan is to preserve and restore oak woodlands, so they are conserved in perpetuity with no net loss of existing woodlands.

Appendix C

Site Photographs



Photograph 1. Access road to Tapia WRF and sycamore trees with mowed understory forming edge of riparian vegetation on Malibu Creek, facing east. Photo location 1. 7/21/2021



Photograph 2. California sycamore woodlands (*Platanus racemosa* – *Quercus agrifolia* woodland association) in Malibu Creek with open water present as the creek passes under Las Virgenes Road, facing west. Photo location 2. 7/21/2021



Photograph 3. Surface water in Malibu Creek, surrounded by riparian vegetation, facing west. Photo location 3. 8/4/2021



Photograph 4. Upland mustards in foreground and edge of California sycamore woodlands (*Platanus racemosa* – *Salix lasiolepis* woodland association) along Malibu Creek in background, facing north. Photo location 4. 7/21/2021



Photograph 5. Natural portion of the ephemeral drainage under coast live oak canopy, facing south. Photo location 5. 7/21/2021



Photograph 6. Ephemeral ditch: outlet of culvert under Tapia WRF access road, concrete-lined ditch, and inlet of culvert that leads to Malibu Creek, facing north. Photo location 6. 7/21/2021



Photograph 7. View of dirt trail along pipeline that passes through upland mustards with scattered coyote brush. Edge of coast live oak woodland and forest on right, facing south. Photo location 7. 7/21/2021



Photograph 8. Creeping ryegrass turfs surrounded by upland mustards and wild oats and annual brome grasslands, facing southeast. Photo location 8. 7/21/2021



Photograph 9. Upland mustards in staging area, coast live oak woodland and forest in background, facing southwest. Photo location 9. 8/4/2021



Photograph 10. Coyote brush scrub habitat interspersed throughout upland mustards, facing northwest. Photo location 27. 2/7/2023



Photograph 9. Black cottonwood forest alliance at the southern edge of the Study Area, facing north.
Photo location 30. 2/7/2023

Appendix D

Floral and Faunal Compendia

Plant Species Observed in the Study Area July 21, 2021 and August 4, 2021

Scientific Name	Common Name	Status ¹	Native or Introduced ²
Trees			
<i>Acer negundo</i>	boxelder	–	Native
<i>Fraxinus latifolia</i>	Oregon ash	–	Native
<i>Juglans californica</i>	southern California black walnut	CRPR 4.2	Native
<i>Pinus</i> sp.	–	–	–
<i>Platanus racemosa</i>	western sycamore	–	Native
<i>Populus trichocarpa</i>	black cottonwood	–	Native
<i>Quercus agrifolia</i>	coast live oak	–	Native
<i>Quercus lobata</i>	valley oak	–	Native
<i>Salix laevigata</i>	red willow	–	Native
<i>Salix lasiandra</i> var. <i>lasiandra</i>	Pacific willow	–	Native
<i>Salix lasiolepis</i>	arroyo willow	–	Native
<i>Sambucus nigra</i> ssp. <i>caerulea</i>	blue elderberry	–	Native
<i>Schinus terebinthifolius</i> var. <i>raddianus</i>	Brazilian pepper tree	–	Introduced
<i>Umbellularia californica</i>	California bay laurel	–	Native
<i>Washingtonia robusta</i>	Mexican fan palm	–	Invasive; Cal-IPC Moderate
Shrubs			
<i>Baccharis pilularis</i> ssp. <i>consanguinea</i>	coyotebrush	–	Native
<i>Baccharis salicifolia</i> ssp. <i>salicifolia</i>	mulefat	–	Native
<i>Datura wrightii</i>	Jimsonweed	–	Native
<i>Diplacus aurantiacus</i>	sticky monkeyflower	–	Native
<i>Eriogonum elongatum</i> var. <i>elongatum</i>	long stemmed buckwheat	–	Native
<i>Hazardia squarrosa</i>	sawtooth goldenbush	–	Native
<i>Heteromeles arbutifolia</i>	toyon	–	Native
<i>Juniperus</i> sp.	–	–	–
<i>Malosma laurina</i>	laurel sumac	–	Native
<i>Penstemon</i> sp.	–	–	Native
<i>Polygala cornuta</i> var. <i>fishiae</i>	Fish's milkwort	CRPR 4.3	Native
<i>Prunus ilicifolia</i> ssp. <i>ilicifolia</i>	holly leaf cherry	–	Native
<i>Quercus berberidifolia</i>	inland scrub oak	–	Native
<i>Rosa californica</i>	California wild rose	–	Native
<i>Salvia leucophylla</i>	purple sage	–	Native
<i>Salvia mellifera</i>	black sage	–	Native
Vines			
<i>Rubus ursinus</i>	California blackberry	–	Native
<i>Toxicodendron diversilobum</i>	poison oak	–	Native

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Scientific Name	Common Name	Status ¹	Native or Introduced ²
Herbs			
<i>Acmispon americanus</i> var. <i>americanus</i>	American bird's foot trefoil	–	Native
<i>Ambrosia psilostachya</i>	western ragweed	–	Native
<i>Apium graveolens</i>	garden celery	–	Introduced
<i>Artemisia douglasiana</i>	California mugwort	–	Native
<i>Artemisia dracunculus</i>	tarragon	–	Native
<i>Brodiaea</i> sp.	brodiaea	–	Native
<i>Carduus pycnocephalus</i> ssp. <i>pycnocephalus</i>	Italian thistle	–	Introduced
<i>Centaurea melitensis</i>	tocalote	–	Invasive; Cal-IPC Moderate
<i>Centaurea solstitialis</i>	yellow star thistle	–	Invasive; Cal-IPC High
<i>Chenopodium album</i>	lambs quarters	–	Introduced
<i>Conium maculatum</i>	poison hemlock	–	Invasive; Cal-IPC Moderate
<i>Corethrogyne filaginifolia</i>	California aster	–	Native
<i>Cyperus eragrostis</i>	tall cyperus	–	Native
<i>Eriogonum elongatum</i> var. <i>elongatum</i>	long-stemmed buckwheat	–	Native
<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	golden yarrow	–	Native
<i>Erodium botrys</i>	big heron bill	–	Introduced
<i>Eschscholzia californica</i>	California poppy	–	Native
<i>Euphorbia peplus</i>	petty spurge	–	Introduced
<i>Foeniculum vulgare</i>	fennel	–	Invasive; Cal-IPC Moderate
<i>Heterotheca grandiflora</i>	telegraph weed	–	Native
<i>Hirschfeldia incana</i>	shortpod mustard	–	Invasive; Cal-IPC Moderate
<i>Lactuca serriola</i>	prickly lettuce	–	Introduced
<i>Madia elegans</i>	common madia	–	Native
<i>Melilotus albus</i>	white sweetclover	–	Introduced
<i>Nasturtium officinale</i>	watercress	–	Native
<i>Osteospermum</i> sp.	African daisy	–	Introduced
<i>Phacelia ramosissima</i>	branching phacelia	–	Native
<i>Plantago lanceolata</i>	lanceleaf plantain	–	Invasive; Cal-IPC Limited
<i>Plantago major</i>	common plantain	–	Introduced
<i>Pseudognaphalium californicum</i>	ladies' tobacco	–	Native
<i>Schoenoplectus acutus</i> var. <i>occidentalis</i>	tule	–	Native
<i>Solanum americanum</i>	common nightshade	–	Native
<i>Stachys bullata</i>	California hedgenettle	–	Native
<i>Stellaria media</i>	chickweed	–	Introduced
<i>Stephanomeria</i> sp.	–	–	Native
<i>Trifolium hirtum</i>	rose clover	–	Invasive; Cal-IPC Limited
<i>Urtica dioica</i> ssp. <i>holosericea</i>	stinging nettle	–	Native
<i>Veronica anagallis-aquatica</i>	water speedwell	–	Introduced
<i>Vinca major</i>	greater periwinkle	–	Invasive; Cal-IPC Moderate

Scientific Name	Common Name	Status ¹	Native or Introduced ²
Grasses			
<i>Avena barbata</i>	slender wild oats	–	Invasive; Cal-IPC Moderate
<i>Bromus catharticus</i>	rescue grass	–	Introduced
<i>Bromus diandrus</i>	ripgut brome	–	Invasive; Cal-IPC Moderate
<i>Bromus hordeaceus</i>	soft brome	–	Invasive; Cal-IPC Limited
<i>Elymus condensatus</i>	giant wild rye	–	Native
<i>Elymus triticoides</i>	creeping wild rye	–	Native
<i>Hordeum murinum</i>	foxtail barley	–	Invasive; Cal-IPC Moderate
<i>Koeleria macrantha</i>	June grass	–	Native
<i>Polypogon monspeliensis</i>	rabbitsfoot grass	–	Invasive; Cal-IPC Limited
<i>Stipa miliacea</i> var. <i>miliacea</i>	smilo grass	–	Invasive; Cal-IPC Limited

Sources:

CRPR: California Rare Plant Rank

¹ Listed on the Special Vascular Plants, Bryophytes, And Lichens List (April 2021) (CDFW 2021c).

² Calflora 2021, Jepson 2021a, and Cal-IPC 2021

Wildlife Species Observed in the Study Area July 21, 2021 and August 4, 2021

Scientific Name	Common Name	Status ¹	Native or Introduced
Insects			
<i>Limenitis lorquini</i>	Lorquin's Admiral	–	Native
<i>Pieris rapae</i>	cabbage butterfly	–	Introduced
Reptiles			
<i>Sceloporus occidentalis</i>	western fence lizard	–	Native
Birds			
<i>Anas platyrhynchos</i>	mallard	–	Native
<i>Aphelocoma californica</i>	California scrub jay	–	Native
<i>Baeolophus inornatus</i>	oak titmouse	LACWL	Native
<i>Buteo lineatus</i>	red-shouldered hawk	–	Native
<i>Calypte anna</i>	Anna's hummingbird	–	Native
<i>Cathartes aura</i>	turkey vulture	LACS	Native
<i>Corvus corax</i>	common raven	–	Native
<i>Dryobates nuttallii</i>	Nuttall's woodpecker	–	Native
<i>Empidonax difficilis</i>	Pacific-slope flycatcher	–	Native
<i>Haemorhous mexicanus</i>	house finch	–	Native
<i>Melanerpes formicivorus</i>	acorn woodpecker	–	Native
<i>Melospiza melodia</i>	song sparrow	–	Native
<i>Melospiza crissalis</i>	California towhee	–	Native
<i>Pipilo maculatus</i>	spotted towhee	–	Native
<i>Psaltiriparus minimus</i>	bushtit	–	Native
<i>Setophaga petechia</i>	yellow warbler	SSC	Native
<i>Sitta carolinensis</i>	white-breasted nuthatch	–	Native
<i>Zenaidura macroura</i>	mourning dove	–	Native
Mammals			
<i>Canis latrans</i>	coyote	–	Native
<i>Neotoma macrostis</i>	common big-eared woodrat	–	Native
<i>Odocoileus hemionus californicus</i>	California mule deer	–	Native
<i>Thomomys bottae</i>	Botta's pocket gopher	–	Native

Sources:

Rodewald 2021, California Herps 2021, Bowers et al. 2004

¹ LACS: Los Angeles County Sensitive Bird

LACWL: Los Angeles County Watch List

SSC: CDFW Species of Special Concern

Appendix E

Special-Status Species Evaluation Tables

Special-Status Plant and Wildlife Species in the Regional Vicinity of the Study Area

Scientific Name Common Name	Status ¹	Habitat Requirements	Potential to Occur
Plants			
<i>Asplenium vespertinum</i> western spleenwort	None/None G4/S4 4.2	Chaparral, Cismontane woodland, Coastal scrub. Rocky sites. 180-1000m. Blooms Feb-Jun.	Not expected. Potentially suitable cismontane woodland and rocky sites are present in the Study Area, however there are no CNDDDB occurrences of this species within 5 miles of the Study Area. Study Area is outside elevation range for this species.
<i>Astragalus brauntonii</i> Braunton's milk-vetch	FE/None G2/S2 1B.1	Perennial herb. Blooms January to August. Closed-cone coniferous forest, chaparral, coast scrub, valley and foothill grassland. Recent burns or disturbed areas; in saline, somewhat alkaline soils high in Ca, Mg, with some K. Soil specialist; requires shallow soils to defeat pocket gophers and open areas, preferably on hilltops, saddles or bowls between hills. 200-650m (655-2130ft).	Not expected. Potentially suitable grassland habitat is present in the Study Area; however, soils present are not suitable and many pocket gopher holes are present. The only CNDDDB occurrence within 5 miles of the Study Area was last observed in 1984 and is located approximately 2.3 miles to the south. The population is considered possibly extirpated. Study Area is outside elevation range for this species.
<i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i> Ventura Marsh milk-vetch	FE/SE G2T1/S1 1B.1	Coastal dunes, Coastal scrub, Marshes and swamps. Within reach of high tide or protected by barrier beaches, more rarely near seeps on sandy bluffs. 1-35m. Blooms (Jun)Aug-Oct.	Not expected. Study Area is inland and is not within the reach of high tide or near any seeps or sandy bluffs. There are no CNDDDB occurrences of this species within 5 miles of the Study Area. Study Area is outside elevation range for this species.
<i>Astragalus tener</i> var. <i>titi</i> coastal dunes milk-vetch	FE/SE G2T1/S1 1B.1	Coastal bluff scrub, Coastal dunes, Coastal prairie. Moist, sandy depressions of bluffs or dunes along and near the Pacific Ocean; one site on a clay terrace. 1-50m. Blooms Mar-May.	Not expected. Study Area is inland, and no coastal bluff scrub, coastal dunes, or coastal prairie are present. There are no CNDDDB occurrences of this species within 5 miles of the Study Area. Study Area is outside elevation range for this species.
<i>Atriplex coulteri</i> Coulter's saltbush	None/None G3/S1S2 1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Valley and foothill grassland. Ocean bluffs, ridgetops, as well as alkaline low places. Alkaline or clay soils. 3-460m. Blooms Mar-Oct.	Not expected. Potentially suitable grassland habitat is present in the Study Area; however, the Study Area is inland and no ocean bluffs, ridgetops, or alkaline low places are present. The only CNDDDB occurrence within 5 miles of the Study Area is from 2009 and is located approximately 3.3 miles to the south.

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Scientific Name Common Name	Status ¹	Habitat Requirements	Potential to Occur
<i>Atriplex pacifica</i> south coast saltscale	None/None G4/S2 1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Playas. Alkali soils. 0-140m. Blooms Mar-Oct.	Not expected. The Study Area is inland, and no suitable coastal bluff scrub, coastal dunes, or coastal scrub habitats are present in the Study Area. Playas and alkaline soils are not present. There are no CNDDDB occurrences of this species within 5 miles of the Study Area.
<i>Atriplex parishii</i> Parish's brittlescale	None/None G1G2/S1 1B.1	Chenopod scrub, Playas, Vernal pools. Usually on drying alkali flats with fine soils. 25-1900m. Blooms Jun-Oct.	Not expected. No suitable chenopod scrub, playas, or vernal pools are present in Study Area and substrate present is not suitable. There are no CNDDDB occurrences of this species within 5 miles of the Study Area.
<i>Atriplex serenana</i> var. <i>davidsonii</i> Davidson's saltscale	None/None G5T1/S1 1B.2	Annual herb. Blooms April to October. Coastal bluff scrub, coastal scrub. Alkaline soil. 3-250m (10-820ft).	Not expected. No suitable coastal bluff scrub or coastal scrub habitats are present in the Study Area, and alkaline soils are not present. The only CNDDDB occurrence within 5 miles of the Study Area was last observed in 1974 and is located approximately 1.6 miles to the south along Malibu Creek.
<i>Baccharis malibuensis</i> Malibu baccharis	None/None G1/S1 1B.1	Perennial deciduous shrub. Blooms August. Coastal scrub, chaparral, cismontane woodland. In Conejo volcanic substrates, often on exposed roadcuts. Sometimes occupies oak woodland habitat. 150-260m (490-855ft).	Low potential. Potentially suitable oak woodland habitat is present in the Study Area, however volcanic soils are not mapped in the Study Area. There are multiple CNDDDB occurrences recorded within 5 miles of the Study Area, including two within 1 mile of the Study Area.
<i>Baccharis plummerae</i> ssp. <i>plummerae</i> Plummer's baccharis	None/None G3T3/S3 4.3	Broadleafed upland forest, Chaparral, Cismontane woodland, Coastal scrub. Brushy canyons and mountainsides near the sea; usually shaded north-facing slopes. Rocky substrates. 5-425m. Blooms May-Oct.	Not expected. Potentially suitable cismontane woodlands are present in the Study Area; however, the topography of the Study Area is generally flat, and upland areas lack canyons or shaded slopes. There are no CNDDDB occurrences of this species within 5 miles of the Study Area.
<i>Calandrinia breweri</i> Brewer's calandrinia	None/None G4/S4 4.2	Chaparral, Coastal scrub. Sandy or loamy soils. Disturbed sites, burns. 10-1220m. Blooms (Jan)Mar-Jun.	Not expected. No suitable chaparral or coastal scrub habitats are present in the Study Area, though soils present may be suitable. There are no CNDDDB occurrences of this species within 5 miles of the Study Area.

Scientific Name Common Name	Status ¹	Habitat Requirements	Potential to Occur
<i>Calochortus catalinae</i> Catalina mariposa lily	None/None G3G4/S3S4 4.2	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland. In heavy soils, open slopes, openings in brush. 15-700m. Blooms (Feb)Mar-Jun.	Low potential. Potentially suitable cismontane woodland and grassland habitats are present in the Study Area. There are no CNDDDB occurrences of this species within 5 miles of the Study Area.
<i>Calochortus clavatus</i> var. <i>clavatus</i> club-haired mariposa lily	None/None G4T3/S3 4.3	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland. Generally on serpentine clay, rocky soils. 30-1300m. Blooms (Mar)May-Jun.	Low potential. Potentially suitable cismontane woodland and grassland habitats are present in the Study Area, however serpentine soils are not present. There are no CNDDDB occurrences of this species within 5 miles of the Study Area.
<i>Calochortus clavatus</i> var. <i>gracilis</i> slender mariposa-lily	None/None G4T2T3/S2S3 1B.2	Perennial bulbiferous herb. Blooms March to June. Chaparral, coastal scrub. Shaded foothill canyons; often on grassy slopes within other habitat. 420-760m (1380-2495ft).	Not expected. Potentially suitable grassy slopes within woodland habitat are present in the Study Area. However, the only CNDDDB occurrences within 5 miles of the Study Area are from 1959 and 1960. Study Area is outside elevation range for this species.
<i>Calochortus plummerae</i> Plummer's mariposa-lily	None/None G4/S4 4.2	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley and foothill grassland. Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 100-1700m. Blooms May-Jul.	Moderate potential. Potentially suitable cismontane woodland and grassland habitats are present in the Study Area. Potentially suitable rocky and alluvial substrates are present. There are multiple CNDDDB occurrences recorded within 5 miles of the Study Area, including one from 1992 that is located approximately 2.1 miles to the north.
<i>Camissoniopsis lewisii</i> Lewis' evening-primrose	None/None G4/S4 3	Cismontane woodland, Coastal bluff scrub, Coastal dunes, Coastal scrub, Valley and foothill grassland. Sandy or clay soil. 0-300m. Blooms Mar-May(Jun).	Low potential. Potentially suitable cismontane woodland and grassland habitats are present in the Study Area, and clay soils are mapped in the Study Area. There are no CNDDDB occurrences of this species within 5 miles of the Study Area.
<i>Cercocarpus betuloides</i> var. <i>blancheae</i> island mountain-mahogany	None/None G5T4/S4 4.3	Chaparral, Closed-cone coniferous forest. 30-600m. Blooms Feb-May.	Not expected. No suitable chaparral or coniferous forest habitats are present in the Study Area. There are no CNDDDB occurrences of this species within 5 miles of the Study Area. This perennial shrub was not observed during the 2021 field surveys.

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Scientific Name Common Name	Status ¹	Habitat Requirements	Potential to Occur
<i>Chloropyron maritimum</i> ssp. <i>maritimum</i> salt marsh bird's-beak	FE/SE G4?T1/S1 1B.2	Occurs in coastal dunes and coastal salt marshes and swamps. This species blooms between May and October, and typically occurs at elevations ranging from 0-30 meters.	Not expected. Study Area is inland, and no suitable coastal dunes or salt marshes and swamps are present. There are no CNDDDB occurrences of this species within 5 miles of the Study Area. Study Area is outside elevation range for this species.
<i>Chorizanthe parryi</i> var. <i>fernandina</i> San Fernando Valley spineflower	None/SE G2T1/S1 1B.1	Annual herb. Blooms April to July. Found in washes and sandy areas (alluvial scrub), in the hills and on mesas. Poorly developed soils, mostly in loam or silty clay loam. 3-1035m (10-3395ft).	Not expected. No suitable alluvial scrub habitat is present in the Study Area, and suitable soils are not present. There are no CNDDDB occurrences of this species within 5 miles of the Study Area.
<i>Chorizanthe parryi</i> var. <i>parryi</i> Parry's spineflower	None/None G3T2/S2 1B.1	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland. Dry slopes and flats; sometimes at interface of 2 vegetation types, such as chaparral and oak woodland. Dry, sandy soils. 275-1220m. Blooms Apr-Jun.	Not expected. Potentially suitable cismontane woodland and grassland habitats are present in the Study Area, however the only CNDDDB occurrence within 5 miles of the Study Area is from 1957 and the population is considered possibly extirpated. Study Area is outside elevation range for this species.
<i>Convolvulus simulans</i> small-flowered morning-glory	None/None G4/S4 4.2	Chaparral, Coastal scrub, Valley and foothill grassland. Wet clay, serpentine ridges. 30-740m. Blooms Mar-Jul.	Not expected. Potentially suitable grassland habitat is present in the Study Area however suitable wet clay and serpentine ridges are not present. There are no CNDDDB occurrences of this species within 5 miles of the Study Area.
<i>Deinandra minthornii</i> Santa Susana tarplant	None/SR G2/S2 1B.2	Perennial deciduous shrub. Blooms July to November. Chaparral, coastal scrub. On sandstone outcrops and crevices, in shrubland. 280-760m (1920-2495ft).	Not expected. No suitable chaparral or coastal scrub habitats are present in the Study Area, and sandstone outcrops are not present. Multiple CNDDDB occurrences were recorded within 5 miles of the Study Area. The closest occurrence is from 2010 and is located approximately 2.7 miles to the west. Study Area is outside elevation range for this species.
<i>Delphinium parryi</i> ssp. <i>blochmaniae</i> dune larkspur	None/None G4T2/S2 1B.2	Chaparral, Coastal dunes. On rocky areas and dunes. 0-200m. Blooms Apr-Jun.	Not expected. No suitable chaparral or coastal dunes are present in the Study Area. There are no CNDDDB occurrences of this species within 5 miles of the Study Area.

Scientific Name Common Name	Status ¹	Habitat Requirements	Potential to Occur
<i>Delphinium parryi</i> ssp. <i>purpureum</i> Mt. Pinos larkspur	None/None G4T4/S4 4.3	Chaparral, Mojavean desert scrub, Pinyon and juniper woodland. 1000-2600m. Blooms May-Jun.	Not expected. No suitable chaparral, Mojavean desert scrub, or pinyon and juniper woodland are present in Study Area. There are no CNDDDB occurrences of this species within 5 miles of the Study Area. Study Area is outside elevation range for this species.
<i>Dichondra occidentalis</i> western dichondra	None/None G3G4/S3S4 4.2	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland. On sandy loam, clay, and rocky soils. 50-500m. Blooms (Jan)Mar-Jul.	Low potential. Potentially suitable cismontane woodland and grassland habitats are present in the Study Area. There are no CNDDDB occurrences of this species within 5 miles of the Study Area.
<i>Dithyrea maritima</i> beach spectaclepod	None/ST G1/S1 1B.1	Occurs in coastal dunes and sandy substrates within coastal scrub sand dunes and other sandy soils near the seashore. This species blooms between March and May, and typically occurs at elevations ranging from 3-50 meters.	Not expected. Study Area is inland, and no suitable coastal dunes or coastal scrub sand dunes are present. There are no CNDDDB occurrences of this species within 5 miles of the Study Area. Study Area is outside elevation range for this species.
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i> Blochman's dudleya	None/None G3T2/S2 1B.1	Occurs in rocky, often clay or serpentinite substrates within coastal bluff scrub, chaparral, coastal scrub, and valley and foothill grassland. This species blooms between April and June, and typically occurs at elevations ranging from 5-450 meters.	Not expected. Potentially suitable rocky areas and grassland are present in the Study Area. However, the only CNDDDB occurrence within 5 miles of the Study Area is from 1948 and is located approximately 2.6 miles to the south. This perennial species was not observed during the 2021 field surveys.
<i>Dudleya cymosa</i> ssp. <i>agourensis</i> Agoura Hills dudleya	FT/None G5T1/S1 1B.2	Perennial herb. Blooms May to June. Chaparral, cismontane woodland. Rocky, volcanic breccia. 200-500m (655-1640ft).	Not expected. Potentially suitable cismontane woodland habitat is present in the Study Area, however volcanic rocky substrate is not present. The only CNDDDB occurrence is from 2015 and is located approximately 4.6 miles to the northwest. Study Area is outside elevation range for this species. This perennial species was not observed during the 2021 field surveys.
<i>Dudleya cymosa</i> ssp. <i>marcescens</i> marcescent dudleya	FT/SR G5T2/S2 1B.2	Perennial herb. Blooms April to July. Chaparral. On sheer rock surfaces and rocky volcanic cliffs. 150-520m (490-1705ft).	Not expected. No suitable chaparral is present in the Study Area, and rocky volcanic cliffs are not present. Multiple CNDDDB occurrences were recorded within 5 miles of the Study Area. The closest occurrence is from 2011 and is located approximately 1.2 miles to the west. This perennial species was not observed during the 2021 field surveys.

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Scientific Name Common Name	Status ¹	Habitat Requirements	Potential to Occur
<i>Dudleya cymosa</i> ssp. <i>ovatifolia</i> Santa Monica dudleya	FT/None G5T1/S1 1B.1	Perennial herb. Blooms March to June. Chaparral, coastal scrub. In canyons on sedimentary conglomerates; primarily north-facing slopes. 210-500m (690-1640ft).	Not expected. No suitable chaparral or coastal scrub habitats are present in the Study Area. The only CNDDDB occurrence within 5 miles of the study area is from 2011 and is located approximately 0.8 miles to the southwest. Study Area is outside elevation range for this species. This perennial species was not observed during the 2021 field surveys.
<i>Dudleya multicaulis</i> many-stemmed dudleya	None/None G2/S2 1B.2	Chaparral, Coastal scrub, Valley and foothill grassland. In heavy, often clayey soils or grassy slopes. 15-790m. Blooms Apr-Jul.	Not expected. Potentially suitable grassland habitat is present in the Study Area, and clay soils are mapped in the Study Area. There are no CNDDDB occurrences of this species within 5 miles of the Study Area. This perennial species was not observed during the 2021 field surveys.
<i>Dudleya parva</i> Conejo dudleya	FT/None G1/S1 1B.2	Coastal scrub, Valley and foothill grassland. In clay or volcanic soils on rocky slopes and grassy hillsides. 60-450m. Blooms May-Jun.	Not expected. Potentially suitable grassland habitat is present in the Study Area, and clay soils are mapped in the Study Area. There are no CNDDDB occurrences of this species within 5 miles of the Study Area. This perennial species was not observed during the 2021 field surveys.
<i>Eriogonum crocatum</i> Conejo buckwheat	None/SR G1/S1 1B.2	Chaparral, Coastal scrub, Valley and foothill grassland. Conejo volcanic outcrops; rocky sites. 50-580m. Blooms Apr-Jul.	Not expected. Potentially suitable grassland habitat is present in the Study Area, however Conejo volcanic outcrops are not present. There are no CNDDDB occurrences of this species within 5 miles of the Study Area.
<i>Horkelia cuneata</i> var. <i>puberula</i> mesa horkelia	None/None G4T1/S1 1B.1	Perennial herb. Blooms February to September. Chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. 70-810m (230-2655ft).	Not expected. Potentially suitable cismontane woodland is present in the Study Area, however sandy or gravelly soils are not present. The only CNDDDB occurrence within 5 miles of the Study Area is from 1935 and is located approximately 4.1 miles to the north.
<i>Isocoma menziesii</i> var. <i>decumbens</i> decumbent goldenbush	None/None G3G5T2T3/S 2 1B.2	Perennial shrub. Blooms April to November. Coastal scrub. Sandy soils; often in disturbed sites. 10-910m (30-2985ft).	Not expected. No suitable coastal scrub is present in the Study Area, and sandy soils are not present. The only CNDDDB occurrence within 5 miles of the Study Area is from 1975 and is located approximately 2.3 miles to the south.

Scientific Name Common Name	Status ¹	Habitat Requirements	Potential to Occur
<i>Juglans californica</i> Southern California black walnut	None/None G4/S4 4.2	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland. Slopes, canyons, alluvial habitats. 50-900m. Blooms Mar-Aug.	Present. This species was observed during the 2021 field surveys.
<i>Juncus acutus</i> ssp. <i>leopoldii</i> southwestern spiny rush	None/None G5T5/S4 4.2	Coastal dunes, Marshes and swamps, Meadows and seeps. Moist saline places. 3-900m. Blooms (Mar)May-Jun.	Not expected. Study Area is inland and no coastal dunes, marshes and swamps, or moist saline meadows and seeps are present. There are no CNDDDB occurrences of this species within 5 miles of the Study Area.
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i> Coulter's goldfields	None/None G4T2/S2 1B.1	Annual herb. Blooms February to June. Coastal salt marshes, playas, valley and foothill grassland, vernal pools. Usually found on alkaline soils in playas, sinks, and grasslands. 1-1400m (3-4595ft).	Not expected. No suitable coastal salt marshes, playas, grasslands, or vernal pools are present in the Study Area and substrate present is not suitable. The only CNDDDB occurrence recorded within 5 miles of the Study Area is from 1933 and is located approximately 2.4 miles to the south.
<i>Lepechinia fragrans</i> fragrant pitcher sage	None/None G3/S3 4.2	Chaparral. 20-1310m. Blooms Mar-Oct.	Not expected. No suitable chaparral habitat is present in the Study Area. There are no CNDDDB occurrences of this species within 5 miles of the Study Area.
<i>Lilium humboldtii</i> ssp. <i>ocellatum</i> ocellated Humboldt lily	None/None G4T4?/S4? 4.2	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Riparian woodland. Yellow-pine forest or openings, oak canyons. 30-1800m. Blooms Mar-Jul(Aug).	Low potential. Potentially suitable cismontane woodland and riparian woodland are present in the Study Area. There are no CNDDDB occurrences of this species within 5 miles of the Study Area.
<i>Monardella hypoleuca</i> ssp. <i>hypoleuca</i> white-veined monardella	None/None G4T3/S3 1B.3	Perennial herb. Blooms April to December. Chaparral, cismontane woodland. Dry slopes. 50-1525m (165-5005ft).	Low potential. Potentially suitable cismontane woodland habitat is present in the Study Area. The only CNDDDB occurrence within 5 miles of the Study Area overlaps the Study Area, however it is from 1898.
<i>Navarretia ojaiensis</i> Ojai navarretia	None/None G2/S2 1B.1	Annual herb. Blooms May to July. Chaparral, coastal scrub, valley and foothill grassland. Openings in shrublands or grasslands. Typically occurs on clay soils. 275-620m (900-2035ft).	Low potential. Potentially suitable grassland habitat is present in the Study Area and clay soils are mapped in the Study Area. There are multiple CNDDDB occurrences recorded within 5 miles of the Study Area. However, the Study Area is outside elevation range for this species.

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Scientific Name Common Name	Status ¹	Habitat Requirements	Potential to Occur
<i>Nolina cismontana</i> chaparral nolina	None/None G3/S3 1B.2	Chaparral, Coastal scrub. Primarily on sandstone and shale substrates; also known from gabbro. 140-1275m. Blooms (Mar)May-Jul.	Not expected. No suitable chaparral or coastal scrub habitats are present in the Study Area, and suitable substrates are not mapped in the Study Area. There are no CNDDDB occurrences of this species within 5 miles of the Study Area. This perennial species was not observed during the 2021 field surveys.
<i>Orcuttia californica</i> California Orcutt grass	FE/SE G1/S1 1B.1	Vernal pools. 15-660m. Blooms Apr-Aug.	Not expected. No suitable vernal pool habitat is present in the Study Area. There are no CNDDDB occurrences of this species within 5 miles of the Study Area.
<i>Pentachaeta lyonii</i> Lyon's pentachaeta	FE/SE G1/S1 1B.1	Annual herb. Blooms March to August. Chaparral, valley and foothill grassland, coastal scrub. Edges of clearing in chaparral, usually at the ecotone between grassland and chaparral or edges of firebreaks. 30-630m (100-2065ft).	Moderate potential. Potentially suitable grassland habitat is present in the Study Area. There are multiple CNDDDB occurrences recorded within 5 miles of the Study Area, including an occurrence from 2017 located approximately 2.8 miles to the east.
<i>Polygala cornuta</i> var. <i>fishiae</i> Fish's milkwort	None/None G5T4/S4 4.3	Chaparral, Cismontane woodland, Riparian woodland. Scree slopes, brushy ridges, and along creeks; often with oaks. 100-1000m. Blooms May-Aug.	Present. This species was observed during the 2021 field surveys.
<i>Quercus dumosa</i> Nuttall's scrub oak	None/None G3/S3 1B.1	Chaparral, Closed-cone coniferous forest, Coastal scrub. Generally on sandy soils near the coast; sometimes on clay loam. 15-400m. Blooms Feb-Apr(May-Aug).	Not expected. No suitable chaparral, coniferous forests, or coastal scrub habitats are present in the Study Area, though clay loam soils have been mapped in the Study Area. There are no CNDDDB occurrences of this species within 5 miles of the Study Area.
<i>Romneya coulteri</i> Coulter's matilija poppy	None/None G4/S4 4.2	Chaparral, Coastal scrub. In washes and on slopes; also after burns. 20-1200m. Blooms Mar-Jul(Aug).	Not expected. No suitable chaparral or coastal scrub habitats are present in the Study Area. There are no CNDDDB occurrences of this species within 5 miles of the Study Area.
<i>Senecio aphanactis</i> chaparral ragwort	None/None G3/S2 2B.2	Chaparral, Cismontane woodland, Coastal scrub. Drying alkaline flats. 15-800m. Blooms Jan-Apr(May).	Not expected. Potentially suitable cismontane woodland is present in the Study Area, however drying alkaline flats are not present. There are no CNDDDB occurrences of this species within 5 miles of the Study Area.

Scientific Name Common Name	Status ¹	Habitat Requirements	Potential to Occur
<i>Sidalcea neomexicana</i> salt spring checkerbloom	None/None G4/S2 2B.2	Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Playas. Alkali springs and marshes. 15-1530m. Blooms Mar-Jun.	Not expected. No suitable chaparral, coastal scrub, coniferous forest, Mojavean desert scrub, playas, or alkali springs and marshes are present in the Study Area. There are no CNDDDB occurrences of this species within 5 miles of the Study Area.
<i>Spermolepis lateriflora</i> western bristly scaleseed	None/None G5/SH 2A	Sonoran desert scrub. Rocky or sandy. 365-670m. Blooms Mar-Apr.	Not expected. No suitable Sonoran Desert scrub is present in the Study Area. There are no CNDDDB occurrences of this species within 5 miles of the Study Area. Study Area is outside elevation range for this species.
<i>Thelypteris puberula</i> var. <i>sonorensis</i> Sonoran maiden fern	None/None G5T3/S2 2B.2	Meadows and seeps. Along streams, seepage areas. 50-610m. Blooms Jan-Sep.	Low potential. A perennial stream is present in the Study Area. There are no CNDDDB occurrences of this species within 5 miles of the Study Area.
<i>Tortula californica</i> California screw moss	None/None G2G3/S2? 1B.2	Chenopod scrub, Valley and foothill grassland. Moss growing on sandy soil. 10-1460m.	Not expected. Potentially suitable grassland habitat is present in the Study Area, however sandy soils are not present. There are no CNDDDB occurrences of this species within 5 miles of the Study Area.
Wildlife			
Invertebrates			
<i>Atractelmis wawona</i> Wawona riffle beetle	None/None G3/S1S2	Aquatic; found in riffles of rapid, small to medium clear mountain streams; 2000-5000 ft elev. Strong preference for inhabiting submerged aquatic mosses.	Low potential. Malibu Creek is present in the Study Area; however, the creek has a slow rate of flow. The only CNDDDB occurrence within 5 miles of the Study Area is from 2009 and is located approximately 3.8 miles to the southwest. Study Area is outside elevation range for this species.
<i>Bombus crotchii</i> Crotch bumble bee	None/None G3G4/S1S2	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> .	High potential. Potential habitat for host plants is available and multiple CNDDDB occurrences have been documented within five miles of the Study Area.
<i>Danaus plexippus</i> pop. 1 monarch - California overwintering population	FC/None G4T2T3/S2S3	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	Not expected. No suitable wind-protected tree groves or milkweed plants are present in the Study Area, though open water is present in Malibu Creek. There are multiple CNDDDB occurrences recorded within 5 miles of the Study Area, including one from 2014 located approximately 2.8 miles to the south in

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Scientific Name Common Name	Status ¹	Habitat Requirements	Potential to Occur
			a eucalyptus grove. Species may occur as a transient.
<i>Euphydryas editha quino</i> quino checkerspot butterfly	FE/None G5T1T2/S1S2	Sunny openings within chaparral & coastal sage shrublands in parts of Riverside & San Diego counties. Hills and mesas near the coast. Need high densities of food plants <i>Plantago erecta</i> , <i>P. insularis</i> , and <i>Orthocarpus purpureus</i> .	Not expected. No suitable chaparral or coastal scrub habitats are present in the Study Area. The only CNDDDB occurrence located within 5 miles of the Study Area is from 1947 and the population is considered extirpated.
<i>Gonidea angulata</i> western ridged mussel	None/None G3/S1S2	Primarily creeks & rivers & less often lakes. Originally in most of state, now extirpated from Central & Southern Calif.	Not expected. Malibu Creek is present in the Study Area, however the only CNDDDB occurrence located within 5 miles of the Study Area is from 1993 and the population is considered extirpated.
<i>Socalchemmis gertschi</i> Gertsch's socalchemmis spider	None/None G1/S1	Known from only 2 localities in Los Angeles County: Brentwood (type locality) and Topanga Canyon.	Low potential. The only CNDDDB occurrence is from 1982 and is located approximately 4.8 miles to the northeast.
Reptiles			
<i>Anniella stebbinsi</i> Southern California legless lizard	None/None G3/S3 SSC	Generally south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation. Disjunct populations in the Tehachapi and Piute Mountains in Kern County. Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content.	Moderate potential. Potentially suitable soils and habitats are present in the Study Area. The only CNDDDB occurrence within 5 miles of the Study Area is from 1965 and overlaps the Study Area.
<i>Aspidoscelis tigris stejnegeri</i> coastal whiptail	None/None G5T5/S3 SSC	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland & riparian areas. Ground may be firm soil, sandy, or rocky.	High potential. Potentially suitable upland and riparian woodlands are present in the Study Area. The closest CNDDDB occurrence is from 2009 and is located approximately 1.7 miles to the northwest of the Study Area.

Scientific Name Common Name	Status ¹	Habitat Requirements	Potential to Occur
<i>Diadophis punctatus modestus</i> San Bernardino ringneck snake	None/None G5T2T3/S2?	Most common in open, relatively rocky areas. Often in somewhat moist microhabitats near intermittent streams. Avoids moving through open or barren areas by restricting movements to areas of surface litter or herbaceous veg.	High potential. Potentially suitable riparian vegetation along Malibu Creek may provide suitable habitat in the Study Area. The only CNDDDB occurrence within 5 miles of the Study Area is from 1999 and is located approximately 1.1 miles to the south.
<i>Emys marmorata</i> western pond turtle	None/None G3G4/S3 SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	High potential. Malibu Creek and adjacent riparian vegetation may provide suitable habitat in the Study Area. There are multiple CNDDDB occurrences recorded within 5 miles of the Study Area, including upstream and on tributaries to Malibu Creek.
<i>Phrynosoma blainvillii</i> coast horned lizard	None/None G3G4/S3S4 SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Moderate potential. Potentially suitable grassland habitat is present in the Study Area, though vegetation is generally dense with few open patches. There are multiple CNDDDB occurrences recorded within 5 miles of the Study Area.
<i>Thamnophis hammondi</i> two-striped gartersnake	None/None G4/S3S4 SSC	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	Moderate potential. Malibu Creek and adjacent riparian vegetation may provide suitable habitat in the Study Area. The only CNDDDB occurrence within 5 miles of the Study Area is from 2010 and is located approximately 4.3 miles to the east.
Birds			
<i>Aquila chrysaetos</i> golden eagle	None/None G5/S3 FP WL	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Low potential. Riparian and upland woodlands may provide suitable roosting or nesting habitat in the Study Area. The only CNDDDB occurrence within 5 miles of the Study Area is from 1998 and is located approximately 0.2 miles to the east.
<i>Baeolophus inornatus</i> oak titmouse	—/ G4/S4 LACWL, BCC	Oak woodlands. Cavity nester.	Present. Species was observed throughout the Study Area in the riparian and upland woodlands.

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Scientific Name Common Name	Status ¹	Habitat Requirements	Potential to Occur
<i>Cathartes aura</i> turkey vulture	–/– G4/S4 SBL	Widespread over open country, woodlands, deserts, and foothills. Nests in sheltered areas such as hollow trees or logs, crevices in cliffs, under rocks, in caves, within dense thickets, or in decrepit infrastructure (Audubon 2020).	High potential. Species was observed soaring above the Study Area, may roost in trees in the Study Area.
<i>Falco peregrinus anatum</i> American peregrine falcon	FD/SD G4T4/S3S4 FP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	Low potential. The Study Area contains potentially suitable roosting and foraging habitat, though suitable nesting habitat is not present. A CNDDDB occurrence from 2009 encompasses the entire Malibu Beach, California quadrangle.
<i>Vireo bellii pusillus</i> Least Bell's vireo	FE/SE G5TS/S2	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms, below 2000-ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	Moderate potential. Suitable riparian habitat is present in the arroyo willow vegetation community along Malibu Creek within the Study Area. No CNDDDB occurrences have been documented within 5 miles of the study area. The species has been documented twice in citizen science database records approx. 3 miles north in 2022, and approximately 5 miles southwest in Malibu in 2020 (eBird 2023).
<i>Setophaga petechia</i> yellow warbler	–/– G5/S3S4 SSC	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	Present. Species was observed in the riparian woodlands along Malibu Creek in the Study Area.
Fish			
<i>Eucyclogobius newberryi</i> tidewater goby	FE/None G3/S3	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	Not expected. The portion of Malibu Creek in the Study Area is upstream of the Rindge Dam. The only CNDDDB occurrence within 5 miles of the Study Area is from a re-introduction in Malibu Creek. The last observations are from 1995 and the occurrence is located approximately 2 miles to the south.
<i>Gila orcuttii</i> arroyo chub	None/None G2/S2 SSC	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave & San Diego River basins. Slow water stream sections with mud or sand	Moderate potential. In the Study Area, Malibu Creek may provide suitable habitat. A CNDDDB occurrence from 1975 overlaps the Study Area and documents this species in Malibu Creek.

Scientific Name Common Name	Status ¹	Habitat Requirements	Potential to Occur
		bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	
<i>Oncorhynchus mykiss</i> irideus pop. 10 steelhead - southern California DPS	FE/None G5T1Q/S1	Federal listing refers to populations from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego County). Southern steelhead likely have greater physiological tolerances to warmer water and more variable conditions.	Not expected. The portion of Malibu Creek in the Study Area is upstream of the Rindge Dam, which is a barrier for steelhead. A CNDDDB occurrence from 1992 documents this species in Malibu Creek approximately 1 mile south of the Study Area.

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Scientific Name Common Name	Status ¹	Habitat Requirements	Potential to Occur
Mammals			
<i>Euderma maculatum</i> spotted bat	None/None G4/S3 SSC	Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests. Typically forages in open terrain; over water and along washes. Feeds almost entirely on moths. Roosts in rock crevices in cliffs or caves. Occasionally roosts in buildings.	Moderate potential. Potentially suitable woodland and grassland habitats are present in the Study Area, and open water for forage is present in Malibu Creek. The only CNDDDB occurrence within 5 miles of the Study Area is from 2003 and is located approximately 1.7 miles to the northwest.
<i>Eumops perotis californicus</i> western mastiff bat	None/None G4G5T4/S3S4 SSC	Occurs in open, semi-arid to arid habitats, including coniferous and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces and caves, and buildings. Roosts typically occur high above ground.	Moderate potential. Potentially suitable woodland and grassland habitats are present in the Study Area. There are multiple CNDDDB occurrence within 5 miles of the Study Area, including one from 2004 located approximately 1.7 miles to the northwest.
<i>Lasiurus blossevillei</i> western red bat	None/None G4/S3 SSC	Roosts in trees in forests and woodlands of varying elevations. Forages in grasslands, shrublands, open woodlands and forests, and agriculture. Typically found in riparian habitats, does not occur in deserts.	Moderate potential. Potentially suitable riparian woodland, upland woodland, grasslands, and open water are present in the Study Area. There are multiple CNDDDB occurrences recorded within 5 miles of the Study Area.
<i>Lasiurus cinereus</i> hoary bat	None/None G3G4/S4	Typically roosts in trees in deciduous and coniferous forests and woodlands but occasionally roosts in rocks crevices. Forages in open areas, typically along riparian corridors or over water. Diet primarily consists of moths.	Moderate potential. Potentially suitable riparian woodland and upland woodland habitats are present in the Study Area, and open water for foraging is present in Malibu Creek. The only CNDDDB occurrence within 5 miles of the Study Area is from 2004 and is located approximately 4.8 miles to the northwest.
<i>Myotis ciliolabrum</i> western small-footed myotis	None/None G5/S3	Occurs in a wide range of arid and semiarid habitats including woodlands, open forests, riparian zones, and desert shrub. Roosts in rock crevices in caves, tunnels, and mines, also found beneath loose bark and in buildings. Forages for insects over water sources.	Moderate potential. Potentially suitable riparian woodland and upland woodland habitats are present in the Study Area, and open water for foraging is present in Malibu Creek. The only CNDDDB occurrence within 5 miles of the Study Area is from 2004 and is located approximately 1.7 miles to the northwest.

Scientific Name Common Name	Status ¹	Habitat Requirements	Potential to Occur
<i>Myotis yumanensis</i> Yuma myotis	None/None G5/S4	Occurs in a variety of lowland and upland habitats including desert scrub, riparian, and woodlands and forests. Distribution is closely tied to bodies of water. Roosts in a variety of areas including caves, cliffs, mines, crevices in live trees, and buildings and other man-made structures.	Moderate potential. Potentially suitable riparian woodland and upland woodland habitats are present in the Study Area, and open water is present in Malibu Creek. There are multiple CNDDDB occurrence within 5 miles of the Study Area, including one from 2004 located approximately 1.7 miles to the northwest.
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	None/None G5T3T4/S3S4 SSC	Occurs in scrub habitats of southern California from San Luis Obispo County to San Diego County.	Not expected. No suitable scrub habitat is present in the Study Area. The only CNDDDB occurrence within 5 miles of the Study Area is from 1995 and is located approximately 2.5 miles to the south. A woodrat midden was observed in the Study Area, however based on size, location, and components of the midden, this was determined to be sign of the common big-eared woodrat (<i>Neotoma macrostis</i>).
Sensitive Natural Communities			
California Walnut Woodland	None/None G2/S2.1	—	Not expected. Vegetation community was not observed within the Study Area.
Southern California Coastal Lagoon	None/None GNR/SNR	—	Not expected. Vegetation community was not observed within the Study Area.
Southern California Steelhead Stream	None/None GNR/SNR	—	Not expected. The portion of Malibu Creek in the Study Area is upstream of the Rindge Dam, which is a barrier for steelhead.
Southern Coast Live Oak Riparian Forest	None/None G4/S4	—	Present. This vegetation community is currently classified as coast live oak woodland and forest under MCV2. This community is present in the Study Area; however, it is no longer considered sensitive.
Southern Coastal Salt Marsh	None/None G2/S2.1	—	Not expected. Vegetation community was not observed within the Study Area.
Southern Sycamore Alder Riparian Woodland	None/None G4/S4	—	Present. This vegetation community is currently classified as California sycamore woodlands under MCV2. Two associations of this alliance are present in the Study Area.

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Scientific Name Common Name	Status ¹	Habitat Requirements	Potential to Occur
Valley Oak Woodland	None/None G3/S2.1	—	Not expected. Vegetation community was not observed within the Study Area.

¹ Notes:

Regional Vicinity refers to within a 5-mile radius of the Study Area.

FE = Federally Endangered FT = Federally Threatened FC = Federal Candidate Species

SE = State Endangered ST = State Threatened SC = State Candidate SR = State Rare SA= State Special Animal

FP = CDFW Fully Protected SSC = CDFW Species of Special Concern P= State Protected Species WL= Watch List

IUCN_LC = International Union for Conservation of Nature's Red List Least Concern

SBL = Los Angeles County Sensitive Bird List

WBWG = Western Bat Working Group (2021)

BCC = USFWS Birds of Conservation Concern

CNPS California Rare Plant Rank

1A=Presumed Extinct in California

1B=Rare, Threatened, or Endangered in California and elsewhere

2A=Plants presumed extirpated in California, but more common elsewhere

2B=Plants Rare, Threatened, or Endangered in California, but more common elsewhere

California Rare Plant Rank Threat Code Extension

.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)

Appendix C

Oak and Native Tree Report



Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project

Oak and Native Tree Report

prepared for

Las Virgenes Municipal Water District – Triunfo Joint Powers Authority

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Calabasas, California 91302

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Appendices

Appendix A	Protected Tree Matrix
Appendix B	Tree Photographs

1 Introduction

Rincon Consultants, Inc. (Rincon) prepared this report for the Las Virgenes Municipal Water District - Triunfo Joint Powers Authority (JPA), Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project (project) located in an unincorporated area of Los Angeles County (County).

1.1 Regulatory Context

The project is in the Santa Monica Mountains (SMM) Local Coastal Program area and therefore subject to the management direction of the California Coastal Act. The County Department of Regional Planning has regulatory authority over the Local Coastal Program, as directed by the California Coastal Commission. This report documents the results of an oak and native tree survey and the project's impacts to protected trees pursuant to the SMM Local Implementation Program (LIP) and Los Angeles County Oak Woodland Conservation Management Plan Guide. Pursuant to the language within the SMM LIP, a permit is required to cut, destroy, remove, relocate, inflict damage, or encroach into the protected zone of the tree. Protected trees are defined as follows:

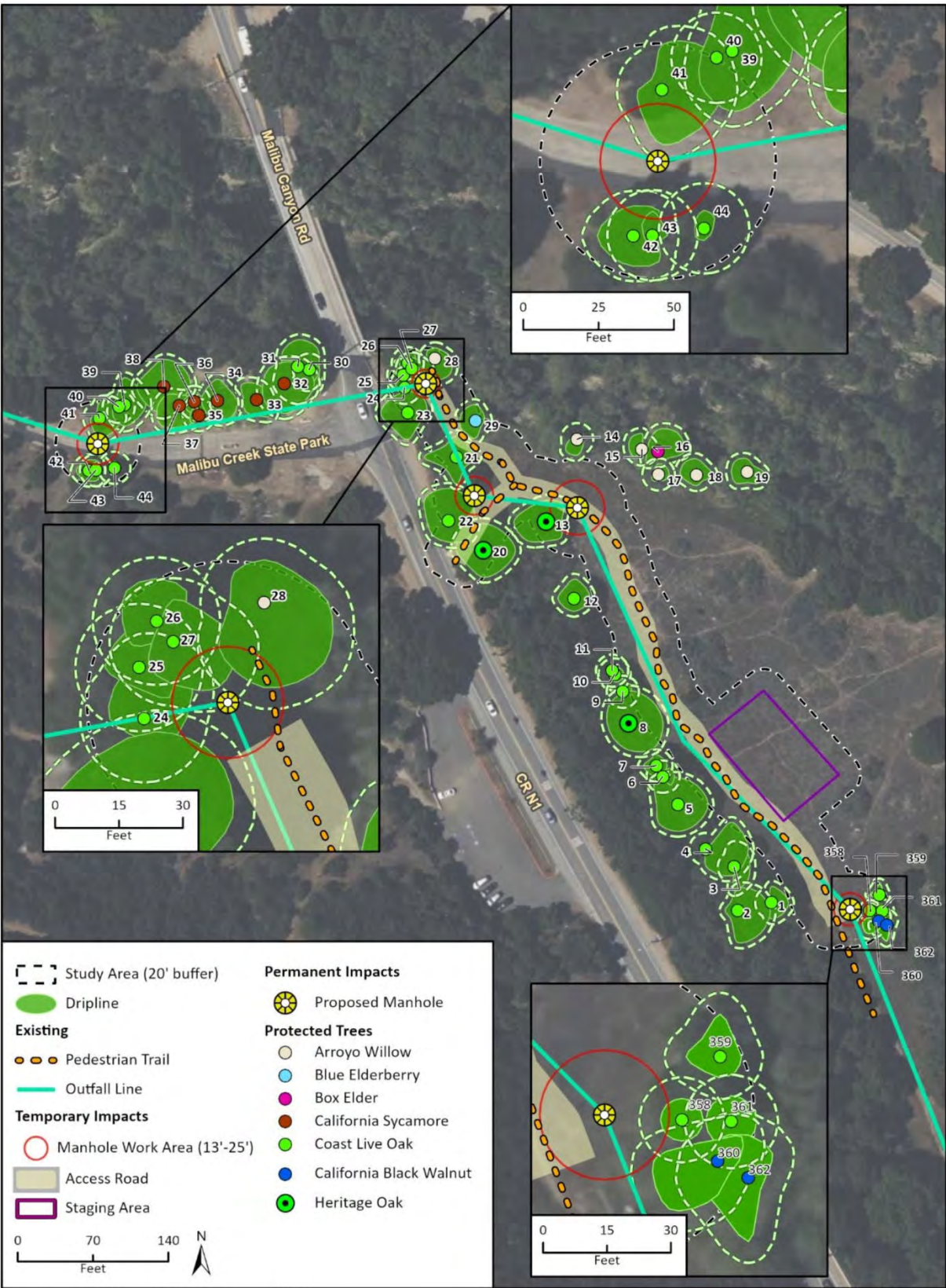
- Any tree or shrub of the oak genus which is six inches or more in diameter as measured four and one-half feet above the natural grade; in the case of an oak with more than one trunk, (a combination of any two trunks measuring a total of eight inches or more in diameter).
- Native sycamore, bay, walnut, or other native tree that has at least one trunk measuring six inches or more in diameter or a combination of any two trunks measuring a total of eight inches or more in diameter.
- Heritage oak trees are either of the following: any oak tree measuring 36 inches or more in diameter, measured four and one-half feet above the natural grade; any oak tree having significant historical or cultural importance to the community, notwithstanding that the tree diameter is less than 36 inches. This also includes any oak tree officially identified by a County resource conservation.

The SMM LIP defines the tree protection zone (TPZ) as the dripline plus five feet, or 15 feet from the trunk, whichever is greater.

1.2 Project Description

The Las Virgenes-Triunfo JPA plans to inspect and repair an existing 24-inch outfall pipeline which runs for approximately 2,250 linear feet from the Tapia Water Reclamation Facility (WRF), located at 731 Malibu Canyon Road in Agoura Hills, to Malibu Creek. The section of pipeline to be inspected and repaired under the proposed project is located within existing roadways and natural areas. Starting at the Tapia WRF, the pipeline is within paved road (Malibu State Park Road) for approximately 0.15 mile to Las Virgenes Road/Malibu Canyon Road, which is also paved, and crosses to the east side of this road (another approximately 0.03 mile). On the east side of Las Virgenes Road/Malibu Canyon Road, the pipeline runs parallel to an unpaved footpath to its terminus at Malibu Creek, approximately 0.25 mile to the south (Figure 1).

Figure 1 Site Plan and Protected Trees



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20-10352 BIO Arborist
FigA Arborist 20230227

The project would install five new manholes along the existing pipeline alignment, to provide access for inspection of the pipeline. Inspection of this pipeline would not expand its capacity or alter its existing uses; rather, it would help ensure the integrity of the pipeline, facilitating its continued use as intended for the conveyance of discharge between the Tapia WRF and Malibu Creek. Under both existing and post-project conditions, effluent from the Tapia WRF is discharged to Malibu Creek in compliance with a National Pollutant Discharge Elimination System (NPDES) permit issued and administered by the RWQCB for the Los Angeles Region (Order No. R4-2005-0074, NPDES No. CA0056014).

The project would install five new 36-inch diameter manholes at existing bends in the alignment, including one manhole located in a paved roadway and four manholes located in natural substrate. Each manhole requires a temporary work area buffer radius ranging from 13 to 25 feet. Installation would allow for the existing pipeline to be inspected using access provided via the new manholes along the existing pipeline alignment. Standard construction best management practices (BMPs) would be employed during project construction to prevent disturbed soils from leaving the work area. These BMPs may include but would not be limited to: use of designated areas for construction staging; use of safety and spill control measures for the handling of all vehicle fuels and other potentially hazardous materials; use of straw wattles or similar materials to prevent surface runoff from leaving the active work area. Also, during the construction phase, temporary lane closures may be used to maintain the safety of workers and the public during construction activities. Access through the project area would be maintained at all times, and workers would provide traffic management and control through the work area as needed to maintain access and safety.

Construction of each manhole would involve trench excavation, backfill and compaction of soil above the Tapia 003 outfall, installation of precast concrete manhole structures into the pipeline, and removal of existing butterfly valves and turnouts. The location of each manhole has been selected to facilitate visual inspection of the entire length of the pipeline via closed circuit television.

The following project activities have the potential to impact protected trees.

1.2.1 Permanent Impacts

- **36-inch manhole.** Trenching and excavation may impact structural and absorbing roots.

1.2.2 Temporary Impacts

- **Manhole work area.** Temporary grading for equipment access may compact the root zone.
- **Access road.** Temporary grading of the existing unpaved pedestrian trail may compact the root zone or damage structural and absorbing roots.
- **Staging area.** Temporary grading for equipment staging may compact the root zone.

2 Oak and Native Tree Survey Methodology

2.1 Tree Survey Methods

The tree survey was conducted by ISA Certified Arborist Yuling Huo (#WE-11975A) and biologist Katherine Christensen on July 22 and 23, 2021 and by ISA Certified Arborist Genelle Watkins (#WE-12998 A) on February 7, 2023. The survey was conducted in accordance with the SMM LIP. All protected trees with any portion of their TPZ within 25 feet of the project components (including the existing outfall line and proposed manholes, access roads, and staging area) were surveyed. Tree locations were recorded using a Geode global positioning system (GPS) device capable of sub-meter accuracy. All protected trees were assigned a unique identification number with a corresponding physical tag affixed to the north side of the tree at approximately 4.5 feet above natural grade, except where inaccessible due to physical barriers (i.e., poison oak). Appendix A includes the data collected for the protected trees that were surveyed.

The following data was collected on each protected tree:

2.1.1 Physical Characteristics

- **Diameter of all trunks.** Measured at 4.5 ft. above natural grade using a forester's diameter tape.
- **Crown clearance and spread.** Measured in eight cardinal directions at points equidistant around the circumference of the tree.
- **Height.** Estimated at an appropriate distance from the tree.
- **Structure.** Crown symmetry, excessive horizontal branching, unbalanced crown, broken branches, etc.
- **Health rating.** A-E scale summarized in Table 1 below based on archetype tree of the same species.

2.1.2 Tree Health

- Physical evidence of disease, slime flux, heart rot, crown rot, armillaria root fungus, exfoliation, leaf scorch, exudations, etc.
- Identification of insect pests, such as galls, twig girdlers, borers, termites, pit scale, and plant parasites.
- Evaluation of tree's vigor – new tip growth, leaf color, abnormal bark, deadwood, and thinning in the crown.
- Recommendations to improve tree health, such as insect or disease control, pruning and fertilization.
- Evaluation of tree impacts as shown as site plan, including suggested mitigation and/or future maintenance measures where required and the anticipated effectiveness.

Table 1 Health Rating

Rating	Health Condition
A – Excellent	A healthy and vigorous tree characteristic of its species and free of any visible signs of disease or pest infestation.
B – Good	A healthy and vigorous tree. However, there are minor visible signs of disease and pest infestation
C – Fair	Although healthy in overall appearance, there is a normal amount of disease and /or pest infestation
D – Poor	This tree is characterized by exhibiting a greater degree of disease and /or pest infestation than normal and appears to be in a state of decline. This tree also exhibits extensive signs of dieback.
E – Dead/Dying	This tree exhibits no signs of life whatsoever.

2.2 Tree Mapping Methods

All protected trees surveyed were mapped in ArcGIS and overlain onto the current project components. The trunk location is based on the GPS waypoint location that was recorded by the arborist from one side of the tree's trunk. Driplines were based on estimated crown spread collected at eight cardinal directions, as described above. Each species, tree trunk, dripline, tree protection zone, and identification number are shown in Figure 1.

3 Oak and Native Tree Survey Results and Impacts

3.1 Oak/Native Tree Survey Results

Forty-nine (49) protected oak and native trees were surveyed as shown in Figure 1. Appendix A – Protected Tree Matrix provides the data collected and detailed notes for each protected tree. The number and type of tree species within Phase 1 are summarized below in Table 2. As indicated in Table 3 and Table 4 in Section 3.2 the trees range in health from B (Good) to D (Poor), and three oak trees are considered ‘Heritage’ in accordance with the County’s SMM LIP.

Table 2 Tree Species Summary

Number of trees	32	2	7	1	1	6
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The protected trees that were surveyed are located within both landscaped and natural areas surrounding the project site. Most of the coast live oak trees are associated with an oak woodland east of Malibu Canyon Road within an area that has been moderately disturbed by various vehicle, pedestrian, and bike trails. The understory primarily consists of non-native grasses (e.g., *Bromus sp.*) and natural leaf litter. As depicted in Figure 1, oak and native trees (#1-#29) are located immediately adjacent to Malibu Canyon Road, while native trees (#14-#19) are located east of the outfall line in a natural area adjacent to Malibu Creek. The remaining oak and native trees (#30-#44; #358-#362) are along the north-side of Malibu Canyon State Park Road within a partially landscaped area.

According to the definition of degraded oak woodlands as described in the Los Angeles County Oak Woodland Conservation Management Plan guidelines, the project site is moderately degraded. By definition, this means that though the site has been altered, oak woodlands persist and retain some of their functions. Natural regeneration is possible, wildlife use still occurs, and some level of ecosystem services is still present. The woodland is adjacent to a busy road, frequented by vehicular, pedestrian and mountain bike use; and the woodland has been previously impacted by installation of the outfall line.

3.2 Oak/Native Tree Impacts

Of the 49 protected trees surveyed, 31 trees would be avoided, five trees (#8, #23, #25, #26, and #360) would be encroached by less than 10 percent of the TPZ, twelve trees (#13, #20, #21, #24, #27, #29, #41, #44, and #358) would be encroached between 10 and 30 percent, and one tree (#22) would be encroached by 32 percent of the TPZ.

None of the trees are proposed to be removed. A summary of the anticipated tree impacts is presented below in Table 3 and Table 4. Data collected on each tree is provided in Appendix A – Tree Matrix.

Table 3 Tree Encroachments

Tree ID #	Species	DBH (inches) ¹	Health Grade	Impact Status	TPZ Impact Percentage and Description
8 ¹	Coast live oak*	44	C	Encroachment	2%, temporary access road unpaved access road
13	Coast live oak*	20, 25	B	Encroachment	25%, Manhole work area and unpaved access road
20 ¹	Coast live oak*	13.5, 45	D	Encroachment	30%, unpaved access road
21	Coast live oak	25	B	Encroachment	21%, unpaved access road, under canopy
22	Coast live oak	28	C	Encroachment	32%, Manhole work area and unpaved access road within manhole construction
23	Coast live oak	20, 21	B	Encroachment	6%, Manhole work area and unpaved access road, minimal branch trimming
24	Coast live oak	10, 9	B	Encroachment	18%, unpaved access road, under canopy
25	Coast live oak	8, 1, 2	C	Encroachment	9%, Manhole work area and unpaved access road
26	Coast live oak	11	C	Encroachment	3%, unpaved access road
27	Coast live oak	10, 12	B	Encroachment	26%, within manhole construction, minimal branch trimming, and vehicle access within unpaved roadway
28	Arroyo willow	7, 7	C	Encroachment	16%, Manhole work area and unpaved access road, minimal branch trimming
29	Blue elderberry	7, 7	C	Encroachment	17%, unpaved access road
41	Coast live oak	14	B	Encroachment	27%, Manhole work area and periodic vehicle access on paved road near manhole construction
42	Coast live oak	10, 6.5	B	Encroachment	18%, Manhole work area and periodic vehicle access on paved road near manhole construction
43	Coast live oak	13	B	Encroachment	22%, Manhole work area and periodic vehicle access on paved road near manhole construction
44	Coast live oak	7, 8	B	Encroachment	14%, Manhole work area and periodic vehicle access on paved road near manhole construction
358	Coast live oak	8, 8	B	Encroachment	26%, Manhole work area
360	California black walnut	17	D	Encroachment	6%, Manhole work area

¹ Only the two largest DBH measurements from multi-trunked trees are indicated.

* Heritage oak trees

Table 4 Trees with No Impacts

Tree ID #	Species	DBH (inches) ¹	Health Grade	Impact Status	TPZ Impact Percentage and Description
1	Coast live oak	17.5	B	No impact	None, TPZ outside project area
2	Coast live oak	35	B	No impact	None, TPZ outside project area
3	Coast live oak	12	B	No impact	None, TPZ outside project area
4	Coast live oak	19	C	No impact	None, TPZ outside project area
5	Coast live oak	35	C	No impact	None, TPZ outside project area
6	Coast live oak	13	B	No impact	None, TPZ outside project area
7	Coast live oak	8, 12	B	No impact	None, TPZ outside project area
9	Coast live oak	11	B	No impact	None, TPZ outside project area
10	Coast live oak	8	C	No impact	None, TPZ outside project area
11	Coast live oak	7.5	C	No impact	None, TPZ outside project area
12	Coast live oak	12, 10	B	No impact	None, TPZ outside project area
14	Arroyo willow	7	B	No impact	None, TPZ outside project area
15	Arroyo willow	10, 8	B	No impact	None, TPZ outside project area
16	Boxelder maple	10, 9, 8, 10, 8	B	No impact	None, TPZ outside project area
17	Arroyo willow	9, 9	D	No impact	None, TPZ outside project area
18	Arroyo willow	6, 6	C	No impact	None, TPZ outside project area
19	Arroyo willow	10, 7	B	No impact	None, TPZ outside project area
30	Coast live oak	12	B	No impact	None, TPZ outside project area
31	Coast live oak	16, 15	B	No impact	None, TPZ outside project area
32	California sycamore	15, 18	B	No impact	None, TPZ outside project area
33	California sycamore	28	B	No impact	None, TPZ outside project area
34	California sycamore	18	B	No impact	None, TPZ outside project area
35	California sycamore	13	C	No impact	None, TPZ outside project area
36	California sycamore	11	B	No impact	None, TPZ outside project area
37	California sycamore	16	B	No impact	None, TPZ outside project area
38	California sycamore	20	B	No impact	None, TPZ outside project area
39	Coast live oak	18	B	No impact	None, TPZ outside project area
40	Coast live oak	9	B	No impact	None, TPZ outside project area
359	Coast live oak	11	B	No impact	None, TPZ outside project area
361	Coast live oak	13	B	No impact	None, TPZ outside project area
362	California black walnut	14	C	No impact	None, TPZ outside project area

¹ Only the two largest DBH measurements from multi-trunked trees are shown in the table above.

* Heritage oak trees

Impacts to protected trees include trimming of branches for equipment clearance and severing or compaction of roots from manhole construction, the unpaved access road, and staging.

Root systems vary by depth and the lateral extent based on tree species, age, slope, and soil type. Typically, tree roots are less abundant in paved areas and access roads due to the compacted nature of the soil where roots may be deprived of water and oxygen. In addition, trees that are leaning

typically have roots that extend further in the direction away from the lean. Similarly, trees that are on slopes typically have roots that extend further on the uphill side to anchor the tree. The full extent of the root zone may vary depending on physical barriers surrounding the tree. Since the exact extent of root systems are unknown, actual impacts will not be known until the time of construction and will depend upon the tree structure and the construction activities (e.g., excavation depth and width, need for trimming of crown for equipment clearance, etc.). All the protected trees in the survey area are growing in landscaped/native areas and are expected to have roots extending the majority of the TPZ.

Due to the nature of the construction activities, the greatest concern to tree health and mortality associated with the project is root damage. The ISA acknowledges that removing 20-25% of the roots of a tree could result in mortality. Removal of larger roots (particularly lateral or sinker roots and roots greater than two inches in diameter) can severely impact the stability of the tree. Healthy and young trees may tolerate impacts to as much as 50% of their crown or root system (Sinclair, Lyon, and Johnson 1987); however, trees that are relatively large and/or old for the species or already under stress will have lower tolerances.

The proposed project would have unavoidable adverse impacts on 13 protected trees (encroachment of 10 percent or more of the TPZ) that would require mitigation as described in Section 4 – Oak/Native Tree Mitigation. However, the encroachments are mostly temporary, and no trees would be removed. Unpaved access roads, staging area, and manhole work areas will be restored to pre-construction conditions. Permanent manhole construction is limited to 36-inch diameter areas over the existing outfall line. As such, project impacts are not anticipated to cause fragmentation, degeneration, or mortality throughout the oak woodland. According to the Oak Woodland Conservation Management Plan guidelines, because the project area is considered moderately degraded, activities will have a low impact severity. Therefore, the proposed project is not expected to significantly impact the woodland within the project site.

Implementation of the mitigation measures described in Section 4 and adherence to the Tree Protection Measures provided in Section 5 would minimize impacts to protected trees and mitigate unavoidable adverse impacts. .

4 Oak and Native Tree Mitigation

The project is located on public lands, owned by the State of California through the Department of Parks and Recreation. As such, on-site oak and native tree mitigation is not feasible. Therefore, the JPA proposes to pay for offsite mitigation through an approved organization such as (but not limited to) the Mountains Resource Conservation Authority or TreePeople. Payment for offsite mitigation will include the required mitigation oak/native trees for 13 oak/native trees that will be encroached by 10 percent or more from the proposed project activities.

4.1 Summary of Oak and Native Tree Replacement Requirements in Accordance with SMM LIP

When unavoidable negative impacts to oak and native trees occur as a result of the project, the SMM LIP requires the following tree mitigation ratios for these trees, as displayed in Table 5.

Table 5 Santa Monica Mountains LIP Mitigation Requirements

Impact	Mitigation Ratio
Removal	10:1
Greater than 30% encroachment into TPZ	10:1
Encroachment that extends within 3 feet of tree trunk	10:1
Trimming branch over 11 inches in diameter	5:1
10-30% encroachment into TPZ	5:1
Less than 10% encroachment into TPZ	None. Annual monitoring for 10 years

In accordance with the SMM LIP, for development encroaching less than 30 percent of the TPZ of oak or native tree, each affected tree shall be monitored annually for a period of no less than 10 years, and an annual monitoring report shall be submitted to the Director for review by the County for 10 years. Replacement oak trees shall be from acorns collected in the area that is the same species as the oak tree that was impacted. Additionally, an acorn from a locally sourced tree of the same species that is impacted shall be planted within the watering zone of all replacement trees.

If any of the trees impacted are lost or suffer worsened health and vigor as a result of proposed development, a 10:1 ratio with seedling-sized trees shall be sufficient mitigation from the JPA. Where on-site mitigation is not feasible, off-site mitigation shall be provided at a suitable site restricted from development or that is within public parkland.

As indicated in Table 6 below, this project will encroach 32 percent of the TPZ of one protected coast live oak tree (#22), which requires a replacement ratio of 10:1. In addition, the project will encroach between 10 and 30 percent of the TPZ of 12 protected trees, which requires a replacement ratio of 5:1 and monitoring for a 10-year period. Seventy (70) trees should be planted onsite with seedlings less than one year old, or if not feasible, offsite within the same watershed as the encroached trees. Any off-site mitigation that is outside of the watershed shall require an additional two mitigation trees per removed or encroached tree; therefore, a total of 96 replacement trees should be planted off-site outside of the watershed. In accordance with the SMM LIP, the replacement trees should be indigenous oaks sourced from acorns collected from the

existing oak trees within the project site or from nearby locations in Los Angeles or Ventura Counties, unless replacement trees come from acorns from the existing oak trees within the project site. Additionally, in accordance with SMM LIP Section 22.44.950, the project's Coastal Development Permit will be conditioned to require the applicant to submit an oak tree replacement program prepared by a qualified biologist, arborist, or other resource specialist.

Five protected oak/native trees that are located within 25 feet of the project components will have an encroachment of less than 10 percent into the TPZ. Replacement trees are not required, but these trees will be monitored annually for a period of 10 years. The remaining 31 protected trees listed in Table 4 will be avoided and will not require replacement or monitoring.

Table 6 below provides a summary of the tree replacement requirements for those oak and native trees that will be encroached by the project.

Table 6 Oak/Native Tree Replacement Summary

Tree ID#	Species	TPZ Encroachment	Replacement Ratio ¹	Number of Mitigation Trees	Replacement Tree Size
8	Coast live oak	2%	N/A	N/A	N/A
13	Coast live oak	25%	5:1 (+2)	5-7	Seedling <1yr
20	Coast live oak	30%	5:1 (+2)	5-7	Seedling <1yr
21	Coast live oak	21%	5:1 (+2)	5-7	Seedling <1yr
22	Coast live oak	32%	10:1 (+2)	10-12	Seedling <1yr
23	Coast live oak	6%	N/A	N/A	N/A
24	Coast live oak	18%	5:1 (+2)	5-7	Seedling <1yr
25	Coast live oak	9%	N/A	N/A	N/A
26	Coast live oak	3%	N/A	N/A	N/A
27	Coast live oak	26%	5:1 (+2)	5-7	Seedling <1yr
28	Arroyo willow	16%	5:1 (+2)	5-7	Seedling <1yr
29	Blue elderberry	17%	5:1 (+2)	5-7	Seedling <1yr
41	Coast live oak	27%	5:1 (+2)	5-7	Seedling <1yr
42	Coast live oak	18%	5:1 (+2)	5-7	Seedling <1yr
43	Coast live oak	22%	5:1 (+2)	5-7	Seedling <1yr
44	Coast live oak	14%	5:1 (+2)	5-7	Seedling <1yr
358	Coast live oak	26%	5:1 (+2)	5-7	Seedling <1yr
360	California black walnut	6%	N/A	N/A	N/A
Total				70-96	Seedling <1yr

¹In accordance with the SMM LIP, two additional mitigation trees are added to the required mitigation ratios if mitigation will occur offsite and outside of the watershed of the encroached trees.

4.1.1 Planting Locations

In determining whether the replacement plantings required by subsection O.1 of the SMM LIP must be carried out on the project site, the Hearing Officer or Commission shall consider but is not limited to the following factors:

- The surrounding vegetation area near the project site
- The number of oak trees that are proposed to be removed/encroached upon in relation to the number of such trees currently existing on the project site
- The probability of long-term success of the replacement oak trees in a healthy condition with no or minimal conflict with the approved construction on the site over time
- The development plans submitted by the JPA of the proposed construction or the proposed use of the subject property.

As previously indicated, the project is located on public lands, owned by the State of California through the Department of Parks and Recreation. The JPA does not own the property, and planting cannot occur in the limited right-of-way access to the pipeline as it could disrupt the line, be damaged during maintenance/repair, or block access. Therefore, on-site oak and native tree mitigation is not feasible. As stated in subsection O.4 of the SMM LIP, where on-site tree mitigation is not feasible, the CDP shall be conditioned to require off-site mitigation in accordance with subsections O.1 and O.3 of the SMM LIP, and the location shall be provided at a suitable site in the Santa Monica Mountains coastal zone that is restricted from development or is public parkland. Off-site mitigation shall be located within the same watershed as the removed or encroached trees, where feasible. The JPA proposes to mitigate oak trees off-site through an approved organization or at an offsite property owned by the JPA for the 13 oak/native trees that will be encroached by 10 percent or more from the proposed project activities. Off-site mitigation within the same watershed as the encroached trees will include 70 mitigation oak/native trees. Off-site mitigation outside of the same watershed will include 96 mitigation oak/native trees.

5 Tree Protection Measures During Construction

The following tree protection measures shall be implemented in accordance with section 22.44.1920 of the County Code of Ordinances:

- Protective fencing shall be used around the outermost limits of the protected zones of the native trees within or adjacent to the construction area that may be disturbed during construction or grading activities. Before the commencement of any clearing, grading, or other construction activities, protective fencing shall be placed around each applicable tree. Fencing shall be maintained in place for the duration of all construction. No construction, grading, staging, or materials storage shall be allowed within the fenced exclusion areas, or within the protected zones of any on site native trees
- Any approved development, including grading or excavation, that encroaches into the protected zone of a native tree shall be constructed using only hand-held tools
- The JPA shall retain the services of a qualified independent biological consultant or arborist, approved by the Director to monitor native trees that are within or adjacent to the construction area. Public agencies may utilize their own staff who have the appropriate classification. If any breach in the protective fencing occurs, all work shall be suspended until the fence is repaired or replaced

In addition, the following tree protection measures should be implemented in accordance with current International Society of Arboriculture (ISA) standards for tree preservation during construction activities:

- Tree protection shall be established at the TPZ or at the greatest distance feasible from all protected trees not proposed for removal
- The limits of the TPZ should be staked in the field prior to commencement of construction activities
- Any brush clearing or pruning required within the TPZ should be accomplished with hand-operated equipment
- All trimming, pruning or removal of protected trees should be performed by or directly monitored by an ISA Certified Arborist in accordance with current ISA Standards
- No materials, equipment, spoil, waste or washout water should be deposited, stored or parked within the TPZ
- Construction activities should be completed using the smallest equipment feasible and shall operate outside the TPZ
- If equipment placement within the TPZ is necessary for construction activities, ground protection should be placed (2 inches of mulch, plywood) to prevent soil compaction
- Any roots of a protected tree over 1 inch in diameter exposed during construction activities should be exposed to sound tissue and cut cleanly with a saw
- For any single native protected tree, no more than 20% of live foliage should be removed or greater than 20% of the ground under a tree be disturbed during the extent of construction activities for this project

6 References

- American National Standards Institute (ANSI). 2012. Tree, Shrub, and Other Woody Plant Management - Standard Practices (Management of Trees and Shrubs During Site Planning, Site Development, and Construction)
- _____. 2017. Tree, Shrub, and Other Woody Plant Management - Standard Practices (Pruning)
- County of, Los Angeles. Oak Woodlands Conservation Management Plan Guide. March 18, 2014.
- Santa Monica Mountains Local Implementation Program (SMM LIP). 2014. 22.44.950 Coastal Development Permit—Oak Tree Requirements.
- Sinclair, W.A., Lyon, H.H., and Johnson, W.T. 1987. Diseases of Trees and Shrubs. Comstock Publishing Associates, Ithaca, NY.

Appendix A

Protected Tree Matrix

Tree ID #	Common Name	Scientific Name	Number of Trunks	Individual Trunk Diameters (inches)	Aggregate Trunk Diameters (inches)	Tree Height (feet)	Crown Spread (N, NE, E, SE, S, SW, W, NW)	Overall Health	Notes	Damage/Issues
1	Coast Live Oak	<i>Quercus agrifolia</i>	1	17.5	17.5	40	15, 14, 16, 15, 15, 8, 6, 4	Good	leaning east	some flagging, anthracnose deadwood slightly sparse
2	Coast Live Oak	<i>Quercus agrifolia</i>	1	35	35	60	20, 25, 30, 30, 30, 10, 12, 10	Good	new growth present	light flagging broken interior branches, deadwood
3	Coast Live Oak	<i>Quercus agrifolia</i>	1	12	12	45	19, 18, 15, 18, 22, 3, 6, 8	Good	new growth present	light flagging
4	Coast Live Oak	<i>Quercus agrifolia</i>	1	19	19	40	1, 35, 40, 35, 15, 1, 1, 1	Fair	leaning east	prostrate decaying bark, some flagging and anthracnose, branches touching ground
5	Coast Live Oak	<i>Quercus agrifolia</i>	1	35	35	60	25, 25, 28, 25, 25, 25, 20, 30	Fair		somewhat sparse crown deadwood broken branches light flagging, epicormic growth
6	Coast Live Oak	<i>Quercus agrifolia</i>	1	13	13	55	5, 11, 11, 11, 3, 10, 10, 6	Good		sparse crown on west side some anthracnose, deadwood
7	Coast Live Oak	<i>Quercus agrifolia</i>	4	8, 12, 4, 6	16	50	10, 9, 10, 10, 10, 10, 12, 8	Good		some anthracnose and flagging, lichen on branches, codominant stems
8	Coast Live Oak	<i>Quercus agrifolia</i>	1	44	44	65	30, 30, 32, 33, 25, 20, 20, 25	Fair		sparse crown, flagging dead branches deadwood
9	Coast Live Oak	<i>Quercus agrifolia</i>	1	11	11	50	7, 10, 8, 9, 8, 6, 5, 6	Good		some flagging and anthracnose
10	Coast Live Oak	<i>Quercus agrifolia</i>	1	8	8	25	6, 8, 9, 8, 7, 2, 2, 2	Fair	leaning east	sparse crown, anthracnose and flagging
11	Coast Live Oak	<i>Quercus agrifolia</i>	1	7.5	7.5	20	5, 5, 7, 3, 3, 2, 3, 2	Fair		anthracnose flagging leaf miners, sparse crown
12	Coast Live Oak	<i>Quercus agrifolia</i>	4	12, 10, 11, 13	23	25	18, 15, 15, 12, 12, 12, 15, 13	Good	new growth, not tagged	light flagging
13	Coast Live Oak	<i>Quercus agrifolia</i>	3	18, 20, 25	37	55	20, 23, 14, 20, 18, 25, 30, 20	Good	new growth on east side	somewhat sparse on northwest side, some dieback
14	Arroyo Willow	<i>Salix lasiolepis</i>	1	7	7	20	1, 1, 5, 8, 15, 15, 6, 1	Good	leaning south, not tagged	NA
15	Arroyo Willow	<i>Salix lasiolepis</i>	2	10, 8	13	30	15, 1, 1, 1, 1, 10, 12, 15	Good	leaning northwest	NA
16	Boxelder Maple	<i>Acer negundo</i>	5	10, 9, 8, 10, 8	20	35	20, 25, 25, 10, 8, 15, 10, 12	Good	growing adjacent to flowing creek, not tagged	NA
17	Arroyo Willow	<i>Salix lasiolepis</i>	10	9, 9	13	20	10, 10, 10, 8, 6, 8, 6, 6	Poor	not tagged	many dead branches and trunks
18	Arroyo Willow	<i>Salix lasiolepis</i>	10	6, 6	8	20	15, 12, 15, 8, 10, 10, 15, 16	Fair	not tagged	dead branches and trunks
19	Arroyo Willow	<i>Salix lasiolepis</i>	2	10, 7	12	30	12, 8, 15, 15, 10, 15, 15, 15	Good	not tagged	some dead branches
20	Coast Live Oak	<i>Quercus agrifolia</i>	2	13.5, 45	47	55	25, 25, 30, 25, 25, 20, 25, 25	Poor	selective pruning to remove dead and decaying lower branches	sparse crown dieback dead lower branches touching ground flagging, anthracnose
21	Coast Live Oak	<i>Quercus agrifolia</i>	1	25	25	55	20, 15, 18, 12, 25, 15, 30, 15	Good		deadwood in lower interior crown, some anthracnose
22	Coast Live Oak	<i>Quercus agrifolia</i>	1	28	28	55	30, 28, 25, 25, 20, 20, 20, 30	Fair	utility pole through crown, no significant previous pruning observed	sparse crown dieback
23	Coast Live Oak	<i>Quercus agrifolia</i>	3	18, 20, 21	34	50	20, 20, 18, 15, 25, 20, 25, 20	Good		somewhat sparse crown light flagging dead branches, deadwood
24	Coast Live Oak	<i>Quercus agrifolia</i>	9	5, 10, 4, 9, 1, 1, 1, 1, 6	15	30	15, 15, 10, 8, 5, 5, 8, 10	Good	not tagged	somewhat sparse crown, some anthracnose
25	Coast Live Oak	<i>Quercus agrifolia</i>	3	8, 1, 2	8	20	10, 8, 8, 10, 5, 5, 8, 8	Fair		sparse crown, anthracnose
26	Coast Live Oak	<i>Quercus agrifolia</i>	1	11	11	40	10, 10, 5, 5, 5, 8, 8, 10	Fair	growing adjacent to retaining wall south of creek	anthracnose, sparse crown dead branches
27	Coast Live Oak	<i>Quercus agrifolia</i>	3	10, 10, 12	19	40	10, 10, 15, 15, 10, 8, 5, 5	Good	growing adjacent to retaining wall south of creek	codominant stems
28	Arroyo Willow	<i>Salix lasiolepis</i>	15	7, 7	10	30	10, 10, 15, 20, 20, 15, 8, 10	Fair	not tagged, dripline at edge of proposed manhole	dead branches, sparse crown
29	Blue Elderberry	<i>Sambucus cerulea</i>	10	7, 7	10	20	15, 10, 8, 7, 16, 16, 15, 15	Fair	not tagged	many dead branches
30	Coast Live Oak	<i>Quercus agrifolia</i>	1	12	12	45	8, 8, 10, 10, 15, 15, 1, 1	Good	previously pruned	codominant stems
31	Coast Live Oak	<i>Quercus agrifolia</i>	3	16, 15, 14.5	26	55	25, 25, 20, 25, 30, 25, 15, 20	Good	previously pruned	codominant stems
32	California sycamore	<i>Platanus racemosa</i>	2	15, 18	23	50	20, 25, 28, 25, 28, 25, 20, 20	Good		NA

Tree ID #	Common Name	Scientific Name	Number of Trunks	Individual Trunk Diameters (inches)	Aggregate Trunk Diameters (inches)	Tree Height (feet)	Crown Spread (N, NE, E, SE, S, SW, W, NW)	Overall Health	Notes	Damage/Issues
33	California sycamore	<i>Platanus racemosa</i>	1	28	28	65	15, 12, 12, 20, 15, 15, 12, 20	Good	adjacent to parking lot	leaf miners
34	California sycamore	<i>Platanus racemosa</i>	1	18	18	60	20, 15, 18, 20, 18, 15, 15, 15	Good		woodpecker damage along trunk and branches
35	California sycamore	<i>Platanus racemosa</i>	1	13	13	65	3, 1, 1, 3, 5, 10, 8, 8	Fair	previously pruned	some dieback, anthracnose epicormic growth sparse crown
36	California sycamore	<i>Platanus racemosa</i>	1	11	11	45	10, 8, 8, 15, 12, 10, 10, 8	Good	previously pruned	uneven crown
37	California sycamore	<i>Platanus racemosa</i>	1	16	16	65	10, 12, 10, 20, 20, 25, 20, 15	Good	stress cracks on branches, previously pruned	some dieback
38	California sycamore	<i>Platanus racemosa</i>	1	20	20	35	25, 25, 25, 20, 25, 23, 25, 20	Good	previously pruned	leaf miners. weak lateral stems from previous pruning
39	Coast Live Oak	<i>Quercus agrifolia</i>	1	18	18	45	25, 20, 20, 18, 20, 15, 10, 10	Good	growing behind chain-link fence	NA
40	Coast Live Oak	<i>Quercus agrifolia</i>	1	9	9	45	2, 2, 2, 8, 10, 10, 10, 3	Good	growing behind chain-link fence	NA
41	Coast Live Oak	<i>Quercus agrifolia</i>	1	14	14	25	15, 20, 20, 18, 18, 10, 8, 5	Good	previously pruned	some anthracnose
42	Coast Live Oak	<i>Quercus agrifolia</i>	2	10, 6.5	12	30	10, 12, 8, 12, 10, 10, 12, 10	Good	previously pruned	some flagging, codominant stems
43	Coast Live Oak	<i>Quercus agrifolia</i>	1	13	13	30	8, 5, 5, 3, 3, 3, 3, 5	Good	previously pruned	some flagging
44	Coast Live Oak	<i>Quercus agrifolia</i>	2	7, 8	11	25	6, 5, 3, 3, 4, 4, 3, 4	Good	previously pruned	some flagging, codominant stems
358	Coast Live Oak	<i>Quercus agrifolia</i>	2	8, 8	11	25	5, 5, 5, 5, 5, 5, 5, 5	Good		
359	Coast Live Oak	<i>Quercus agrifolia</i>	1	11	11	25	10, 5, 5, 5, 5, 5, 8, 6	Good		
360	California black walnut	<i>Juglans californica</i>	1	17	17	30	5, 8, 5, 4, 8, 16, 15, 6	Poor		dead, snapped branches
361	Coast Live Oak	<i>Quercus agrifolia</i>	1	13	13	30	6, 6, 6, 6, 6, 6, 6, 6	Good		
362	California black walnut	<i>Juglans californica</i>	1	14	14	30	10, 8, 4, 4, 15, 10, 12, 12	Fair		

Appendix B

Tree Photographs



Tree #1 Coast Live Oak (*Quercus agrifolia*)



Tree #2 Coast Live Oak (*Quercus agrifolia*)



Tree #3 Coast Live Oak (*Quercus agrifolia*)



Tree #4 Coast Live Oak (*Quercus agrifolia*)



Tree #5 Coast Live Oak (*Quercus agrifolia*)



Tree #6 Coast Live Oak (*Quercus agrifolia*)



Tree #7 Coast Live Oak (*Quercus agrifolia*)



Tree #8 Coast Live Oak (*Quercus agrifolia*)



Tree #9 Coast Live Oak (*Quercus agrifolia*)



Tree #10 Coast Live Oak (*Quercus agrifolia*)



Tree #11 Coast Live Oak (*Quercus agrifolia*)



Tree #12 Coast Live Oak (*Quercus agrifolia*)



Tree #13 Coast Live Oak (*Quercus agrifolia*)



Tree #14 Arroyo Willow (*Salix lasiolepis*)



Tree #15 Arroyo Willow (*Salix lasiolepis*)



Tree #16 Boxelder Maple (*Acer negundo*)



Tree #17 Arroyo Willow (*Salix lasiolepis*)



Tree #18 Arroyo Willow (*Salix lasiolepis*)



Tree #19 Arroyo Willow (*Salix lasiolepis*)



Tree #20 Coast Live Oak (*Quercus agrifolia*)



Tree #20 Coast Live Oak (*Quercus agrifolia*)



Tree #20 Coast Live Oak (*Quercus agrifolia*)



Tree #21 Coast Live Oak (*Quercus agrifolia*)



Tree #22 Coast Live Oak (*Quercus agrifolia*)



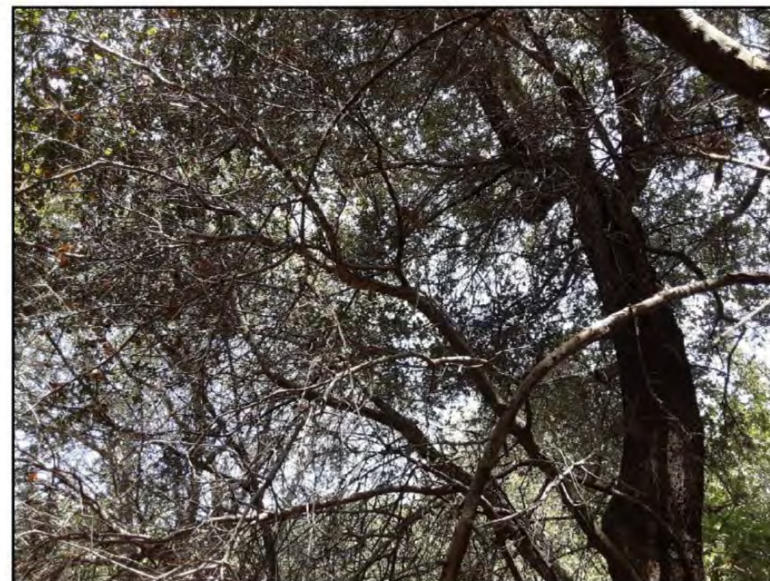
Tree #23 Coast Live Oak (*Quercus agrifolia*)



Tree #24 Coast Live Oak (*Quercus agrifolia*)



Tree #25 Coast Live Oak (*Quercus agrifolia*)



Tree #26 Coast Live Oak (*Quercus agrifolia*)



Tree #26 Coast Live Oak (*Quercus agrifolia*)



Tree #27 Coast Live Oak (*Quercus agrifolia*)



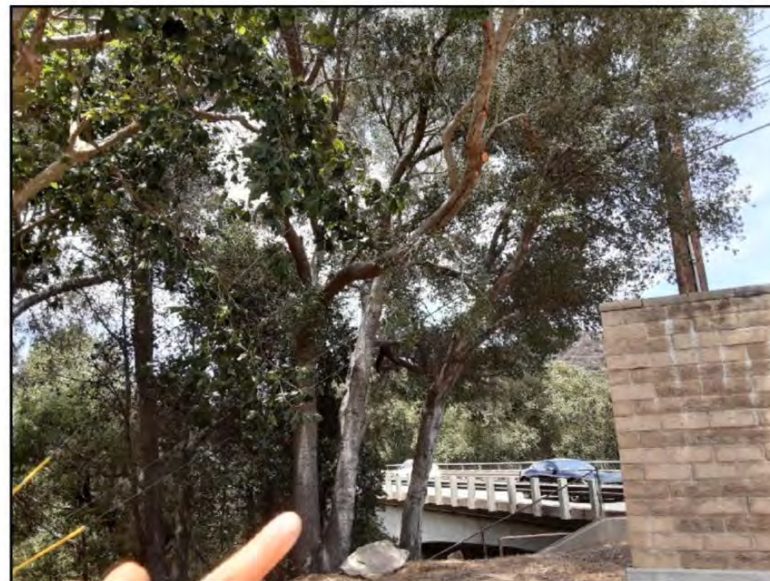
Tree #28 Arroyo Willow (*Salix lasiolepis*)



Tree #29 Blue Elderberry (*Sambucus cerulea*)



Tree #30 Coast Live Oak (*Quercus agrifolia*)



Tree #31 Coast Live Oak (*Quercus agrifolia*)



Tree #32 California sycamore (*Platanus racemosa*)



Tree #33 California sycamore (*Platanus racemosa*)



Tree #34 California sycamore (*Platanus racemosa*)



Tree #34 California sycamore (*Platanus racemosa*)



Tree #35 California sycamore (*Platanus racemosa*)



Tree #36 California sycamore (*Platanus racemosa*)



Tree #37 California sycamore (*Platanus racemosa*)



Tree #38 California sycamore (*Platanus racemosa*)



Tree #39 Coast Live Oak (*Quercus agrifolia*)



Tree #40 Coast Live Oak (*Quercus agrifolia*)



Tree #41 Coast Live Oak (*Quercus agrifolia*)



Tree #42 Coast Live Oak (*Quercus agrifolia*)



Tree #43 Coast Live Oak (*Quercus agrifolia*)



Tree #44 Coast Live Oak (*Quercus agrifolia*)



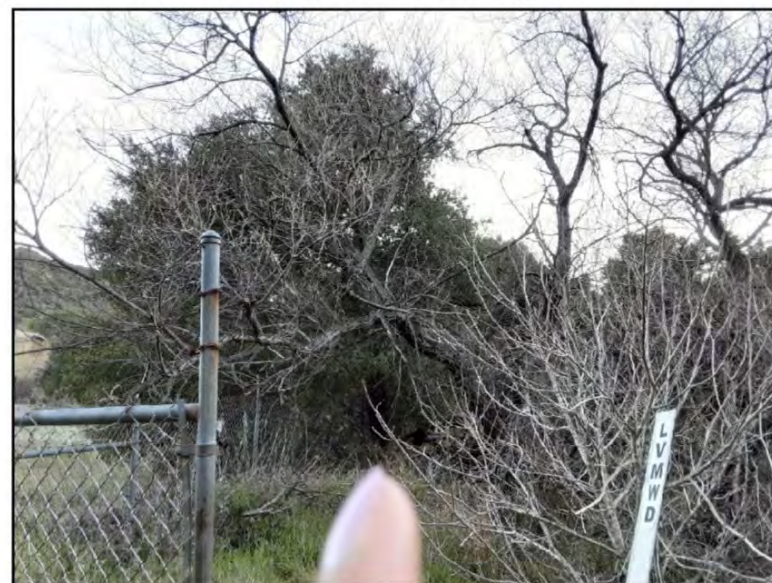
Tree #358 Coast Live Oak (*Quercus agrifolia*)



Tree #359 Coast Live Oak (*Quercus agrifolia*)



Tree #360 California black walnut (*Juglans californica*)



Tree #361 Coast Live Oak (*Quercus agrifolia*)



Tree #362 California black walnut (*Juglans californica*)

Appendix D

Cultural Resources Assessment



Rincon Consultants, Inc.
250 East 1st Street, Suite 1400
Los Angeles, California 90012
213-788-4842

July 27, 2023
Project No: 20-10352

Veronica Hurtado, Water Reclamation Manager
Las Virgenes Municipal Water District – Triunfo Joint Powers Authority
4232 Las Virgenes Road, #1994
Calabasas, California, 91302
Via email: bdingman@lvmwd.com

Subject: Cultural Resources Assessment for the Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project

Dear Ms. Hurtado:

The Las Virgenes Municipal Water District – Triunfo Joint Powers Authority (Las Virgenes-Triunfo JPA) has retained Rincon Consultants, Inc. (Rincon) to prepare a cultural resources assessment in support of the Tapia Water Reclamation Facility (WRF) 003 Outfall Rehabilitation Project (project) located within the Tapia WRF and Malibu Creek State Park, Los Angeles County. The project proposes the installation of five new manholes to facilitate the inspection of an existing outfall pipeline associated with the Tapia WRF. This cultural resources assessment was prepared in support of an Initial Study/Mitigated Negative Declaration (IS/MND) pursuant to the California Environmental Quality Act (CEQA). Las Virgenes-Triunfo JPA is the CEQA lead agency.

The project is partially located within Malibu Creek State Park, which is administered by California State Parks. As such, this letter report was also prepared to comply with California State Parks cultural resources guidelines.

Project Site and Description

The project site is located in an unincorporated portion of northwestern Los Angeles County within the Santa Monica Mountains, and overlaps the Tapia WRF's eastern portion, as well as a portion of Malibu Creek State Park. The proposed project is located within Section 18 of Township 1 South, Range 17 West on the *Malibu Beach, CA 7.5-minute* topographic quadrangle (Figure 1, Attachment A). Specifically, the project site encompasses an approximately 1.4-acre area that bounds both sides of Malibu Canyon Road approximately 460 feet south of its intersection with Piuma Road, 330 feet west of Malibu Creek, and 550 feet east of the Tapia WRF (Figure 2, Attachment A).

The proposed project includes the inspection of an existing 24-inch outfall pipeline, which runs for approximately 2,250 linear feet (approximately 0.43 mile) from the Tapia WRF, located at 731 Malibu Canyon Road in Calabasas, to Malibu Creek. Starting at the Tapia WRF, the pipeline is within paved road for approximately 0.15 mile to Las Virgenes Road/Malibu Canyon Road, which is also paved, and crosses to the east side of this road (another approximate 0.03 mile). On the east side of Las Virgenes Road/Malibu Canyon Road, the pipeline is within an unpaved access road to its terminus at Malibu Creek, approximately 0.25 mile to the south.

Inspection of the existing pipeline would require the installation of five new manholes to provide access along the pipeline alignment. One manhole would be installed along the paved entry road leading up to the Tapia WRF west of Malibu Canyon Road, and the remaining four manholes would be installed in the unpaved access road east of Malibu Canyon Road. The existing unpaved access road would be



expanded to the north and south, and widened to a width of 20 feet. Construction of each manhole would involve trench excavation, backfill and compaction of soil above the Tapia 003 outfall pipeline, installation of precast concrete manhole structures into the pipeline, and removal of existing butterfly valves and turnouts. An area of approximately 20 feet by 40 feet would be temporarily impacted for the construction of each manhole. Additionally, approximately 200 cubic yards of soil would be excavated for the installation of the five manholes and later used as backfill after construction is complete.

Methods

California Historical Resources Information System Records Search

On February 27, 2023, Rincon staff conducted a records search for the proposed project at the California Historical Resources Information System (CHRIS) South Central Coastal Information Center (SCCIC). The SCCIC is the official state repository for cultural resources records and reports for the county in which the project is located. The records search included a review of all previously recorded cultural resources and previous studies within the project site plus a 0.5-mile radius. Rincon also reviewed the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the California Historical Landmarks list, and the Built Environment Resources Directory, as well as its predecessor the California State Historic Property Data File. Additionally, Rincon reviewed the Archaeological Determination of Eligibility list. See Attachment B for the CHRIS records search results.

Sacred Lands File Search

Rincon contacted the California Native American Heritage Commission (NAHC) on February 2, 2023, to request a search of the Sacred Lands File (SLF), as well as a contact list of Native Americans culturally affiliated with the project site.

Background and Archival Research

Rincon completed archival research in support of this study in March 2023. The desktop archival research included a review of historical topographic maps and aerial photographs, as well as geologic and soils maps. The intent of the archival research is to provide a development history of the project site and its vicinity, as well as to assess the likelihood for the project site to contain subsurface archaeological deposits.

Field Survey

Rincon cultural resources specialist, Andrea Ogaz, M.A., RPA, conducted a pedestrian survey of the project site on May 3, 2023, under State Parks Permit No. 23-022. Ms. Ogaz conducted a systematic pedestrian survey of the project site using transect intervals spaced 5 meters and oriented generally from north to south. Exposed ground surfaces were examined for artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire-affected rock), ecofacts (marine shell and bone), soil discoloration that might indicate the presence of a cultural midden, soil depressions, and features indicative of the former presence of structures or buildings (e.g., standing exterior walls, postholes, foundations) or historical debris (e.g., metal, glass, ceramics). Ground disturbances such as burrows were also visually inspected. Survey accuracy was maintained using a handheld Global Positioning Satellite unit and a georeferenced map of the project site. Site characteristics and survey conditions



were documented using field records and a digital camera. Copies of the survey notes and digital photographs are maintained at our Rincon Los Angeles office.

Findings

California Historical Resources Information System Records Search

Cultural Resources Studies

The CHRIS records search results indicate 13 cultural resources studies have been previously conducted within the 0.5-mile records search radius. Approximately 50 percent of the 0.5-mile radius has been included in previous cultural resources studies. Approximately 50 percent of the project site has been included as part of three previous cultural resources studies (LA-03505, -03764, and -08128). Of these three studies, two did not include fieldwork (LA-03505 and -03764). The one study overlapping the project site that included fieldwork (LA-08128) is described in detail below.

Study LA-08128

In 2017, Historical Environmental Archaeological Research Team (HEART) prepared a cultural resources assessment that included a records search and cultural resources survey for a recycled water pipeline project (Wlodarski and Conrad 2007). HEART's investigation identified three cultural resources within their study area including one historic-period archaeological site consisting of concrete foundations (P-19-003105), and two prehistoric archaeological sites consisting of a shell scatter (P-19-003106) and a lithic scatter (P-19-003107). None of these three resources were identified within or immediately adjacent to the project site.

Previously Recorded Cultural Resources

The records search results indicate 10 cultural resources have been previously recorded within a 0.5-mile radius of the project site including: six prehistoric archaeological sites (P-19-000417, -000785, -000817, -001350, and -003106); one historic-period archaeological site (P-19-003105); one prehistoric isolate (P-19-100880); and two historic-period built environment resources (P-19-186812 and -190760) (Table 1). No cultural resources have been previously recorded within or immediately adjacent to (within 100 feet of) the project site.



Table 1 Previously Recorded Cultural Resources Within 0.5 Mile of the Project Site

Primary No.	Trinomial	Description	Date(s) Recorder(s) and Date(s)	NRHP/CRHR Eligibility	Relationship to Project Site
P-19-000417	CA-LAN-417	Prehistoric archaeological site: bedrock milling features	1970 (N. Nelson and N. Leonard); 1980 (Ronald D. Douglas); 1987 (Andrew Pignoli and Steven H. Briggs)	Not evaluated	Outside
P-19-000785	CA-LAN-785	Prehistoric archaeological site: bedrock milling features	1977 (Bove and Dillon); 1980 (Anonymous)	Not evaluated	Outside
P-19-000817	CA-LAN-817	Prehistoric archaeological site: artifact scatter	1975 (Pat O'Neil); 2002 (T. G. Cooley)	Not evaluated	Outside
P-19-001350	CA-LAN-1350	Prehistoric archaeological site: bedrock milling features	1987 (Andrew Pignoli and Steven H. Briggs)	Not evaluated	Outside
P-19-003105	CA-LAN-3105H	Historic-period archaeological site: remnants of rehabilitation camp	2002 (Stacey C. Jordan, Kristen E. Walker, and Laura J. Barrie)	Not evaluated	Outside
P-19-003106	CA-LAN-3106	Prehistoric archaeological site: sparse shell scatter	2002 (Theodore G. Cooley, Laura J. Barrie, and Kristen E. Walker)	Not evaluated	Outside
P-19-003107	CA-LAN-3107	Prehistoric archaeological site: lithic scatter	2002 (Theodore G. Cooley, Laura J. Barrie, and Kristen E. Walker); 2010 (Albert Knight and Chester King)	Not evaluated	Outside
P-19-100880	–	Prehistoric isolate: quartzite scraper	2010 (Albert Knight and Chester King)	Not evaluated	Outside
P-19-186812	–	Historic-period built environment resource: cement and cobble pilon	2002 (T. Cooley, L. Barrie and K. Walker)	Determined not eligible *	Outside
P-19-190760	–	Historic-period built environment resource: culvert constructed in 1914	2013 (Barbara Tejada and Alex D. Bevil)	Not evaluated	Outside

NRHP = National Register of Historic Places; CRHR = California Register of Historic Resources

*NRHP Status Code 6Z

Source: SCCIC 2023

Sacred Land File Search

On March 2, 2023, the NAHC responded to Rincon's SLF request, stating that the results of the SLF search were negative for the presence of Native American cultural resources. See Attachment 2 for the NAHC response letter.

Background and Archival Research

Historical Topographic Map and Aerial Imagery Review

Historical topographic maps reviewed include the 1903 and 1944 *Calabasas, CA* 15-minute topographic quadrangles, the 1929 and 1931 *Solstice Canyon, CA* 7.5-minute quadrangles, and the 1950 and 1995 *Malibu Beach, CA* 7.5-minute quadrangles. Historical aerial photographs of the project site were available for the years 1947, 1952, 1959, 1964, 1967, 1980, 1985, 1990, 1995, 2000, 2005, and 2016 (NETROnline 2023).



The 1903 map shows the project site located on a terrace overlooking the western side of Malibu Creek, just south of where the creek intersects with an intermittent wash. Aside from the presence of dirt roads, the map shows very little development within the project site and its immediate vicinity. The 1929, 1931, and 1944 maps show the dirt roads have been replaced with paved roads that are analogous to present-day Las Virgenes Road and Piuma Road. The maps also show the placenames, Brents Mountain Crag Camp and Perrel Ranch located 0.70 and 0.60 mile northwest and northeast of the project site, respectively. The 1955 map shows the construction of Las Virgenes Road south of the project site, but no additional development is depicted in the vicinity. The 1995 map shows facilities associated with the existing Tapia WRF along the project site's western terminus, but no additional development is depicted.

The 1947 aerial photograph shows very little development in the vicinity of the project site aside from Las Virgenes Road and Piuma Road located immediately north of the project site. The 1952 map shows a number of structures immediately southwest of the project site, on the west side of Las Virgenes Road. The photograph also shows the project site and its immediate vicinity as having been graded, possibly as part of the construction of Las Virgenes Road and its bridge spanning Malibu Creek. The 1959 map shows the completed paved bridge and Las Virgenes Road passing through the project site. The 1967 photograph shows the construction of the Tapia WRF approximately 550 feet west of the project site. The 1980, 1985, and 1990 photographs show the completed Tapia WRF. The 1995 photograph shows the structures immediately southwest of the project site are no longer present. The 2000, 2005, and 2016 photographs show the current condition of the project site in that it is comprised of paved roads at its western portion, and its central and eastern portions are comprised of a meadow bisected by a narrow dirt access road.

Geologic and Soil Map Review

Geologic mapping indicates Holocene-age (11,650 years ago to present) young alluvium (Qya) is mapped at surface within the project site (Campbell et al. 2016). The age of the geologic unit spans human occupation of the region and is of appropriate age for the burial and preservation of subsurface archaeological deposits. Soils mapping indicates the project site is underlain by Cotharin clay loam, a generally shallow soil formed from colluvium and/or weathered andesite deposited on side slopes (United States Department of Agriculture [USDA] 2001). The typical Cotharin clay loam soil profile consists of the following: an organic layer (Oe Horizon) from the surface to a depth of 1 inch; topsoil (A-horizon) from depths of 1 to 9 inches below the ground surface; a mixture of topsoil and parent material (AC Horizon) from depths of 9 to 11 inches below the ground surface; and a mixture of parent material and bedrock (Cr Horizon) from depths of 11 to 60 inches below the ground surface (USDA 2001).

Summary

The archival research indicates the alluvium mapped at surface within the project site is of appropriate age to preserve subsurface archaeological deposits. However, the soils map indicates the soil profile is relatively shallow, with bedrock identified at a depth of 11 inches below ground surface (USDA 2001). That being the case, should archaeological deposits be present, they would be close to the surface and lack depth. The historical aerial photographs show the project's eastern portion, which is comprised of Las Virgenes Road and the access road to the Tapia WRF has been paved since 1980. The photographs also indicate the project's central and eastern portions east of Las Virgenes Road, which are located in an area vegetated with coyote brush scrub, upland mustard, and wild oats and grasses, were subject to grading in the early 1950s, possibly during construction of Las Virgenes Road and/or the road's bridge spanning Malibu Creek. Furthermore, much of the project's excavation would occur over the existing outfall pipeline, representing an already disturbed context. As such, were



archaeological deposits present in the project site, they would likely have been destroyed or displaced as a result of the previous construction activities. Therefore, Rincon recommends the likelihood for encountering intact archaeological deposits during project implementation is low.

Survey Results

The project site is comprised of paved surfaces in the western portion and seasonal grasses and oak trees in the eastern portion. The paved surfaces and dense seasonal grasses reduced ground surface visibility to 0 and 10 percent, respectively. The only portion of the project site with adequate visibility was the existing dirt access road in the project site's western portion. Soils noted within the pathway included compacted brown loamy silt with gravel. No cultural resources were identified as a result of the survey. Figure 3 through Figure 4 in Attachment A depict the survey conditions within the project site.

Conclusions and Recommendations

The impact analysis included here is organized based on the cultural resources thresholds included in CEQA Guidelines Appendix G: Environmental Checklist Form:

- a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?
- b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?
- c. Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Threshold A broadly refers to historical resources. To more clearly differentiate between archaeological and built environment resources, analysis under Threshold A is limited to built environment resources. Archaeological resources, including those that may be considered historical resources pursuant to Section 15064.5 and those that may be considered unique archaeological resources pursuant to Section 21083.2, are considered under Threshold B.

Historical Built Environment Resources (Threshold A)

No historical built environment resources were documented in the project site as a result of the archival research and cultural resources survey. Based on the results of the current study, Rincon recommends a finding of **no impact** to historical resources for the purposes of CEQA.

Historical and Unique Archaeological Resources (Threshold B)

No archaeological resources were identified in the project site as a result of the archival research and pedestrian survey. Furthermore, the map review suggests a low potential for encountering intact subsurface archaeological deposits within the project site due to disturbances associated with previous grading activities and the installation of the existing outfall pipeline. Although there is low potential for encountering subsurface archaeological deposits, in the unlikely event archaeological materials are encountered during project construction, Rincon recommends the following standard measures be implemented. With the implementation of these measures, Rincon recommends a finding of **less than significant impacts with mitigation incorporated** for archaeological resources that may qualify as historical resources or unique archaeological resource pursuant to CEQA.



Recommended Measures

Unanticipated Discovery of Cultural Resources

In the event that archaeological resources are unexpectedly encountered during ground-disturbing activities, work within 50 feet of the find should halt and the qualified archaeologist should be contacted immediately to evaluate the resource. If the resource is determined by the qualified archaeologist to be prehistoric, then a Native American representative should also be contacted to participate in the evaluation of the resource. If the qualified archaeologist and/or Native American representative determines it to be appropriate, archaeological testing for CRHR eligibility should be completed. If the resource proves to be eligible for the CRHR and significant impacts to the resource cannot be avoided via project redesign, a qualified archaeologist should prepare a data recovery plan tailored to the physical nature and characteristics of the resource, per the requirements of CEQA Guidelines Section 15126.4(b)(3)(C). The data recovery plan should identify data recovery excavation methods, measurable objectives, and data thresholds to reduce any significant impacts to cultural resources related to the resource. Pursuant to the data recovery plan, the qualified archaeologist and Native American representative, as appropriate, should recover and document the scientifically consequential information that justifies the resource's significance. Las Virgenes-Triunfo JPA should review and approve the treatment plan and archaeological testing as appropriate, and the resulting documentation should be submitted to the regional repository of the CHRIS, per CEQA Guidelines Section 15126.4(b)(3)(C).

Human Remains (Threshold C)

No human remains are known to be present within the project site. However, the discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be of Native American origin, the Coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the landowner shall reinter the remains in an area of the property secure from subsequent disturbance. With adherence to existing regulations, Rincon recommends a finding of **less than significant impact** to human remains under CEQA.



Should you have any questions concerning this study, please do not hesitate to contact the undersigned at (619) 241-9238 or mvader@rinconconsultants.com.

Sincerely,

Rincon Consultants, Inc.

A handwritten signature in black ink, appearing to read "M. Vader", with a long horizontal stroke extending to the right.

Michael Vader, B.A.
Senior Archaeologist

A handwritten signature in black ink, appearing to read "Hannah Haas", with a long horizontal stroke extending to the right.

Hannah Haas, M.A., RPA
Program Manager

A handwritten signature in black ink, appearing to read "Chris Duran", with a long horizontal stroke extending to the right.

Christopher A. Duran, M.A., RPA
Principal

Attachments

- Attachment A Figures
- Attachment B CHRIS Records Search Results
- Attachment C Sacred Lands File Search Results



References

Campbell, R.H., Wills, C.J., Irvine, P.J., and Swanson, B.J.

- 2016 Preliminary geologic map of the Los Angeles 30' x 60' quadrangle, California. California Geologic Survey, Sacramento, California.

NETROnline

- 2023 Historic Aerial Photographs for the Years 1947, 1952, 1959, 1969, 1974, 1977, 1985, 1992, 1999, 2002, and 2016. Electronic resource, <https://www.historicaerials.com/viewer>, accessed April 28, 2023

United State Department of Agriculture (USDA)

- 2001 Cotharian Series. Electronic resource, https://soilseries.sc.egov.usda.gov/OSD_Docs/COTHARIN.html, accessed March 8, 2023.

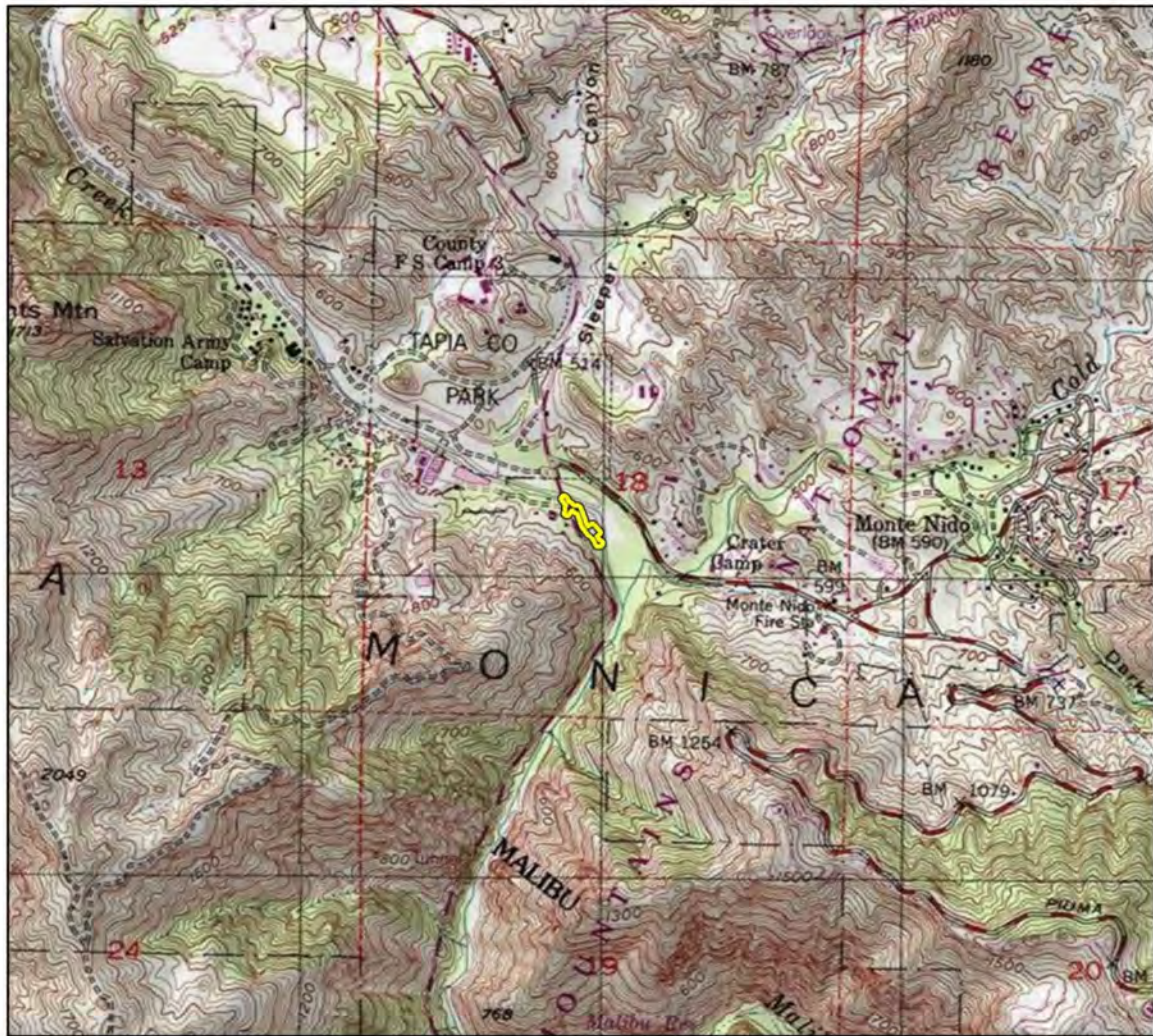
Wlodarski, Robert and Matthew Conrad

- 2007 A Phase 1 Archaeological Study for the Tapia State Park Portion of the LVDWD REW Recycled Water Pipeline Project County of Los Angles, California. On file at the South Central Coastal Information Center, California State University Fullerton, California.

Attachment A

Figures

Figure 1 Project Location



Basemap provided by National Geographic Society, Esri and their licensors
 © 2023. Malibu Beach Quadrangle. T01S R17W S18. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

 Project Location

0 1,000 2,000 Feet

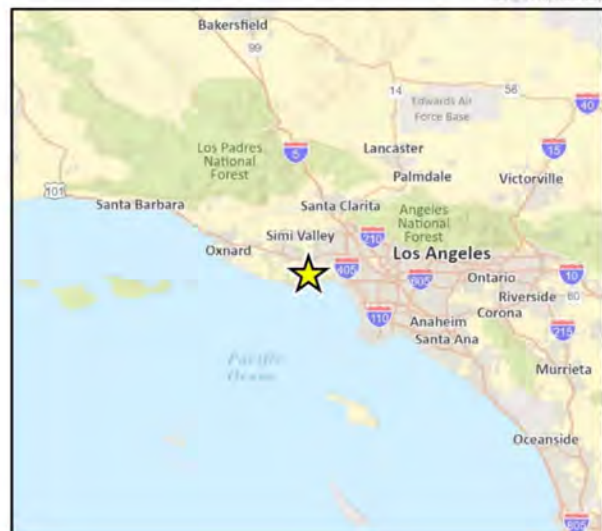
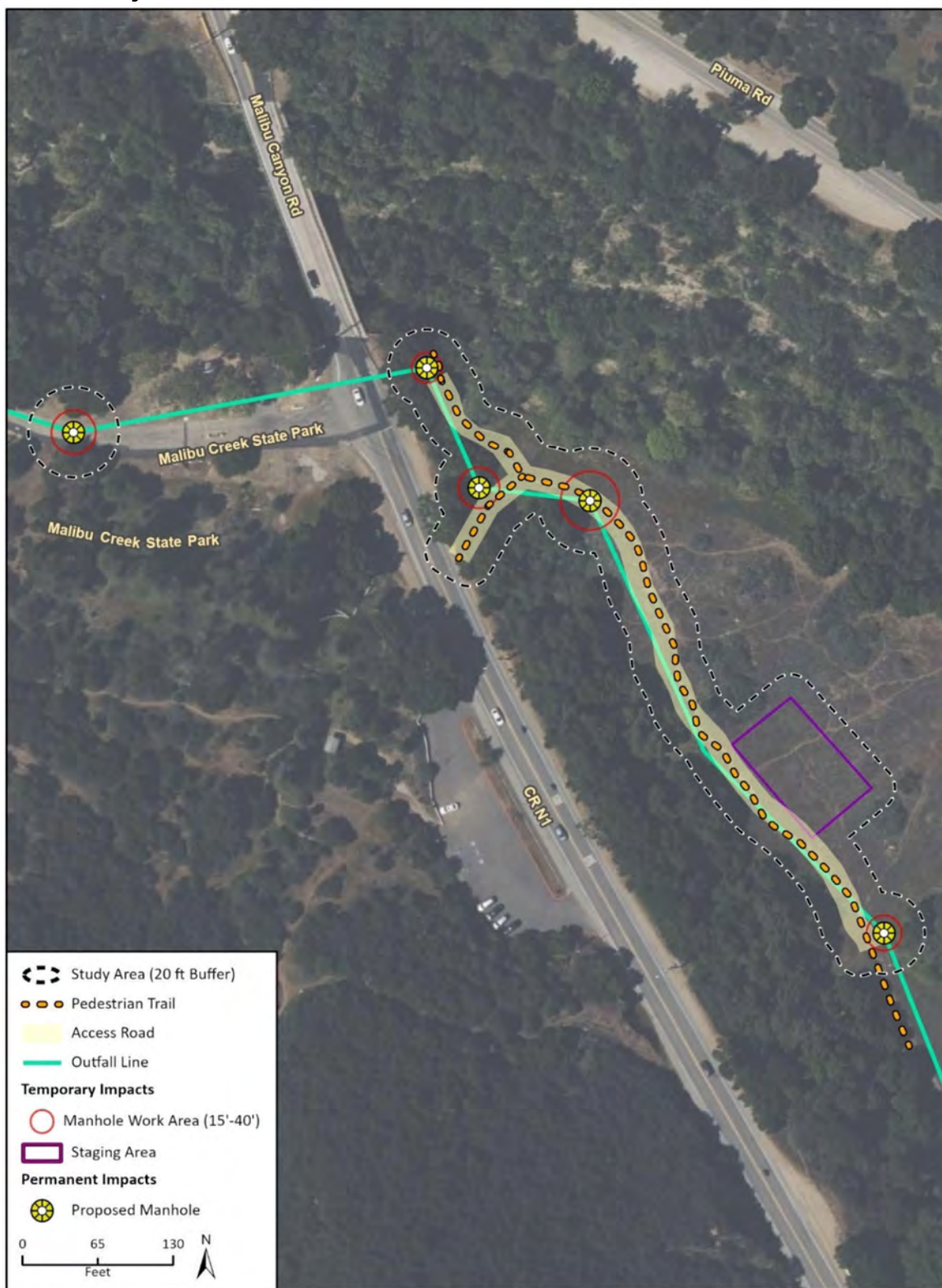


Figure 2 Project Site



Imagery provided by Microsoft Bing and its licensors © 2023.

80-10152-000-A-000001
 Fig8 Arborist 20230417 No Trees

Figure 3 Overview of Project Site, View to NW



Figure 4 Overview of Dirt Pathway, View to NW



Attachment B

CHRIS Records Search (Confidential – Bound Separately)

Attachment C

Sacred Lands File Search Results



NATIVE AMERICAN HERITAGE COMMISSION

March 2, 2023

Michael Vader
Rincon Consultants, Inc.

Via Email to: mvader@rinconconsultants.com

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Luiseño

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EXECUTIVE SECRETARY
**Raymond C.
Hitchcock**
Miwok/Nisenan

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

Re: 20-10352 Tapia WRF 003 Outfall Rehab Project, Los Angeles County

Dear Mr. Vader:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green
Cultural Resources Analyst

Attachment

Appendix E

Construction Energy Consumption Calculations

Last Updated: August 16, 2021

Compression-Ignition Engine Brake-Specific Fuel Consumption (BSFC) Factors [1]:

HP: 0 to 100	0.0588	HP: Greater than 100	0.0529
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Values above are expressed in gallons per horsepower-hour/BSFC.

CONSTRUCTION EQUIPMENT						
Construction Equipment	#	Hours per Day	Horsepower	Load Factor	Construction Phase	Fuel Used (gallons)
Excavators	1	8	158	0.38	Demolition Phase	1,675.69
Tractors/Loaders/Backhoes	1	8	97	0.37	Demolition Phase	1,113.58
Off-Highway Trucks	1	8	402	0.38	Demolition Phase	4,263.46
Excavators	1	8	158	0.38	Site Preparation Phase	558.56
Graders	1	8	187	0.41	Site Preparation Phase	713.28
Tractors/Loaders/Backhoes	1	8	97	0.37	Site Preparation Phase	371.19
Total Fuel Used						8,695.76 (Gallons)

Construction Phase	Days of Operation
Demolition Phase	66
Site Preparation Phase	22
Total Days	88

WORKER TRIPS				
Constuction Phase	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
Demolition Phase	24.1	10	14.7	402.57
Site Preparation Phase	24.1	8	14.7	107.35
Total				509.93

HAULING AND VENDOR TRIPS				
Trip Class	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
HAULING TRIPS				
Demolition Phase	7.5	0	20.0	0.00
Site Preparation Phase	7.5	0	20.0	0.00
Total				-
VENDOR TRIPS				
Demolition Phase	7.5	0	6.9	0.00
Site Preparation Phase	7.5	0	6.9	0.00
Total				-

Total Gasoline Consumption (gallons)	509.93
Total Diesel Consumption (gallons)	8,695.76

Sources:

[1] United States Environmental Protection Agency. 2018. *Exhaust and Crankcase Emission Factors for Nonroad Compression-Ignition Engines in MOVES2014b*. July 2018. Available at: <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100UXEN.pdf>.

[2] United States Department of Transportation, Bureau of Transportation Statistics. 2019. *National Transportation Statistics 2019*. Available at: <https://www.bts.gov/topics/national-transportation-statistics>.

Mitigation Monitoring and Reporting Program

This document constitutes the Mitigation Monitoring and Reporting Program (MMRP) for the Tapia Water Reclamation Facility 003 Outfall Rehabilitation project (hereinafter referred to as the “project” or “proposed project”). CEQA requires that a reporting or monitoring program be adopted for the conditions of project approval that are necessary to mitigate or avoid significant effects on the environment (Public Resources Code 21081.6). This MMRP is intended to track and ensure compliance with adopted mitigation measures during the project implementation phase. For each mitigation measure recommended in the Initial Study – Mitigated Negative Declaration (IS-MND), specifications are made herein that identify the action required, the monitoring that must occur, and the agency or department responsible for oversight.

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
Biological Resources							
Mitigation Measure BIO-1 Worker Environmental Awareness Program							
Prior to initiation of all construction activities (including staging and mobilization), all personnel associated with project construction shall attend a Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist, to assist workers in recognizing special-status biological resources with the potential to occur in the project site. This training will include information about all special-status species determined to be present or to have a moderate or high potential to occur on-site. Training will also address protected nesting birds, special-status plants, sensitive natural communities, SERAs, resources protected by local policies, as well as other special-status species potentially occurring on the project site. The specifics of this program will include identification of special-status species and sensitive communities, a description of the regulatory status and general ecological characteristics of special-status resources, and review of the limits of construction and measures required to avoid and minimize impacts to biological resources within the project site. A fact sheet conveying this information will also be prepared for distribution to all contractors, their employees, and other personnel involved with construction of the project. All employees will sign a form provided by the trainer documenting they attended the WEAP training and understand the information presented. The crew foreman will be responsible for ensuring crew members adhere to the guidelines and restrictions designed to avoid impacts to special-status species. If new construction personnel are added to the project, the crew foreman will ensure the new personnel receive the WEAP training before starting work.	Require all construction personnel to attend WEAP training developed and led by a qualified biologist.	Prior to and during construction if new personnel are added.	Once prior to initiation of construction activities, and as needed as new personnel are added to the project site	Las Virgenes Municipal Water District-Triunfo Joint Powers Authority			
Mitigation Measure BIO-2 General Best Management Practices							
General requirements which shall be followed by construction personnel are listed below. - No project construction, activities, and equipment staging shall occur within the bed and banks of the stream channel. Any work, including operation of loaders, dozers, drilling rigs, cranes, and vehicles, that occurs within 30 feet from the top of stream banks will be minimized to the extent practicable to reduce impacts to special-status wildlife species that may occur within the riparian habitat. Only work that is required to occur within this buffer (e.g., construction of manholes) may be performed. Fencing and signage shall be installed 30 feet from the stream banks to exclude entry into the stream channel for the duration of the project. Fencing and signage shall not be moved (except to facilitate work that is required to occur within 30 feet of the stream banks) and must be maintained for the duration of the project. The contractor shall advise all workers of the intent of the protection measures prior to the start of project construction and activities. No living native vegetation shall be removed from the channel, bed, or banks of Malibu Creek. - Project-related vehicles shall observe a 5-mile-per-hour speed limit within the unpaved limits of construction. - All open trenches shall be fenced and sloped to prevent entrapment of wildlife species. - All hollow posts and pipes shall be capped, and metal fence stakes shall be plugged with bolts or other plugging materials to prevent wildlife entrapment and mortality. - All food-related trash items such as wrappers, cans, bottles, and food scraps generated during proposed project construction shall be disposed of in closed containers and removed daily from the project site. - No deliberate feeding of wildlife shall be allowed. - No pets shall be allowed on the project site. - No firearms shall be allowed on the project site. - If vehicle or equipment maintenance is necessary, it shall be performed in the designated staging areas. - During construction, heavy equipment shall be operated in accordance with standard Best Management Practices (BMPs). All equipment used on-site shall be properly maintained to avoid leaks of oil, fuel, or residues. The contractor shall prevent oil, petroleum products, or any other pollutants from contaminating the soil or entering a watercourse (dry or otherwise). When vehicles or equipment are stationary, mats or drip pans shall be placed below vehicles to contain fluid leaks. Provisions shall be in place to remediate any accidental spills. - No changing of oil or other fluids or discarding of any trash or other construction waste materials shall occur on the project Site. Vehicles carrying supplies, such as concrete, shall not be allowed to empty, clean out, or otherwise place materials into natural areas on or immediately adjacent to the site. - Refueling of any equipment shall only occur in designated staging areas. Designated areas shall not be located near any storm drain inlets, drainage swales, or surface waterways. When refueling gas powered equipment or mixing herbicide, workers shall refuel or mix over drip pan which is appropriately sized to catch any spillage. The designated refueling area shall be inspected frequently to ensure no spill of hazardous materials have occurred and could contaminate the ground or water. The Contractor shall advise workers to clean and report spills immediately. - Materials shall be stored on impervious surfaces or plastic ground covers to prevent any spills or leakage and shall be at least 50 feet from drainage features. Construction materials and spoils shall be protected from stormwater runoff using temporary perimeter sediment barriers such as berms, silt fences, fiber rolls, covers, sand/gravel bags, and straw bale barriers, as appropriate. - While encounters with special-status-species are not anticipated, any worker who inadvertently injures or kills a special-status species or finds one dead, injured, or entrapped shall immediately report the incident to the construction foreman or biological monitor. The construction foreman or biological monitor shall immediately notify the JPA. The JPA shall follow up with written notification to LACDRP, USFWS and/or CDFW within five working days of the incident, as appropriate. All observations of special-status species shall be recorded on California Natural Diversity Database (CNDDB) field sheets and sent to CDFW by the JPA or the biological monitor. - Before starting or moving construction vehicles, especially after a few days of nonoperation, operators shall inspect under all vehicles to avoid impacts to any wildlife that may have sought refuge under equipment. All large building materials and pieces (e.g., sections of the bridge) with crevices where wildlife can potentially hide shall be inspected before moving. If wildlife is detected, a qualified biologist shall move wildlife out of harm’s way or temporarily stop activities until the animal leaves the area.	Implement general best management practices prior to the start of and during construction.	During construction.	As needed.	Las Virgenes Municipal Water District-Triunfo Joint Powers Authority			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
- The construction contractor shall install temporary erosion control measures to reduce impacts to and protect on site drainages from excess sedimentation, siltation, and erosion. These measures shall consist of minimization of existing vegetation removal; the use of temporary soil covers, such as hydroseeding with native species, mulch/binder and erosion control blankets to protect exposed soil from wind and rain erosion; and/or the installation of silt fencing, berms, and dikes to protect storm drain inlets and drainages. - Gas-powered vehicles and equipment shall not be left idling or operated beyond periods needed to accomplish approved tasks. - Standard dust control measures of the South Coast Air Quality Management District shall be implemented to reduce impacts on nearby plants and wildlife. This includes a variety of options to reduce dust including replacing ground cover in disturbed areas as quickly as possible, watering active sites regularly, and suspending all excavating and grading operations during periods of high winds. - Upon completion of construction, the contractor shall be held responsible for restoring any access roads or staging areas that are outside of approved grading limits. This restoration shall be done in consultation with the project biologist.							
Mitigation Measure BIO-3 Blooming Season Protocol Rare Plant Survey							
Blooming season protocol rare plant surveys shall be conducted for Plummer’s mariposa lily (May-July) and Lyon’s pentachaeta (March-August) to determine the presence/absence of these species. The rare plant survey shall also target Malibu baccharis (August), Plummer’s baccharis (May-October), Catalina mariposa lily (March-June). Reference sites must be visited to document if target species are detectable prior to site surveys. Valid botanical surveys will be considered current for up to five years; if construction has not commenced within three years of the most recent survey, botanical surveys must be repeated. Plants that are not within the immediate disturbance footprint but are located within 50 feet of disturbance limits will be flagged and fenced off by a qualified biologist before construction activities start, to avoid impacts. If avoidance is not feasible, impacts must be offset through implementation of a restoration plan.	Conduct protocol rare plant surveys for specified species during blooming seasons. Flag and fence off identified special-status species. If avoidance is not feasible, prepare and implement a restoration plan.	Survey May – July for Plummer’s mariposa lily Survey March – August for Lyon’s pentachaeta Survey August for Malibu baccharis Survey May – October for Plummer’s baccharis Survey March – June for Catalina mariposa lily Prior to construction for flagging/fencing Restoration as needed (see below)	Implement protocol surveys once prior to start of construction during specified plant blooming seasons If construction has not commenced within three years of the most recent survey, botanical surveys are to be repeated Implement fencing and restoration as needed.	Las Virgenes Municipal Water District-Triunfo Joint Powers Authority			
Mitigation Measure BIO-4 Special-Status Plant Species and Sensitive Community Restoration Plan							
Permanent removal of H1 habitat (California sycamore – coast live oak woodlands, California sycamore – arroyo willow woodlands, coast live oak woodland and forest, black cottonwood forest and woodland, and creeping ryegrass turfs) shall be mitigated in accordance with LCP current in-lieu fee schedule for restoration. A restoration plan consistent with County Local Implementation Plan (LIP) requirements shall be prepared to mitigate impacts to special-status plant species and sensitive communities. The LIP (County 2018b) states that: - Mitigation for unavoidable permanent impacts to H1 Habitat for one of the non-resource dependent uses allowed by this LCP shall be provided, at a minimum, through the restoration and/or enhancement of like habitat type, at the ratio of 4:1 (acres of restored habitat to each acre of impacted H1 Habitat) for wetland habitat, or the ratio of 3:1 (acres of restored habitat to each acre of impacted H1 Habitat) for all other H1 Habitat types. Priority shall be given to on-site restoration or enhancement, unless there is not sufficient area of disturbed habitat on the project site, in which case off-site mitigation may be allowed. The County shall coordinate with other public agencies and/or qualified non-profit land preservation organizations to establish priorities for offsite restoration and enhancement efforts, where appropriate, for proposed development projects lacking adequate on-site mitigation opportunities. - If the restoration site is off-site, written evidence that the property owner has irrevocably agreed to allow the restoration work, maintenance and monitoring required by this condition and not to disturb any native vegetation in the restoration area. The area of habitat to be restored shall be permanently preserved through the recordation of an open space deed restriction that applies to the entire restored area. The open space deed restriction shall be recorded free of prior encumbrances other than tax liens, prior to issuance of a Coastal Development Permit (CDP). To minimize impacts to special-status plants and sensitive communities that may occur in the temporary impact areas, the project should implement topsoil and native vegetation salvage, recontour the land to existing conditions after construction, and re-vegetate using native seeds, as described below. <i>Removal of Non-Native Species</i> Areas of temporary disturbance shall be treated to remove non-native plant species, including invasive plant species, and limit their seed production prior to initiating any earthmoving activity. This shall be completed with the objectives of (1) preventing invasive species from spreading from the disturbance area, and (2) removing weed sources from the salvaged topsoil. The treatment will be completed in advance of the earthmoving for this mitigation to have its intended effect (e.g., the treatment would need to occur prior to target species setting seed). Non-native plants shall be removed primarily using hand removal methods, e.g., hand-held weed whips, loppers, and hoes. If hand removal is not feasible due to the characteristics of the species, such as resistance to hand removal methods, the size of the plants, or the number of plants, perennial invasive non-native species may be treated with herbicides. Herbicide application shall be limited to the smallest extent possible while maintaining effectiveness. Only individual plants shall be treated; no blanket spraying efforts shall be allowed. If herbicide is applied, it shall be applied during dry and low wind conditions when no rain is predicted within a week to prevent conveyance of herbicide into drainages or other non-targeted areas. Herbicide application must be performed by a licensed applicator that can identify the species to be treated and is experienced in the handling and application of herbicides. Herbicides must only be allowed under permit and property conditions. Herbicide use may require notification to the JPA or resource agencies. Only	Prepare and implement special-status plant species and sensitive community restoration plan consistent with County LIP requirements.	Prior to, during and after construction activities.	As needed.	Las Virgenes Municipal Water District-Triunfo Joint Powers Authority			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
herbicides approved for use near or in water, such as AquaMaster™ or equivalent, shall be used if necessary. Large vegetation with potential to contain bird nests shall not be removed during the breeding bird season (February 1 to September 15) unless a qualified biologist determines that it does not contain active bird nests. Salvage of Native Vegetation After removal of non-native species, the temporary impact areas shall be cleared of vegetation using a bulldozer or scraper as necessary. Tree canopies shall be avoided to the extent practicable. Native plant material shall be crushed and stockpiled for later use in re-vegetation. Plant material shall not be segregated based on plant community. The stockpile(s) shall be covered to prevent loss due to erosion and invasion by non-native plants. Stockpile coverings shall be a natural permeable material such as burlap or jute netting to protect the plant material without solarizing or otherwise damaging the seedbank and propagules. Alternatively, the stockpile(s) may be stored indoors within a warehouse. Salvage of Topsoil In areas where soil will be disturbed by project activities, the topsoil shall be salvaged and then replaced after disturbance activities are complete. Salvage, storage, and replacement of the topsoil shall be the responsibility of the Contractor, under supervision of a biological monitor. Topsoil salvage may be accomplished using two lifts, the first to remove the upper layer of soil containing the seed bank, and the second to remove the lower layer containing soil biota in the root zone. The depth of topsoil removed shall be determined by the biological monitor based on local soil and vegetation characteristics; however, it is estimated that approximately 6 to 12 inches may be salvaged in two lifts. The two soil layers shall be stockpiled in two areas inside the temporary disturbance footprint and labeled to identify it as containing either the upper or lower layer of topsoil. Stockpiles shall be covered to prevent loss of soil, plant propagules, etc. due to erosion and invasion by non-native plants. Stockpile coverings shall be a natural permeable material such as burlap or jute netting to protect the soil without solarizing or otherwise damaging the seedbank. Source of Seeds Plant seeds shall be collected by a qualified native nursery contractor, with oversight by a Restoration Specialist. To preserve the integrity of local gene pools, ensure adaptation to site-specific conditions, and avoid inadvertent introduction of inappropriate species or pathogens, seeds used for revegetation shall be collected primarily from the study area, or within the Cold Creek-Malibu Creek Subwatershed. If sufficient seeds cannot be collected from these areas alone, plant stock from within the Malibu Creek Watershed may also be acceptable. All plant species to be installed within potentially jurisdictional riparian communities shall be California native plants and under no circumstances shall non-native plants be installed. All seeds obtained from the native plant nursery shall be free of any pests or pathogens. More specific areas for collection of native plant materials will be defined in the field, considering the following: - Ecological similarity of the area to the study area - Proximity to the study area - Land ownership - Accessibility - Abundance and availability of target species - Need to ensure genetic diversity of source material (i.e., seed shall be collected from a diverse sample of the parent plants within the collection zone) See Table 6 in the IS-MND for a proposed planting palette. Species found within the Study Area, or species native to the region that are characteristic of the vegetation community, but are not included on the plant palette below, may also be used as substitutes as determined by the Restoration Specialist. The final mix will be determined by source availability. Post-Project Restoration Topsoil will be replaced in the proper layers after final reconfiguration of disturbed areas. The soil will be replaced in a manner that replicates the original contours of the land and does not block or divert the flow of water from its pre-existing flow paths. The salvaged and stockpiled native vegetative mulch will be spread within the disturbed area to allow seeds and propagules to become established naturally. No soil amendments will be applied. Mulch will be incorporated into the top six inches of soil with hand tools to improve the integration of mulch and native plant propagules into the soil. Seeds will be installed via hand-seeding in the temporarily impacted areas. Each seeded area will be immediately watered by hand with a water truck or similar set up as conditions allow. The Restoration Specialist shall oversee the contractor during site installation activities. Long-term irrigation and weeding will not be required.							

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
Mitigation Measure BIO-5 Pre-Activity Surveys							
No more than three days prior to initiation of each phase of ground disturbance and vegetation removal, a qualified biologist shall conduct a pre-construction survey for potential rare, listed, or other special-status wildlife species. The preconstruction surveys shall incorporate appropriate methods and timing to detect these species, including individuals that could be concealed in burrows, beneath leaf litter, or in loose soil. Should a special-status species be located on the project site during pre-activity surveys all individuals shall be documented and locations of presence recorded. If a non-listed special-status species is found, the qualified biologist shall contact CDFW, and the species shall be passively ushered out of harm’s way to an area containing suitable habitat that is unaffected by the project. If the project requires special-status species to be removed, disturbed, or otherwise handled, the qualified biologist shall obtain all appropriate handling permits from regulatory agencies (e.g., CDFW, United States Fish and Wildlife Service [USFWS]) and prepare a species-specific relocation plan for review and approval by the appropriate regulatory agencies. The relocation plan shall be implemented prior to project construction activities that may affect the species. All observations of special-status species shall be recorded on CNDDDB field sheets and sent to CDFW by the District or qualified biologist. Additionally, pre-activity surveys shall include focused surveys for western pond turtle during the species’ active periods (May to September) to determine presence/absence of the species within the project site. The surveys shall be conducted by a qualified biologist familiar with the species’ behavior and life history. The surveys shall be conducted within suitable habitat and adhere to the Visual Encounter Survey Protocol for Western Pond Turtles (ODFG 2020). The qualified biologist shall survey the proposed impact areas and a 50-foot buffer. If the species is detected within or adjacent to the project site, nesting surveys shall be conducted to identify nest sites and a western pond turtle avoidance plan shall be developed to fully avoid direct or indirect impacts to the species. The western pond turtle avoidance plan shall be approved by USFWS and/or CDFW prior to ground disturbance within western pond turtle suitable habitat. If Crotch’s bumble bee remains a candidate for listing under the California ESA (CESA) or has been listed as threatened or endangered under CESA at the time project construction commences, the following avoidance, minimization, and compensation measures for Crotch’s bumble bee shall be implemented. Focused Crotch’s bumble bee surveys for foraging bees and nests shall be conducted in the active season prior to construction (during the Colony Active Period [April 1 through August 31]) within suitable habitat per the Survey Considerations for CESA Candidate Bumble Bee Species (CDFW 2023). At least three surveys spaced two to four weeks apart will be conducted by a qualified biologist with a Memorandum of Understanding from CDFW and familiar with the species’ behavior and life history of the species to determine presence/absence of this species and active colonies within the project site. If this species is detected foraging or nesting within or immediately adjacent to the project site and may be impacted by project implementation, the following measures shall be implemented: ▪ A qualified biologist shall identify the location of all nests in or adjacent to the project area to the extent feasible. Adjacent areas containing suitable habitat that are inaccessible shall be surveyed from the nearest vantage point from within the project site or public property. If a nest is identified, a minimum 50-foot no disturbance buffer zone shall be established around the nest to avoid disturbance or accidental take. If project activities may result in disturbance or potential take, the qualified biologist, in coordination with CDFW, should expand the buffer zone as necessary to prevent disturbance or take. ▪ A Crotch’s bumble bee avoidance plan shall be developed prior to the start of construction to fully avoid direct and indirect impacts to this species. If “take” or adverse impacts to Crotch's bumble bee cannot be avoided either during project activities or over the life of the project, the project proponent shall obtain appropriate take authorization from CDFW pursuant to Fish and Game Code section 2081 subdivision (b). ▪ If avoidance is not possible and an Incidental Take Permit (ITP) is needed, mitigation for direct impacts to Crotch’s bumblebee shall be fulfilled through compensatory mitigation at a minimum 1:1 nesting habitat replacement of equal or better functions and values to those impacted by the project, or as otherwise determined through the ITP process. A Crotch’s bumble bee habitat restoration plan shall be prepared and implemented over a minimum three-year period. The habitat restoration plan shall include, but not limited to, the location of restoration, performance standards and success criteria, responsible parties, monitoring and reporting requirements (and schedule), and adaptive management.	Retain a qualified biologist to complete pre-activity surveys for special status species. If a special-status species is located, document the special-status species and contact CDFW.	No more than three days prior to initiation of each phase of ground disturbance and vegetation removal.	Prior to any ground or plant disrupting activities.	Las Virgenes Municipal Water District-Triunfo Joint Powers Authority			
	If special-status species must be removed, disturbed, or otherwise handled, obtain all appropriate handling permits from regulatory agencies and prepare a species-specific relocation plan for review and approval by the appropriate regulatory agencies.	Prior to project construction activities that may affect the species.	As needed.				
	Record all observations of special-status species on CNDDDB field sheets and submit to CDFW.	As observations occur.	As needed.				
	Retain a qualified biologist to conduct pre-activity surveys for western pond turtle in the proposed impact areas plus a 50-foot buffer.	During the species’ active periods (May to September).	Once.				
	If western pond turtle are identified within or adjacent to the project site, conduct nesting surveys and prepare a western pond turtle avoidance plan for approval by CDFW and/or USFWS.	Prior to ground disturbance within western pond turtle suitable habitat.	Once.				
	If required, retain a qualified biologist with a Memorandum of Understanding from CDFW to conduct Crotch’s bumble bee surveys.	During the Colony Active Period (April 1 through August 31).	At least three surveys spaced two to four weeks apart.				

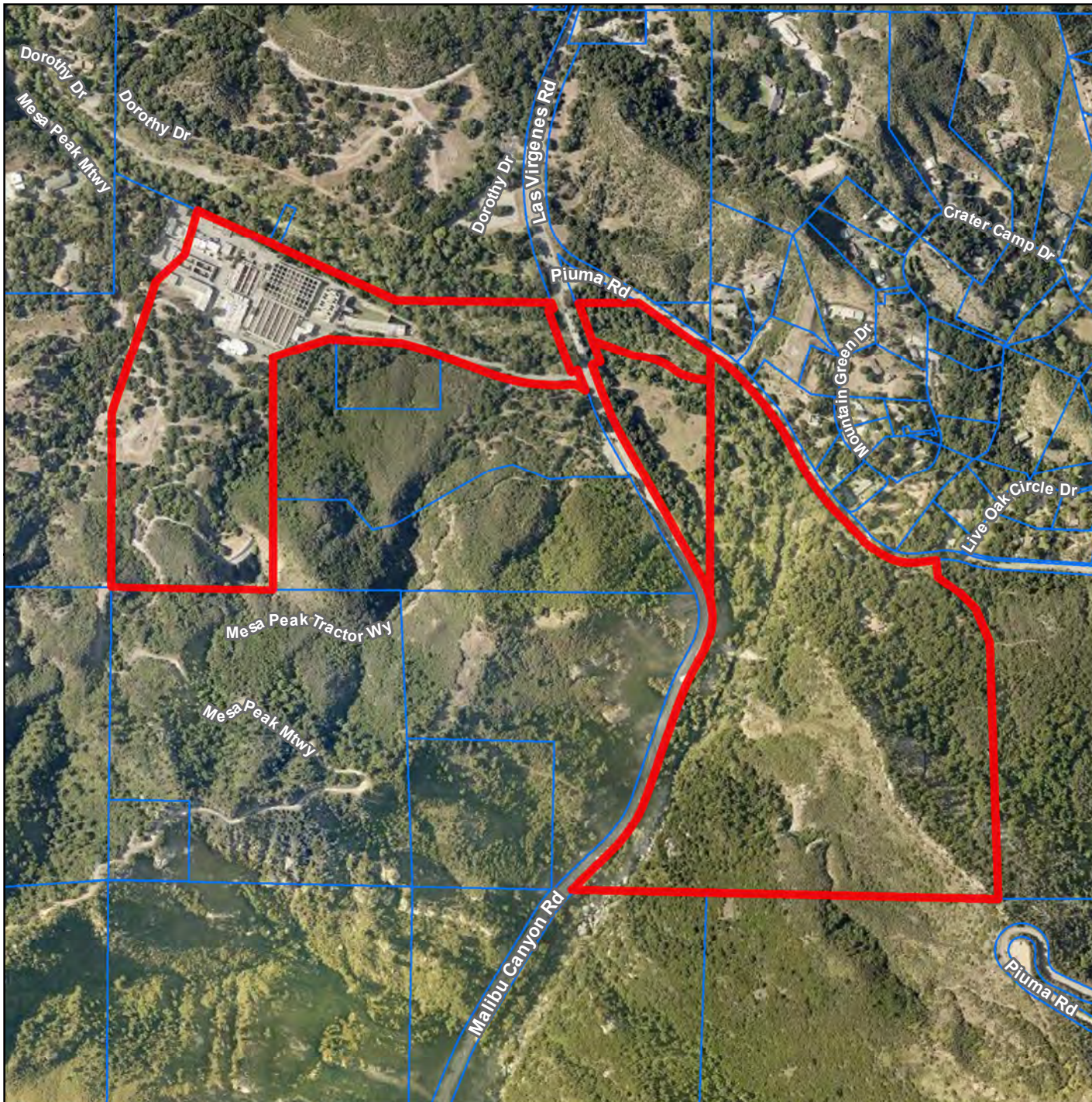
Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
	If Crotch’s bumble bee is detected within or adjacent to the project site, identify all nests to the extent feasible and establish a minimum 50-foot buffer zone. Expand the buffer zone as necessary to prevent disturbance or take. Develop a Crotch’s bumble bee avoidance plan.	As nests are identified.	As needed.				
	If avoidance of Crotch’s bumble bee is not possible and an ITP is required, fulfill compensatory mitigation and prepare a Crotch’s bumble bee habitat restoration plan.	Obtain ITP prior to ground disturbance activities that may impact Crotch’s bumble bee. Restoration plan shall be implemented over a three year period.	Until restoration plan is fully implemented.				
Mitigation Measure BIO-6 Nesting Bird Surveys							
If feasible, removal of vegetation within suitable nesting bird habitats will be scheduled to occur in the fall and winter (between February 1 to September 15), after fledging and before the initiation of the nesting season. If construction activities must occur during the nesting season (generally February 1 to September 15), surveys for nesting birds covered by the CFGC and the Migratory Bird Treaty Act (MBTA) shall be conducted by a qualified biologist no more than 14 days prior to vegetation removal for each phase of the project. The surveys shall include the disturbance area plus a 500-foot buffer around the site, or to the topographic divide where substantial topography is present in the buffer. If active nests are located, all construction work shall be conducted outside a buffer zone from the nest to be determined by a qualified biologist. The buffer shall be a minimum of 50 feet for non-raptor bird species and at least 300 feet for raptor species. Larger buffers may be required depending upon the status of the nest and the construction activities occurring in the vicinity of the nest. The buffer area(s) shall be closed to construction personnel and equipment until the adults and young are no longer reliant on the nest site. A qualified biologist shall confirm that breeding/nesting is completed, and young have fledged the nest prior to removal of the buffer. If buffer zones are determined to be infeasible, a full-time qualified biological monitor must be onsite to monitor construction within the buffer zones to ensure active nests and nesting birds are not impacted. All observations of special-status species shall be recorded on CNDDDB field sheets and sent to CDFW by the applicant or qualified biologist. Active nests shall be monitored at a minimum of once per week until it has been determined that the nest is no longer being used by either the young or adults. If project activities must occur within the buffer, they shall be conducted at the discretion of a qualified biologist. If no nesting birds are observed during pre-construction surveys, no further actions would be necessary. If least Bell’s vireo or other listed species are identified in the work area, work must be halted and USFWS and/or CDFW must be contacted for additional avoidance and minimization measure guidance. Pre-construction nesting bird and raptor surveys should be conducted during the time of day when birds are active and should be of sufficient duration to reliably conclude presence/absence of nesting birds and raptors onsite and within the designated vicinity. In addition, if construction must occur within the bird breeding season, low-noise construction equipment shall be used whenever possible to reduce the amount of noise generated during construction activities within 100 feet from the limits of riparian habitat. Low-noise equipment would reduce noise to less than 60dB hourly average or to ambient noise levels. If sound levels exceed 60dB hourly average or ambient noise levels, sound mitigation measures such as sound shields, blankets around smaller equipment, use of mufflers, and minimizing the use of back-up alarms shall be employed (as feasible). If these sound mitigation measures do not reduce noise levels, work activities shall cease and shall not recommence until either new sound mitigation can be employed or young have fledged the nest.	Schedule construction activities to commence outside the general bird nesting season (September 16 to January 31) if feasible.	Prior to construction.	Once.	Las Virgenes Municipal Water District-Triunfo Joint Powers Authority			
	If project construction commences within the general bird nesting season (February 1 to September 15), retain a qualified biologist to conduct a pre-construction nesting bird survey and establish buffer areas, if necessary.	No more than 14 days prior to site disturbance.	As needed along the project site alignment, and as needed if work pauses for more than 14 days.				
	Verify compliance with avoidance requirements.	During construction.	As needed.				
Mitigation Measure BIO-7 Construction Monitor							
A biologist shall be retained by the JPA as a construction monitor to ensure that incidental construction impacts on retained biological resources are avoided or minimized. Responsibilities of the construction monitor shall include the following: - Attend all pre-grading meetings to ensure that the timing and location of construction activities do not conflict with mitigation requirements. - Conduct meetings with the contractor and other key construction personnel, describing the importance of restricting work to within the project boundaries and outside of the preserved areas. The monitor shall also work with the contractor to determine the most appropriate staging/storage areas for equipment and materials. - Guide the contractor in marking/flagging the construction area limits, in accordance with the final approved grading plan. - Periodically and routinely visit the site during construction to coordinate and monitor compliance with the above provisions.	Retain a qualified biologist to attend pre-construction meetings and perform construction monitoring.	Prior to construction, and periodically and routinely during construction.	As needed.	Las Virgenes Municipal Water District-Triunfo Joint Powers Authority			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
Mitigation Measure BIO-8 Bat Surveys and Protection							
The presence or absence of any bat roosts shall be confirmed prior to the initiation of project activities. A qualified bat specialist shall conduct bat surveys within the project site and within a 100-foot buffer to identify potential habitat that could provide daytime and/or nighttime roost sites, and any maternity roosts. Acoustic recognition technology shall be used to maximize detection of bats. Night roosts are typically utilized from the approach of sunset until sunrise. Maternity colonies, composed of adult females and their young, typically occur from spring through fall. If bats are not detected, but the bat specialist determines that roosting bats may be present at any time of year and could roost in trees, trees planned for removal shall be pushed down using heavy machinery rather than felling it with a chainsaw. To optimize the warning for any roosting bats that may still be present, trees shall be pushed lightly two to three times, with a pause of approximately 30 seconds between each nudge to allow bats to become active. The tree shall be initially pushed slowly to allow roosting bats to escape. After a suitable bat roosting tree is felled, it shall remain in place until it is inspected by a bat specialist. Trees that are confirmed to be bat roosts shall not be bucked or mulched immediately, instead, a period of at least 24 hours, and preferably 48 hours, shall elapse prior to such operations to allow bats to escape. If presence of a bat roost is confirmed in a tree that has been felled, the tree shall remain in place until the bat specialist has determined that individual bats have left the roost. The bat specialist shall document all trees containing bat roosts and prepare a summary report to the District upon completion of project activities. All observations of special-status species shall be recorded on CNDDB field sheets and sent to CDFW by the applicant or qualified biologist. If maternity roosts are found, work that has a potential to impact the roosts (as determined by a qualified biologist), such as, removal of a tree with an active bat roost, shall be scheduled between October 1 and February 28, outside of the maternity roosting season when young bats are present but are not yet ready to fly out of the roost (March 1 to September 30). If maternity roosts are found and trees must be removed during the maternity season, a qualified bat specialist shall conduct a preconstruction survey to identify those trees proposed for disturbance that could provide hibernacula or nursery colony roosting habitat. Acoustic recognition technology shall be used to maximize detection of bats. Each tree identified as potentially supporting an active maternity roost shall be closely inspected by the bat specialist no more than seven days prior to tree disturbance to determine the presence or absence of roosting bats more precisely. If maternity roosts are detected, trees determined to be maternity roosts shall be left in place until the end of the maternity season. Work shall not occur within 100 feet of an active roost and construction shall not occur between 30 minutes before sunset and 30 minutes after sunrise.	Retain a qualified biologist to perform pre-construction bat surveys with acoustic recognition technology.	Prior to the initiation of project activities.	Once.	Las Virgenes Municipal Water District-Triunfo Joint Powers Authority			
	Push down trees which bats may be present in, instead of felling with a chainsaw.	During tree removal.	As needed.				
	Inspect felled trees which may contain suitable bat roosting habitat prior to mulching.	During tree removal.	As needed.				
Mitigation Measure BIO-9: Sensitive Community Avoidance							
California sycamore – coast live oak woodlands, California sycamore – arroyo willow woodlands, and creeping ryegrass turfs shall be avoided to the extent feasible. CDFW sensitive natural communities not within the immediate disturbance footprint but located within 50 feet of disturbance limits shall be flagged and fenced off by a qualified biologist before construction activities start, to avoid impacts. Where avoidance is not feasible, impacts shall be offset through implementation of a restoration plan (BIO-4).	Flag and fence off sensitive communities located within 50 feet of the disturbance footprint.	Prior to start of construction activities.	Once.	Las Virgenes Municipal Water District-Triunfo Joint Powers Authority			
Mitigation Measure BIO-10: Protection Against Spread of Non-Native Seeds and Pathogens							
Prior to entering the project site, workers shall inspect their clothing, including shoes, all vehicles, and equipment for invasive plant seeds or plant parts. The undercarriage and tires of loaders, dozers, drilling rigs, cranes, and vehicles, power tools, and other equipment, shall be power washed and clean from any seeds, pathogens, and mud before entering the project site for the first time. All soil and fill material shall be inspected and determined free of any invasive plant seed prior to leaving the facility where the material is coming from. Any straw, wood, or other mulch shall be purchased from a certified weed-free vendor. Excavated soil containing non-native plants shall be stored in a previously disturbed area or staging area at least 50 feet from potentially jurisdictional features. Any soil contaminated by non-native species shall be placed at the bottom of the trench or spoils pile to reduce the spread of non-native species. Pruning and power tools shall be cleaned and disinfected before use on site to prevent introducing pathogens, and after use to prevent spread of pathogens to new areas.	Verify inspection of construction workers, vehicles and equipment, and soil and fill material.	Continuous.	Continuous.	Las Virgenes Municipal Water District-Triunfo Joint Powers Authority			
	Store excavated soil containing non-native plants in a previously disturbed area 50 feet from potentially jurisdictional features.	Continuous.	Continuous.				
Mitigation Measure BIO-11: Protection Against Impacts to Wildlife Movement							
- Work shall be limited to daylight hours. The project shall avoid non-essential lighting and artificial lighting. Any artificial lighting shall be of the lowest illumination, be selectively placed, and shielded and directed downward to minimize light spillage into the adjacent natural habitats. - Gates, walls, fences, barriers, or other structures that prevent the movement of wildlife through developed areas to access adjacent open space resources shall be avoided, as feasible. - If gates are necessary, the gates shall be wildlife-permeable and shall only be constructed on roads or driveways that provide access to the development on the parcel. - Development shall avoid all known wildlife movement corridors, as feasible. - If development must occur in known wildlife movement corridors, the development shall not block wildlife ‘chokepoints’ (within Malibu Creek) and shall allow wildlife to pass through these areas. - Roads, vehicle access routes, and fencing shall avoid impacts to wildlife movement corridors, if feasible. If road, vehicle access routes, and fencing must occur in wildlife movement corridors, the development footprint shall be the minimized to the smallest extent feasible and the development shall avoid blocking ‘chokepoints’ within wildlife movement corridors.	Verify work is limited to daylight hours, and artificial lighting is shielded and directed downward.	Continuous.	Continuous.	Las Virgenes Municipal Water District-Triunfo Joint Powers Authority			
	Avoid use of obstructions to wildlife movement as feasible. Verify gates are wildlife-permeable.	Continuous.	Continuous.				
	Verify construction avoids wildlife movement corridors as feasible.	Continuous.	Continuous.				

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
Mitigation Measure BIO-12: Minimize Impacts to Protected Trees							
The following tree protection measures adhere to section 22.44.1920 of the County Code of Ordinances: - Protective fencing shall be used around the outermost limits of the protected zones of the native trees within or adjacent to the construction area that may be disturbed during construction or grading activities. Before the commencement of any clearing, grading, or other construction activities, protective fencing shall be placed around each applicable tree. Fencing shall be maintained in place for the duration of all construction. No construction, grading, staging, or materials storage shall be allowed within the fenced exclusion areas, or within the protected zones of any on site native trees - Any approved development, including grading or excavation, that encroaches into the protected zone of a native tree shall be constructed using only hand-held tools - The JPA shall retain the services of a qualified independent biological consultant or arborist, approved by the Director to monitor native trees that are within or adjacent to the construction area. Public agencies may utilize their own staff who have the appropriate classification. If any breach in the protective fencing occurs, all work shall be suspended until the fence is repaired or replaced In addition, the following tree protection guidelines adhere to current International Society of Arboriculture (ISA) standards for tree preservation during construction activities: - Tree protection shall be established at the TPZ or at the greatest distance feasible from all protected trees not proposed for removal - The limits of the TPZ should be staked in the field prior to commencement of construction activities - Any brush clearing or pruning required within the TPZ should be accomplished with hand-operated equipment - All trimming, pruning or removal of protected trees should be performed by or directly monitored by an ISA Certified Arborist in accordance with current ISA Standards - No materials, equipment, spoil, waste or washout water should be deposited, stored or parked within the TPZ - Construction activities should be completed using the smallest equipment feasible and shall operate outside the TPZ - If equipment placement within the TPZ is necessary for construction activities, ground protection should be placed (2 inches of mulch, plywood) to prevent soil compaction - Any roots of a protected tree over 1 inch in diameter exposed during construction activities should be exposed to sound tissue and cut cleanly with a saw - For any single native protected tree, no more than 20% of live foliage should be removed or greater than 20% of the ground under a tree be disturbed during the extent of construction activities for this project	Implement tree protection measures.	Prior to and throughout construction.	Continuous.	Las Virgenes Municipal Water District-Triunfo Joint Powers Authority			
Mitigation Measure BIO-13: Oak Tree Replacement and Monitoring							
In accordance with Section 22.44.950, Section O, of the SMM LIP, if any of the protected trees impacted are lost or suffer worsened health and vigor as a result of proposed development, a 10:1 ratio with seedling-sized trees shall be planted. Where on-site mitigation is not feasible, off-site mitigation shall be provided at a suitable site restricted from development or is public parkland. The project has significant encroachment impacts exceeding 10% to one protected coast live oak tree, which requires a replacement ratio of 10:1 with seedlings that are less than one-year (10 indigenous oak trees as mitigation for the one encroached). Ten (10) trees should be planted on site, or if not feasible, off site within the same watershed. According to the LIP, any off-site mitigation that is in the same watershed shall require an additional two mitigation trees per removed or encroached tree. To maintain compliance, where feasible, the replacement trees shall be indigenous oaks sourced from seeds collected in Los Angeles or Ventura Counties, unless replacement trees come from acorns from the existing oak trees within the project site. In addition, an acorn derived from a local Santa Monica Mountains of the same species that is impacted shall be planted within the watering zone of the replacement trees. In accordance with SMM LIP Section 22.44.950, Section O, when development encroaches less than 30 percent of the TPZ of native trees, each affected tree shall be monitored annually for a period of no less than 10 years, and an annual monitoring report shall be submitted for review by the County for each of the 10 years. The precise location of trees to be installed on-site shall be determined by a qualified restoration specialist and will address existing groundcover species, level of soil disturbance, and other factors that may influence tree growth. If considered necessary by the restoration specialist, soil may be decompacted using hand tools to encourage root growth. If the project site is unsuitable for planting one or more of the replacement trees, the County Forester may approve other options as follows: - Planting replacement oak trees within the same watershed as the removed or encroached trees, where feasible. Any off-site mitigation not located within a site that was previously specified shall require an additional two mitigation trees per removed or encroached tree. - Payment into the Oak Forests Special Fund in the amount equivalent to the oak resource value as calculated by the applicant and approved by the County Forester in alignment with the International Society of Arboriculture’s “Guide to Establishing Values for Trees and Shrubs.” The project is located on public lands, owned by the State of California through the Department of Parks and Recreation; therefore, on-site oak and native tree mitigation is not feasible. As stated in subsection O.4 of the SMM LIP, where on-site tree mitigation is not feasible, the CDP shall be conditioned to require off-site mitigation in accordance with subsections O.1 and O.3 of the SMM LIP, and the location shall be provided at a suitable site in the Santa Monica Mountains coastal zone that is restricted from development or is public parkland. Off-site mitigation shall be located within the same watershed as the removed or encroached trees, where feasible. Any off-site mitigation that is in the same watershed shall require an additional two mitigation trees per removed or encroached tree; therefore, a total of 96 replacement trees should be planted off-site. Payment for offsite mitigation will include 96 mitigation oak/native trees for the 13 oak/native trees that will be encroached by 10 percent or more from the proposed project activities.	Replace and monitor oak trees as required or pay into the Oak Forests Special Fund.	As needed.	As needed.	Las Virgenes Municipal Water District-Triunfo Joint Powers Authority			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification Initial	Compliance Verification Date	Compliance Verification Comments
Cultural Resources							
CR-1: Unanticipated Discovery of Cultural Resources							
In the event archaeological resources are unexpectedly encountered during ground-disturbing activities, work within 50 feet of the find shall halt and the qualified archaeologist shall be contacted immediately to evaluate the resource. If the resource is determined by the qualified archaeologist to be prehistoric, then a Native American representative shall also be contacted to participate in the evaluation of the resource. If the qualified archaeologist and/or Native American representative determines it to be appropriate, archaeological testing for CRHR eligibility shall be completed. If the resource proves to be eligible for the CRHR and significant impacts to the resource cannot be avoided via project redesign, a qualified archaeologist shall prepare a data recovery plan tailored to the physical nature and characteristics of the resource, per the requirements of CEQA Guidelines Section 15126.4(b)(3)(C). The data recovery plan shall identify data recovery excavation methods, measurable objectives, and data thresholds to reduce any significant impacts to cultural resources related to the resource. Pursuant to the data recovery plan, the qualified archaeologist and Native American representative, as appropriate, shall recover and document the scientifically consequential information that justifies the resource's significance. Las Virgenes-Triunfo JPA shall review and approve the treatment plan and archaeological testing as appropriate, and the resulting documentation shall be submitted to the regional repository of the CHRIS, per CEQA Guidelines Section 15126.4(b)(3)(C).	Retain an archaeologist meeting the Secretary of Interior's Professional Qualifications Standards for archaeology to evaluate unanticipated finds, if encountered.	During construction.	As needed.	Las Virgenes Municipal Water District-Triunfo Joint Powers Authority			

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AERIAL IMAGERY

SITE-SPECIFIC MAP

PROJECT NO. PRJ2021-004371

CDP RPPL2021012462

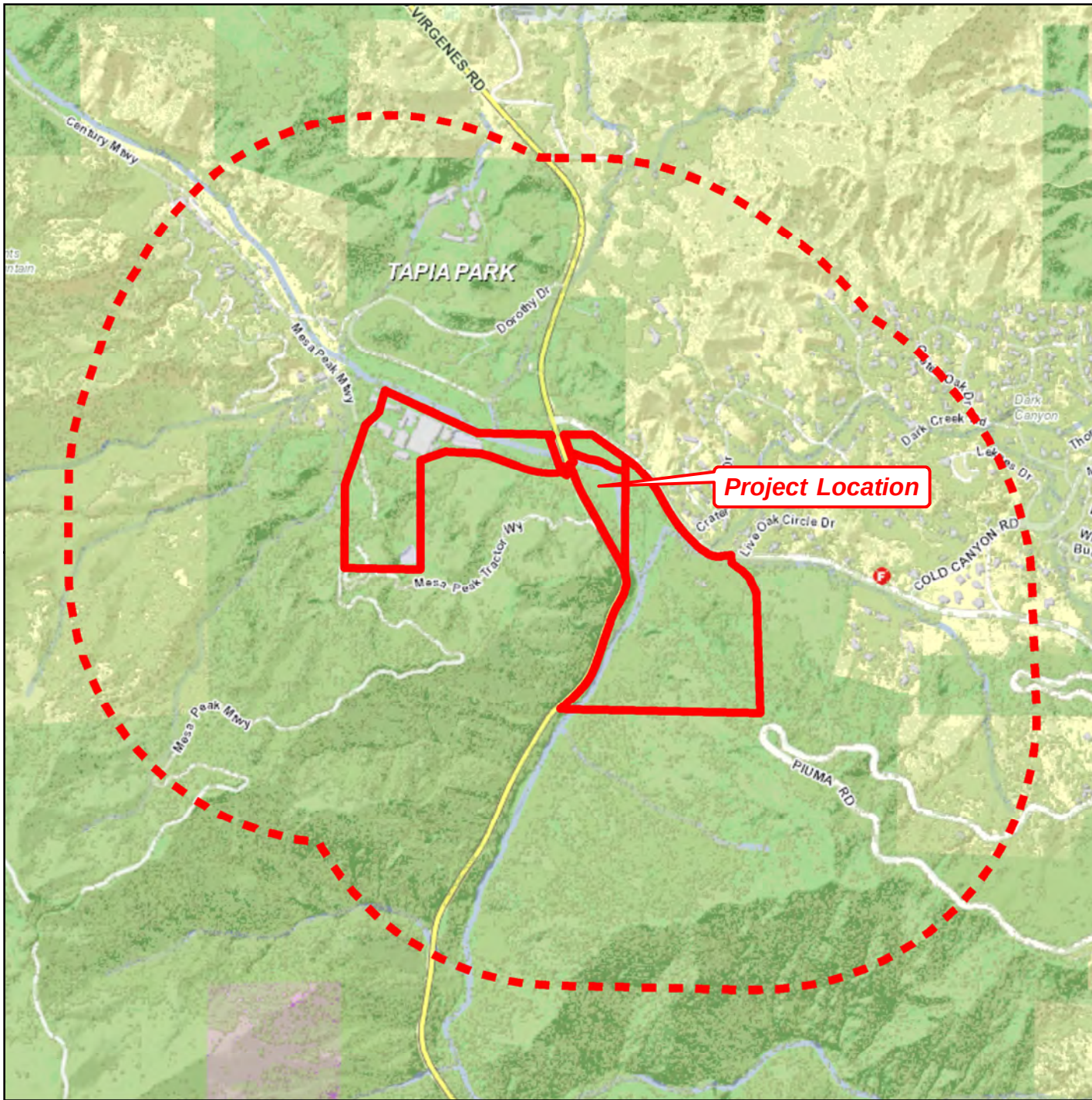
Digital Ortho Aerial Imagery:
Los Angeles Region Imagery
Acquisition Consortium (LARIAC)
2024

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Dept. of Regional Planning
320 W. Temple Street
Los Angeles, CA 90012

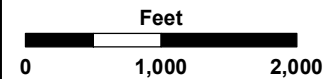


HALF-MILE RADIUS

LOCATOR MAP

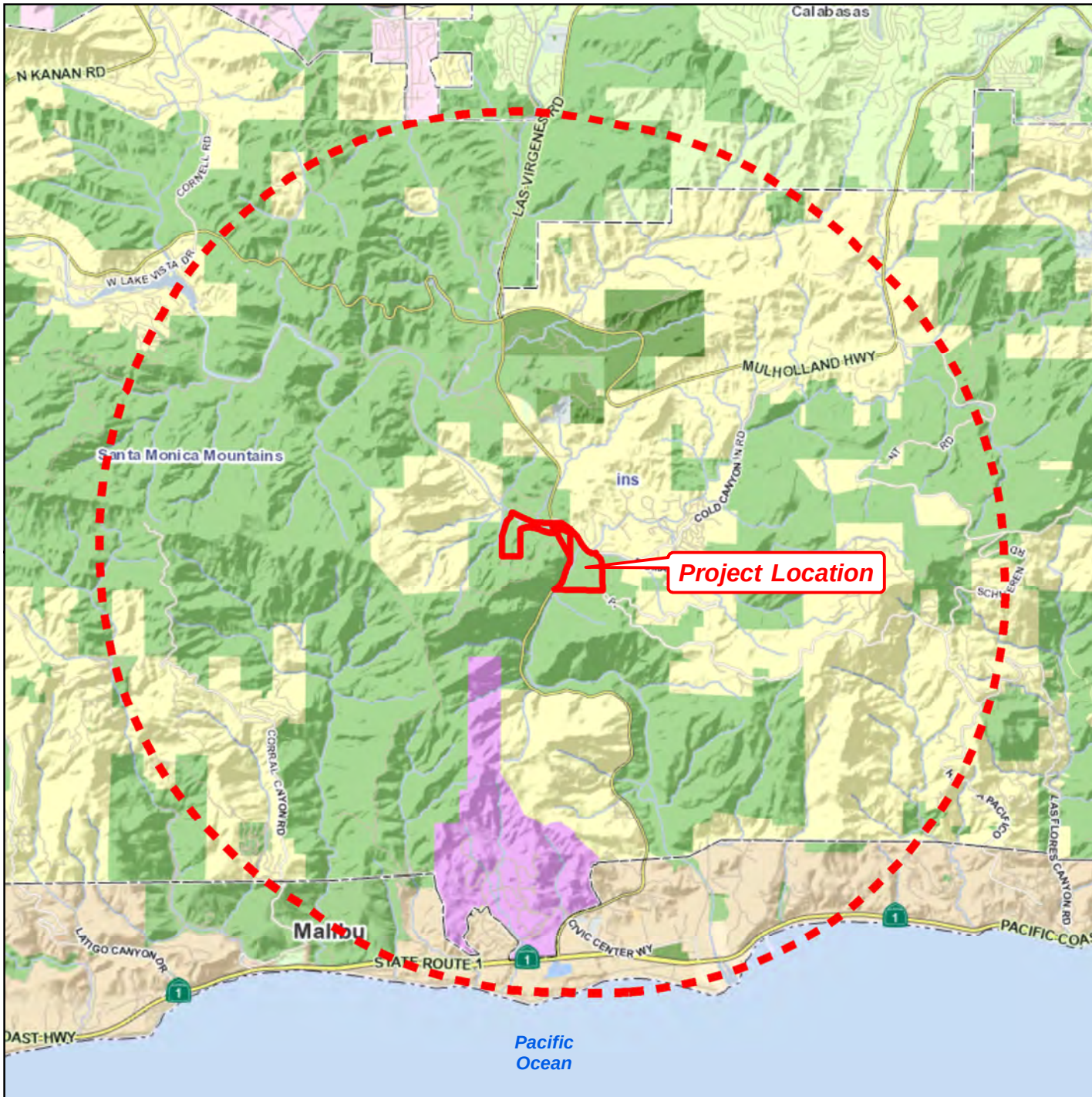
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CDP RPPL2021012462



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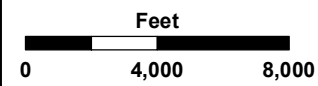


3-MILE RADIUS

LOCATOR MAP

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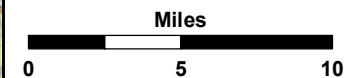
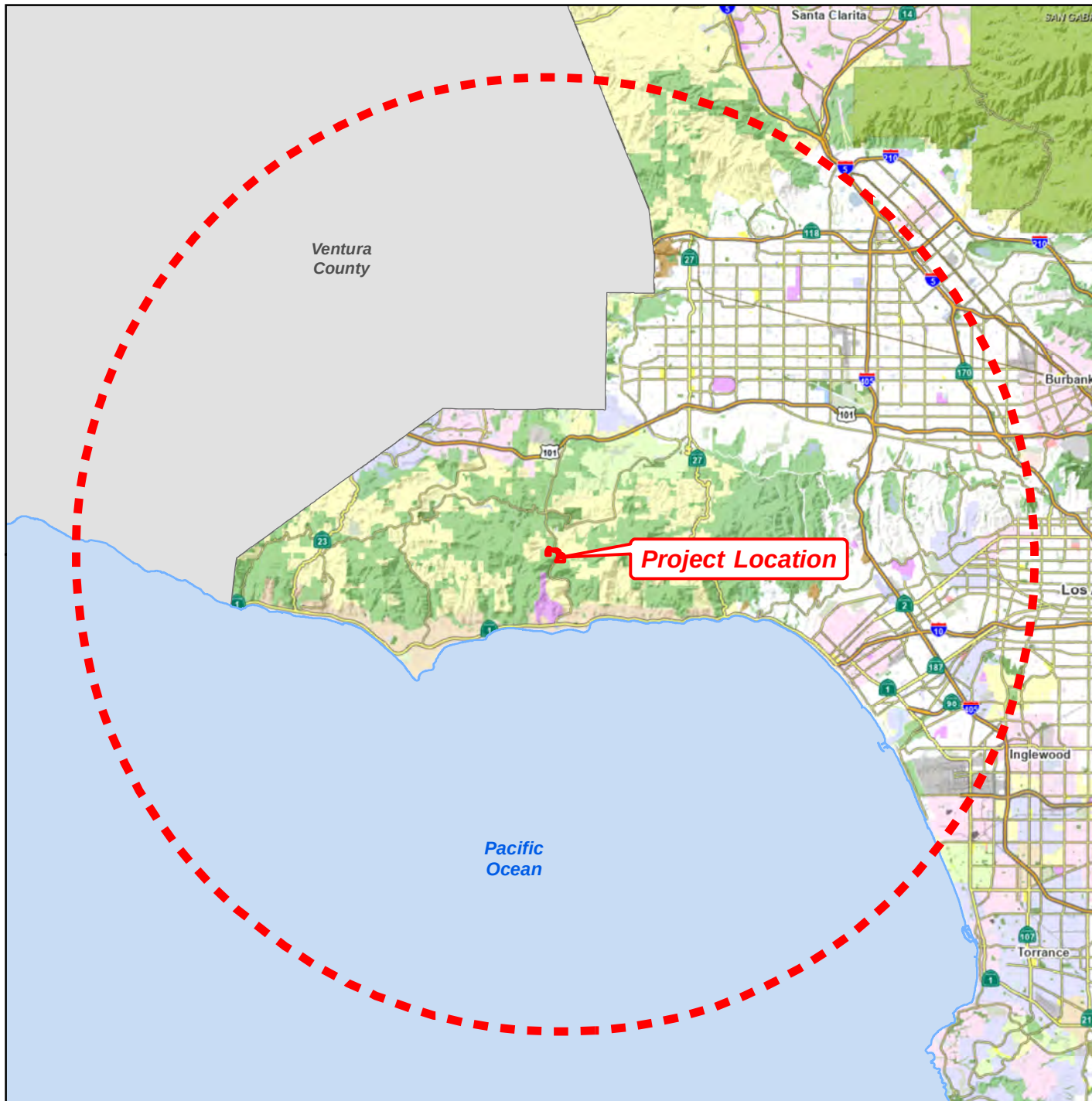
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**20-MILE RADIUS
LOCATOR MAP**
PROJECT NO. PRJ2021-004371
CDP RPPL2021012462



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Los Angeles, CA 90012





PROPERTY OF LAS VIRGENES
MUNICIPAL WATER DISTRICT
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AUTHORIZED PERSONNEL
ONLY

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BARBARA FERRER, Ph.D., M.P.H., M.Ed.
Director

MUNTU DAVIS, M.D., M.P.H.
County Health Officer

MEGAN McCLAIRE, M.S.P.H.
Chief Deputy Director

LIZA FRIAS, REHS
Director of Environmental Health

BRENDA LOPEZ, REHS
Assistant Director of Environmental Health

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Fifth District

June 22, 2022

TO: Robert Glaser
Supervising Regional Planner
Department of Regional Planning

Attention: William Chen

FROM: Charlene Contreras 
Director, Toxicology & Environmental Assessment Branch
Department of Public Health

**SUBJECT: COASTAL DEVELOPMENT PERMIT (CDP) REQUEST - MAJOR
CASE: RPPL2021012462
PROJCT: PRJ2021-004371 LVMWD MANHOLES
731 NORTH MALIBU CANYON ROAD CALABASAS, CA 91302**

Thank you for the opportunity to review the subject project for a Coastal Development Permit. This project proposes to install five (5) new manholes along the existing pipeline alignment extending from the Tapia Water Reclamation Facility (WRF), located at 731 Malibu Canyon Road in Calabasas, to Malibu Creek. The project is located within the Santa Monica Mountains (SMM) Local Coastal Program (LCP) area. The project proposes the restoration and improvements to the trail, stream, and habitat with no infrastructure for potable water or sewer usage. The applicant shall abide by the requirements contained in Title 12, Section 12.08, Noise Control Ordinance for the County of Los Angeles. During grading or excavation activities if applicable, application of dust control measures to minimize fugitive dust is recommended. Adhere to applicable air quality Air Quality Management District regulations.

- ☒ Public Health recommends the approval of the aforementioned project with the following conditions to be fulfilled at the permitting stage before the installation of any interactive water features.
- ☐ Public Health requires that the conditions or information requested below are addressed prior to agency approval; therefore, the Department **DOES NOT** recommend clearance of this project until the following conditions are met:

If you have any other questions or require additional information, please contact Makkaphoeum Em of Public Health, Environmental Hygiene Program at (626) 430-5201 or mem@ph.lacounty.gov.

CC:me

DPH_CLEARED_731 N MALIBU CANYON RD CALABASAS, CA 91302_ RPPL2021012462_06.22.2022



MARK PESTRELLA, Director

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100
<http://dpw.lacounty.gov>

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

June 29, 2022

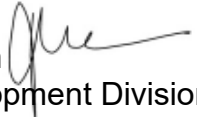
IN REPLY PLEASE

REFER TO FILE:

LD-4

TO: Rob Glaser
Coastal Development Services
Department of Regional Planning

Attention William Chen

FROM: James Chon 
Land Development Division

CDP – SMMLCP – MAJOR (RPPL2021012462)
731 NORTH MALIBU CANYON ROAD
ASSESSOR'S MAP BOOK 4462, PAGE 32, PARCEL 901
UNINCORPORATED SANTA MONICA MOUNTAINS

As requested, Public Works reviewed the zoning permit application and site plan for the proposed project. The project would install five new manholes, along the existing Las Virgenes Municipal Water District pipeline alignment, to provide access for inspection of the pipeline which, in turn, will determine where repairs will be implemented.

☒ Public Works has no comments, and this memo will serve as clearance for our review.

☐ Public Works has comments on the submitted documents; therefore, a Public Hearing shall **NOT** be scheduled until the comments have been addressed.

If you have any questions or require additional information, please contact Ed Gerlits of Public Works, Land Development Division, at (626) 458-4953 or egerlits@pw.lacounty.gov.

DK:la

P:\dpub\SUBPCHECK\Plan Checking Files\CUP\RPPL2021012462 - 731 N Malibu Canyon Road\2022-06-14 Submittal\DPW_Cleared_2022-06-23_RPPL2021012462.docx

MINUTES OF THE ENVIRONMENTAL REVIEW BOARD (ERB)
Unincorporated Coastal Zone, Santa Monica Mountains, Los Angeles County
In-Person Meeting of July 15, 2024

Present:

ERB Members

Katherine Pease
Daniel Cooper
Richard Ibarra
Margot Griswold
Danielle LeFer

Regional Planning Staff

Joseph Decruyenaere, Senior Biologist
William Chen, Principal Planner
Iris Chi, ERB Coordinator

PART I: PRELIMINARY BUSINESS

1. Roll call.
2. Coordinator's Report – ERB meetings will be held at the LA County Regional Planning – Calabasas/Malibu Field Office moving forward.

PART II: APPROVAL OF MINUTES

3. December 18, 2023 ERB meeting minute approval. Motion to approve by Margot/seconded by Ibarra. Vote: Unanimous consent to approve the minutes.
4. ERB requests future meetings to discuss minimum mapping units and incorporate findings in future ERB recommendations.

PART III: OLD BUSINESS

PART IV: NEW BUSINESS

5. **Project No.:** PRJ2021-004371-(3)
Permit No.: Major CDP RPPL2021012462

ERB Comments:

- ERB request the location of the temporary impacts area be confined to the construction area and the perimeter area around the construction area. In addition, ERB requests to use fencing around trees to protect trees from temporary impacts.
- ERB request to reduce the use of all construction materials and equipment to minimize impacts to trees.
- ERB requests to reduce the width of the access road and widen and clear the trail in an as needed basis to minimize vegetation removal and compaction.
- Requested clarification over where the replacement oak trees will be planted. Replacement oak trees may be planted on-site of State Park land with State Park approval of appropriate planting site. However, the applicant will mitigate by paying the in-leu fee.
- There will be a separate State Parks discussion regarding the scope of each manhole cover. State Parks will request the use of the most minimally invasive equipment for each manhole to minimizing impacts to the work area. State Parks will also request a more complete restoration plan. This discussion will be required before State Parks approves a permit.
- ERB request the Las Virgenes Maintenance Plan require a future review and plan.

ERB Motion:

- With the provisions in the biologists report for oak tree mitigation for the provisions in the Rincon's mitigation monitor recommendations that the project is compatible with the Coastal Development permit and all ERB recommendations would be included.

Motion/Second by Griswold/Cooper, Vote – Ayes: Unanimous

PART V: PUBLIC COMMENT

6. Public comment pursuant to Section 54954.3 of the Government Code. No request for public comments.

PART VI: ADJOURNMENT : Adjournment to 1:00 pm, August 19, 2024.



Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project

Oak and Native Tree Report

prepared for

Las Virgenes Municipal Water District – Triunfo Joint Powers Authority

4232 Las Virgenes Road, #1994

Calabasas, California 91302

Contact: Veronica Hurtado, Water Reclamation Manager

prepared by

Rincon Consultants, Inc.

180 North Ashwood Avenue

Ventura, California 93003

August 2023



RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers

rinconconsultants.com

Rincon Consultants, Inc.

2023 *Oak and Native Tree Report, Tapia Water Reclamation Facility 003 Outfall
Rehabilitation Project.* Rincon Project 20-10352. April 2023.

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Appendix A	Protected Tree Matrix
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1 Introduction

Rincon Consultants, Inc. (Rincon) prepared this report for the Las Virgenes Municipal Water District - Triunfo Joint Powers Authority (JPA), Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project (project) located in an unincorporated area of Los Angeles County (County).

1.1 Regulatory Context

The project is in the Santa Monica Mountains (SMM) Local Coastal Program area and therefore subject to the management direction of the California Coastal Act. The County Department of Regional Planning has regulatory authority over the Local Coastal Program, as directed by the California Coastal Commission. This report documents the results of an oak and native tree survey and the project's impacts to protected trees pursuant to the SMM Local Implementation Program (LIP) and Los Angeles County Oak Woodland Conservation Management Plan Guide. Pursuant to the language within the SMM LIP, a permit is required to cut, destroy, remove, relocate, inflict damage, or encroach into the protected zone of the tree. Protected trees are defined as follows:

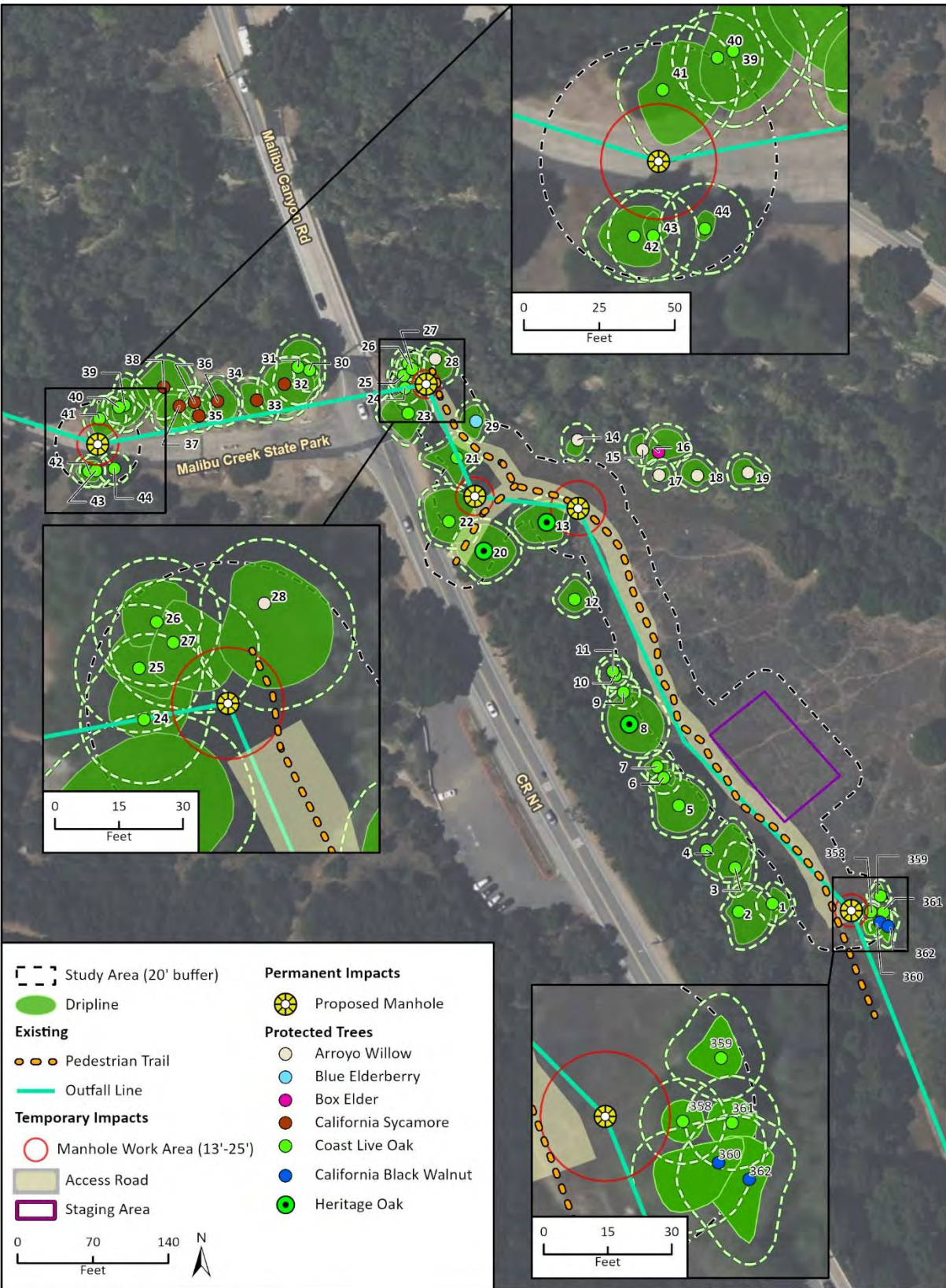
- Any tree or shrub of the oak genus which is six inches or more in diameter as measured four and one-half feet above the natural grade; in the case of an oak with more than one trunk, (a combination of any two trunks measuring a total of eight inches or more in diameter).
- Native sycamore, bay, walnut, or other native tree that has at least one trunk measuring six inches or more in diameter or a combination of any two trunks measuring a total of eight inches or more in diameter.
- Heritage oak trees are either of the following: any oak tree measuring 36 inches or more in diameter, measured four and one-half feet above the natural grade; any oak tree having significant historical or cultural importance to the community, notwithstanding that the tree diameter is less than 36 inches. This also includes any oak tree officially identified by a County resource conservation.

The SMM LIP defines the tree protection zone (TPZ) as the dripline plus five feet, or 15 feet from the trunk, whichever is greater.

1.2 Project Description

The Las Virgenes-Triunfo JPA plans to inspect and repair an existing 24-inch outfall pipeline which runs for approximately 2,250 linear feet from the Tapia Water Reclamation Facility (WRF), located at 731 Malibu Canyon Road in Agoura Hills, to Malibu Creek. The section of pipeline to be inspected and repaired under the proposed project is located within existing roadways and natural areas. Starting at the Tapia WRF, the pipeline is within paved road (Malibu State Park Road) for approximately 0.15 mile to Las Virgenes Road/Malibu Canyon Road, which is also paved, and crosses to the east side of this road (another approximately 0.03 mile). On the east side of Las Virgenes Road/Malibu Canyon Road, the pipeline runs parallel to an unpaved footpath to its terminus at Malibu Creek, approximately 0.25 mile to the south (Figure 1).

Figure 1 Site Plan and Protected Trees



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20-10352 BIO Arborist
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The project would install five new manholes along the existing pipeline alignment, to provide access for inspection of the pipeline. Inspection of this pipeline would not expand its capacity or alter its existing uses; rather, it would help ensure the integrity of the pipeline, facilitating its continued use as intended for the conveyance of discharge between the Tapia WRF and Malibu Creek. Under both existing and post-project conditions, effluent from the Tapia WRF is discharged to Malibu Creek in compliance with a National Pollutant Discharge Elimination System (NPDES) permit issued and administered by the RWQCB for the Los Angeles Region (Order No. R4-2005-0074, NPDES No. CA0056014).

The project would install five new 36-inch diameter manholes at existing bends in the alignment, including one manhole located in a paved roadway and four manholes located in natural substrate. Each manhole requires a temporary work area buffer radius ranging from 13 to 25 feet. Installation would allow for the existing pipeline to be inspected using access provided via the new manholes along the existing pipeline alignment. Standard construction best management practices (BMPs) would be employed during project construction to prevent disturbed soils from leaving the work area. These BMPs may include but would not be limited to: use of designated areas for construction staging; use of safety and spill control measures for the handling of all vehicle fuels and other potentially hazardous materials; use of straw wattles or similar materials to prevent surface runoff from leaving the active work area. Also, during the construction phase, temporary lane closures may be used to maintain the safety of workers and the public during construction activities. Access through the project area would be maintained at all times, and workers would provide traffic management and control through the work area as needed to maintain access and safety.

Construction of each manhole would involve trench excavation, backfill and compaction of soil above the Tapia 003 outfall, installation of precast concrete manhole structures into the pipeline, and removal of existing butterfly valves and turnouts. The location of each manhole has been selected to facilitate visual inspection of the entire length of the pipeline via closed circuit television.

The following project activities have the potential to impact protected trees.

1.2.1 Permanent Impacts

- **36-inch manhole.** Trenching and excavation may impact structural and absorbing roots.

1.2.2 Temporary Impacts

- **Manhole work area.** Temporary grading for equipment access may compact the root zone.
- **Access road.** Temporary grading of the existing unpaved pedestrian trail may compact the root zone or damage structural and absorbing roots.
- **Staging area.** Temporary grading for equipment staging may compact the root zone.

2 Oak and Native Tree Survey Methodology

2.1 Tree Survey Methods

The tree survey was conducted by ISA Certified Arborist Yuling Huo (#WE-11975A) and biologist Katherine Christensen on July 22 and 23, 2021 and by ISA Certified Arborist Genelle Watkins (#WE-12998 A) on February 7, 2023. The survey was conducted in accordance with the SMM LIP. All protected trees with any portion of their TPZ within 25 feet of the project components (including the existing outfall line and proposed manholes, access roads, and staging area) were surveyed. Tree locations were recorded using a Geode global positioning system (GPS) device capable of sub-meter accuracy. All protected trees were assigned a unique identification number with a corresponding physical tag affixed to the north side of the tree at approximately 4.5 feet above natural grade, except where inaccessible due to physical barriers (i.e., poison oak). Appendix A includes the data collected for the protected trees that were surveyed.

The following data was collected on each protected tree:

2.1.1 Physical Characteristics

- **Diameter of all trunks.** Measured at 4.5 ft. above natural grade using a forester's diameter tape.
- **Crown clearance and spread.** Measured in eight cardinal directions at points equidistant around the circumference of the tree.
- **Height.** Estimated at an appropriate distance from the tree.
- **Structure.** Crown symmetry, excessive horizontal branching, unbalanced crown, broken branches, etc.
- **Health rating.** A-E scale summarized in Table 1 below based on archetype tree of the same species.

2.1.2 Tree Health

- Physical evidence of disease, slime flux, heart rot, crown rot, armillaria root fungus, exfoliation, leaf scorch, exudations, etc.
- Identification of insect pests, such as galls, twig girdlers, borers, termites, pit scale, and plant parasites.
- Evaluation of tree's vigor – new tip growth, leaf color, abnormal bark, deadwood, and thinning in the crown.
- Recommendations to improve tree health, such as insect or disease control, pruning and fertilization.
- Evaluation of tree impacts as shown as site plan, including suggested mitigation and/or future maintenance measures where required and the anticipated effectiveness.

Table 1 Health Rating

Rating	Health Condition
A – Excellent	A healthy and vigorous tree characteristic of its species and free of any visible signs of disease or pest infestation.
B – Good	A healthy and vigorous tree. However, there are minor visible signs of disease and pest infestation
C – Fair	Although healthy in overall appearance, there is a normal amount of disease and /or pest infestation
D – Poor	This tree is characterized by exhibiting a greater degree of disease and /or pest infestation than normal and appears to be in a state of decline. This tree also exhibits extensive signs of dieback.
E – Dead/Dying	This tree exhibits no signs of life whatsoever.

2.2 Tree Mapping Methods

All protected trees surveyed were mapped in ArcGIS and overlain onto the current project components. The trunk location is based on the GPS waypoint location that was recorded by the arborist from one side of the tree's trunk. Driplines were based on estimated crown spread collected at eight cardinal directions, as described above. Each species, tree trunk, dripline, tree protection zone, and identification number are shown in Figure 1.

3 Oak and Native Tree Survey Results and Impacts

3.1 Oak/Native Tree Survey Results

Forty-nine (49) protected oak and native trees were surveyed as shown in Figure 1. Appendix A – Protected Tree Matrix provides the data collected and detailed notes for each protected tree. The number and type of tree species within Phase 1 are summarized below in Table 2. As indicated in Table 3 and Table 4 in Section 3.2 the trees range in health from B (Good) to D (Poor), and three oak trees are considered ‘Heritage’ in accordance with the County’s SMM LIP.

Table 2 Tree Species Summary

	Coast Live Oak	California Black Walnut	California Sycamore	Blue Elderberry	Boxelder Maple	Arroyo Willow
Number of trees	32	2	7	1	1	6

The protected trees that were surveyed are located within both landscaped and natural areas surrounding the project site. Most of the coast live oak trees are associated with an oak woodland east of Malibu Canyon Road within an area that has been moderately disturbed by various vehicle, pedestrian, and bike trails. The understory primarily consists of non-native grasses (e.g., *Bromus sp.*) and natural leaf litter. As depicted in Figure 1, oak and native trees (#1-#29) are located immediately adjacent to Malibu Canyon Road, while native trees (#14-#19) are located east of the outfall line in a natural area adjacent to Malibu Creek. The remaining oak and native trees (#30-#44; #358-#362) are along the north-side of Malibu Canyon State Park Road within a partially landscaped area.

According to the definition of degraded oak woodlands as described in the Los Angeles County Oak Woodland Conservation Management Plan guidelines, the project site is moderately degraded. By definition, this means that though the site has been altered, oak woodlands persist and retain some of their functions. Natural regeneration is possible, wildlife use still occurs, and some level of ecosystem services is still present. The woodland is adjacent to a busy road, frequented by vehicular, pedestrian and mountain bike use; and the woodland has been previously impacted by installation of the outfall line.

3.2 Oak/Native Tree Impacts

Of the 49 protected trees surveyed, 31 trees would be avoided, five trees (#8, #23, #25, #26, and #360) would be encroached by less than 10 percent of the TPZ, twelve trees (#13, #20, #21, #24, #27, #29, #41, #44, and #358) would be encroached between 10 and 30 percent, and one tree (#22) would be encroached by 32 percent of the TPZ.

None of the trees are proposed to be removed. A summary of the anticipated tree impacts is presented below in Table 3 and Table 4. Data collected on each tree is provided in Appendix A – Tree Matrix.

Table 3 Tree Encroachments

Tree ID #	Species	DBH (inches) ¹	Health Grade	Impact Status	TPZ Impact Percentage and Description
8 ¹	Coast live oak*	44	C	Encroachment	2%, temporary access road unpaved access road
13	Coast live oak*	20, 25	B	Encroachment	25%, Manhole work area and unpaved access road
20 ¹	Coast live oak*	13.5, 45	D	Encroachment	30%, unpaved access road
21	Coast live oak	25	B	Encroachment	21%, unpaved access road, under canopy
22	Coast live oak	28	C	Encroachment	32%, Manhole work area and unpaved access road within manhole construction
23	Coast live oak	20, 21	B	Encroachment	6%, Manhole work area and unpaved access road, minimal branch trimming
24	Coast live oak	10, 9	B	Encroachment	18%, unpaved access road, under canopy
25	Coast live oak	8, 1, 2	C	Encroachment	9%, Manhole work area and unpaved access road
26	Coast live oak	11	C	Encroachment	3%, unpaved access road
27	Coast live oak	10, 12	B	Encroachment	26%, within manhole construction, minimal branch trimming, and vehicle access within unpaved roadway
28	Arroyo willow	7, 7	C	Encroachment	16%, Manhole work area and unpaved access road, minimal branch trimming
29	Blue elderberry	7, 7	C	Encroachment	17%, unpaved access road
41	Coast live oak	14	B	Encroachment	27%, Manhole work area and periodic vehicle access on paved road near manhole construction
42	Coast live oak	10, 6.5	B	Encroachment	18%, Manhole work area and periodic vehicle access on paved road near manhole construction
43	Coast live oak	13	B	Encroachment	22%, Manhole work area and periodic vehicle access on paved road near manhole construction
44	Coast live oak	7, 8	B	Encroachment	14%, Manhole work area and periodic vehicle access on paved road near manhole construction
358	Coast live oak	8, 8	B	Encroachment	26%, Manhole work area
360	California black walnut	17	D	Encroachment	6%, Manhole work area

¹ Only the two largest DBH measurements from multi-trunked trees are indicated.

* Heritage oak trees

Table 4 Trees with No Impacts

Tree ID #	Species	DBH (inches) ¹	Health Grade	Impact Status	TPZ Impact Percentage and Description
1	Coast live oak	17.5	B	No impact	None, TPZ outside project area
2	Coast live oak	35	B	No impact	None, TPZ outside project area
3	Coast live oak	12	B	No impact	None, TPZ outside project area
4	Coast live oak	19	C	No impact	None, TPZ outside project area
5	Coast live oak	35	C	No impact	None, TPZ outside project area
6	Coast live oak	13	B	No impact	None, TPZ outside project area
7	Coast live oak	8, 12	B	No impact	None, TPZ outside project area
9	Coast live oak	11	B	No impact	None, TPZ outside project area
10	Coast live oak	8	C	No impact	None, TPZ outside project area
11	Coast live oak	7.5	C	No impact	None, TPZ outside project area
12	Coast live oak	12, 10	B	No impact	None, TPZ outside project area
14	Arroyo willow	7	B	No impact	None, TPZ outside project area
15	Arroyo willow	10, 8	B	No impact	None, TPZ outside project area
16	Boxelder maple	10, 9, 8, 10, 8	B	No impact	None, TPZ outside project area
17	Arroyo willow	9, 9	D	No impact	None, TPZ outside project area
18	Arroyo willow	6, 6	C	No impact	None, TPZ outside project area
19	Arroyo willow	10, 7	B	No impact	None, TPZ outside project area
30	Coast live oak	12	B	No impact	None, TPZ outside project area
31	Coast live oak	16, 15	B	No impact	None, TPZ outside project area
32	California sycamore	15, 18	B	No impact	None, TPZ outside project area
33	California sycamore	28	B	No impact	None, TPZ outside project area
34	California sycamore	18	B	No impact	None, TPZ outside project area
35	California sycamore	13	C	No impact	None, TPZ outside project area
36	California sycamore	11	B	No impact	None, TPZ outside project area
37	California sycamore	16	B	No impact	None, TPZ outside project area
38	California sycamore	20	B	No impact	None, TPZ outside project area
39	Coast live oak	18	B	No impact	None, TPZ outside project area
40	Coast live oak	9	B	No impact	None, TPZ outside project area
359	Coast live oak	11	B	No impact	None, TPZ outside project area
361	Coast live oak	13	B	No impact	None, TPZ outside project area
362	California black walnut	14	C	No impact	None, TPZ outside project area

¹ Only the two largest DBH measurements from multi-trunked trees are shown in the table above.

* Heritage oak trees

Impacts to protected trees include trimming of branches for equipment clearance and severing or compaction of roots from manhole construction, the unpaved access road, and staging.

Root systems vary by depth and the lateral extent based on tree species, age, slope, and soil type. Typically, tree roots are less abundant in paved areas and access roads due to the compacted nature of the soil where roots may be deprived of water and oxygen. In addition, trees that are leaning

typically have roots that extend further in the direction away from the lean. Similarly, trees that are on slopes typically have roots that extend further on the uphill side to anchor the tree. The full extent of the root zone may vary depending on physical barriers surrounding the tree. Since the exact extent of root systems are unknown, actual impacts will not be known until the time of construction and will depend upon the tree structure and the construction activities (e.g., excavation depth and width, need for trimming of crown for equipment clearance, etc.). All the protected trees in the survey area are growing in landscaped/native areas and are expected to have roots extending the majority of the TPZ.

Due to the nature of the construction activities, the greatest concern to tree health and mortality associated with the project is root damage. The ISA acknowledges that removing 20-25% of the roots of a tree could result in mortality. Removal of larger roots (particularly lateral or sinker roots and roots greater than two inches in diameter) can severely impact the stability of the tree. Healthy and young trees may tolerate impacts to as much as 50% of their crown or root system (Sinclair, Lyon, and Johnson 1987); however, trees that are relatively large and/or old for the species or already under stress will have lower tolerances.

The proposed project would have unavoidable adverse impacts on 13 protected trees (encroachment of 10 percent or more of the TPZ) that would require mitigation as described in Section 4 – Oak/Native Tree Mitigation. However, the encroachments are mostly temporary, and no trees would be removed. Unpaved access roads, staging area, and manhole work areas will be restored to pre-construction conditions. Permanent manhole construction is limited to 36-inch diameter areas over the existing outfall line. As such, project impacts are not anticipated to cause fragmentation, degeneration, or mortality throughout the oak woodland. According to the Oak Woodland Conservation Management Plan guidelines, because the project area is considered moderately degraded, activities will have a low impact severity. Therefore, the proposed project is not expected to significantly impact the woodland within the project site.

Implementation of the mitigation measures described in Section 4 and adherence to the Tree Protection Measures provided in Section 5 would minimize impacts to protected trees and mitigate unavoidable adverse impacts. .

4 Oak and Native Tree Mitigation

The project is located on public lands, owned by the State of California through the Department of Parks and Recreation. As such, on-site oak and native tree mitigation is not feasible. Therefore, the JPA proposes to pay for offsite mitigation through an approved organization such as (but not limited to) the Mountains Resource Conservation Authority or TreePeople. Payment for offsite mitigation will include the required mitigation oak/native trees for 13 oak/native trees that will be encroached by 10 percent or more from the proposed project activities.

4.1 Summary of Oak and Native Tree Replacement Requirements in Accordance with SMM LIP

When unavoidable negative impacts to oak and native trees occur as a result of the project, the SMM LIP requires the following tree mitigation ratios for these trees, as displayed in Table 5.

Table 5 Santa Monica Mountains LIP Mitigation Requirements

Impact	Mitigation Ratio
Removal	10:1
Greater than 30% encroachment into TPZ	10:1
Encroachment that extends within 3 feet of tree trunk	10:1
Trimming branch over 11 inches in diameter	5:1
10-30% encroachment into TPZ	5:1
Less than 10% encroachment into TPZ	None. Annual monitoring for 10 years

In accordance with the SMM LIP, for development encroaching less than 30 percent of the TPZ of oak or native tree, each affected tree shall be monitored annually for a period of no less than 10 years, and an annual monitoring report shall be submitted to the Director for review by the County for 10 years. Replacement oak trees shall be from acorns collected in the area that is the same species as the oak tree that was impacted. Additionally, an acorn from a locally sourced tree of the same species that is impacted shall be planted within the watering zone of all replacement trees.

If any of the trees impacted are lost or suffer worsened health and vigor as a result of proposed development, a 10:1 ratio with seedling-sized trees shall be sufficient mitigation from the JPA. Where on-site mitigation is not feasible, off-site mitigation shall be provided at a suitable site restricted from development or that is within public parkland.

As indicated in Table 6 below, this project will encroach 32 percent of the TPZ of one protected coast live oak tree (#22), which requires a replacement ratio of 10:1. In addition, the project will encroach between 10 and 30 percent of the TPZ of 12 protected trees, which requires a replacement ratio of 5:1 and monitoring for a 10-year period. Seventy (70) trees should be planted onsite with seedlings less than one year old, or if not feasible, offsite within the same watershed as the encroached trees. Any off-site mitigation that is outside of the watershed shall require an additional two mitigation trees per removed or encroached tree; therefore, a total of 96 replacement trees should be planted off-site outside of the watershed. In accordance with the SMM LIP, the replacement trees should be indigenous oaks sourced from acorns collected from the

existing oak trees within the project site or from nearby locations in Los Angeles or Ventura Counties, unless replacement trees come from acorns from the existing oak trees within the project site. Additionally, in accordance with SMM LIP Section 22.44.950, the project's Coastal Development Permit will be conditioned to require the applicant to submit an oak tree replacement program prepared by a qualified biologist, arborist, or other resource specialist.

Five protected oak/native trees that are located within 25 feet of the project components will have an encroachment of less than 10 percent into the TPZ. Replacement trees are not required, but these trees will be monitored annually for a period of 10 years. The remaining 31 protected trees listed in Table 4 will be avoided and will not require replacement or monitoring.

Table 6 below provides a summary of the tree replacement requirements for those oak and native trees that will be encroached by the project.

Table 6 Oak/Native Tree Replacement Summary

Tree ID#	Species	TPZ Encroachment	Replacement Ratio ¹	Number of Mitigation Trees	Replacement Tree Size
8	Coast live oak	2%	N/A	N/A	N/A
13	Coast live oak	25%	5:1 (+2)	5-7	Seedling <1yr
20	Coast live oak	30%	5:1 (+2)	5-7	Seedling <1yr
21	Coast live oak	21%	5:1 (+2)	5-7	Seedling <1yr
22	Coast live oak	32%	10:1 (+2)	10-12	Seedling <1yr
23	Coast live oak	6%	N/A	N/A	N/A
24	Coast live oak	18%	5:1 (+2)	5-7	Seedling <1yr
25	Coast live oak	9%	N/A	N/A	N/A
26	Coast live oak	3%	N/A	N/A	N/A
27	Coast live oak	26%	5:1 (+2)	5-7	Seedling <1yr
28	Arroyo willow	16%	5:1 (+2)	5-7	Seedling <1yr
29	Blue elderberry	17%	5:1 (+2)	5-7	Seedling <1yr
41	Coast live oak	27%	5:1 (+2)	5-7	Seedling <1yr
42	Coast live oak	18%	5:1 (+2)	5-7	Seedling <1yr
43	Coast live oak	22%	5:1 (+2)	5-7	Seedling <1yr
44	Coast live oak	14%	5:1 (+2)	5-7	Seedling <1yr
358	Coast live oak	26%	5:1 (+2)	5-7	Seedling <1yr
360	California black walnut	6%	N/A	N/A	N/A
Total				70-96	Seedling <1yr

¹In accordance with the SMM LIP, two additional mitigation trees are added to the required mitigation ratios if mitigation will occur offsite and outside of the watershed of the encroached trees.

4.1.1 Planting Locations

In determining whether the replacement plantings required by subsection O.1 of the SMM LIP must be carried out on the project site, the Hearing Officer or Commission shall consider but is not limited to the following factors:

- The surrounding vegetation area near the project site
- The number of oak trees that are proposed to be removed/encroached upon in relation to the number of such trees currently existing on the project site
- The probability of long-term success of the replacement oak trees in a healthy condition with no or minimal conflict with the approved construction on the site over time
- The development plans submitted by the JPA of the proposed construction or the proposed use of the subject property.

As previously indicated, the project is located on public lands, owned by the State of California through the Department of Parks and Recreation. The JPA does not own the property, and planting cannot occur in the limited right-of-way access to the pipeline as it could disrupt the line, be damaged during maintenance/repair, or block access. Therefore, on-site oak and native tree mitigation is not feasible. As stated in subsection O.4 of the SMM LIP, where on-site tree mitigation is not feasible, the CDP shall be conditioned to require off-site mitigation in accordance with subsections O.1 and O.3 of the SMM LIP, and the location shall be provided at a suitable site in the Santa Monica Mountains coastal zone that is restricted from development or is public parkland. Off-site mitigation shall be located within the same watershed as the removed or encroached trees, where feasible. The JPA proposes to mitigate oak trees off-site through an approved organization or at an offsite property owned by the JPA for the 13 oak/native trees that will be encroached by 10 percent or more from the proposed project activities. Off-site mitigation within the same watershed as the encroached trees will include 70 mitigation oak/native trees. Off-site mitigation outside of the same watershed will include 96 mitigation oak/native trees.

5 Tree Protection Measures During Construction

The following tree protection measures shall be implemented in accordance with section 22.44.1920 of the County Code of Ordinances:

- Protective fencing shall be used around the outermost limits of the protected zones of the native trees within or adjacent to the construction area that may be disturbed during construction or grading activities. Before the commencement of any clearing, grading, or other construction activities, protective fencing shall be placed around each applicable tree. Fencing shall be maintained in place for the duration of all construction. No construction, grading, staging, or materials storage shall be allowed within the fenced exclusion areas, or within the protected zones of any on site native trees
- Any approved development, including grading or excavation, that encroaches into the protected zone of a native tree shall be constructed using only hand-held tools
- The JPA shall retain the services of a qualified independent biological consultant or arborist, approved by the Director to monitor native trees that are within or adjacent to the construction area. Public agencies may utilize their own staff who have the appropriate classification. If any breach in the protective fencing occurs, all work shall be suspended until the fence is repaired or replaced

In addition, the following tree protection measures should be implemented in accordance with current International Society of Arboriculture (ISA) standards for tree preservation during construction activities:

- Tree protection shall be established at the TPZ or at the greatest distance feasible from all protected trees not proposed for removal
- The limits of the TPZ should be staked in the field prior to commencement of construction activities
- Any brush clearing or pruning required within the TPZ should be accomplished with hand-operated equipment
- All trimming, pruning or removal of protected trees should be performed by or directly monitored by an ISA Certified Arborist in accordance with current ISA Standards
- No materials, equipment, spoil, waste or washout water should be deposited, stored or parked within the TPZ
- Construction activities should be completed using the smallest equipment feasible and shall operate outside the TPZ
- If equipment placement within the TPZ is necessary for construction activities, ground protection should be placed (2 inches of mulch, plywood) to prevent soil compaction
- Any roots of a protected tree over 1 inch in diameter exposed during construction activities should be exposed to sound tissue and cut cleanly with a saw
- For any single native protected tree, no more than 20% of live foliage should be removed or greater than 20% of the ground under a tree be disturbed during the extent of construction activities for this project

6 References

- American National Standards Institute (ANSI). 2012. Tree, Shrub, and Other Woody Plant Management - Standard Practices (Management of Trees and Shrubs During Site Planning, Site Development, and Construction)
- _____. 2017. Tree, Shrub, and Other Woody Plant Management - Standard Practices (Pruning)
- County of, Los Angeles. Oak Woodlands Conservation Management Plan Guide. March 18, 2014.
- Santa Monica Mountains Local Implementation Program (SMM LIP). 2014. 22.44.950 Coastal Development Permit—Oak Tree Requirements.
- Sinclair, W.A., Lyon, H.H., and Johnson, W.T. 1987. Diseases of Trees and Shrubs. Comstock Publishing Associates, Ithaca, NY.

Appendix A

Protected Tree Matrix

Tree ID #	Common Name	Scientific Name	Number of Trunks	Individual Trunk Diameters (inches)	Aggregate Trunk Diameters (inches)	Tree Height (feet)	Crown Spread (N, NE, E, SE, S, SW, W, NW)	Overall Health	Notes	Damage/Issues
1	Coast Live Oak	<i>Quercus agrifolia</i>	1	17.5	17.5	40	15, 14, 16, 15, 15, 8, 6, 4	Good	leaning east	some flagging, anthracnose deadwood slightly sparse
2	Coast Live Oak	<i>Quercus agrifolia</i>	1	35	35	60	20, 25, 30, 30, 30, 10, 12, 10	Good	new growth present	light flagging broken interior branches, deadwood
3	Coast Live Oak	<i>Quercus agrifolia</i>	1	12	12	45	19, 18, 15, 18, 22, 3, 6, 8	Good	new growth present	light flagging
4	Coast Live Oak	<i>Quercus agrifolia</i>	1	19	19	40	1, 35, 40, 35, 15, 1, 1, 1	Fair	leaning east	prostrate decaying bark, some flagging and anthracnose, branches touching ground
5	Coast Live Oak	<i>Quercus agrifolia</i>	1	35	35	60	25, 25, 28, 25, 25, 25, 20, 30	Fair		somewhat sparse crown deadwood broken branches light flagging, epicormic growth
6	Coast Live Oak	<i>Quercus agrifolia</i>	1	13	13	55	5, 11, 11, 11, 3, 10, 10, 6	Good		sparse crown on west side some anthracnose, deadwood
7	Coast Live Oak	<i>Quercus agrifolia</i>	4	8, 12, 4, 6	16	50	10, 9, 10, 10, 10, 10, 12, 8	Good		some anthracnose and flagging, lichen on branches, codominant stems
8	Coast Live Oak	<i>Quercus agrifolia</i>	1	44	44	65	30, 30, 32, 33, 25, 20, 20, 25	Fair		sparse crown, flagging dead branches deadwood
9	Coast Live Oak	<i>Quercus agrifolia</i>	1	11	11	50	7, 10, 8, 9, 8, 6, 5, 6	Good		some flagging and anthracnose
10	Coast Live Oak	<i>Quercus agrifolia</i>	1	8	8	25	6, 8, 9, 8, 7, 2, 2, 2	Fair	leaning east	sparse crown, anthracnose and flagging
11	Coast Live Oak	<i>Quercus agrifolia</i>	1	7.5	7.5	20	5, 5, 7, 3, 3, 2, 3, 2	Fair		anthracnose flagging leaf miners, sparse crown
12	Coast Live Oak	<i>Quercus agrifolia</i>	4	12, 10, 11, 13	23	25	18, 15, 15, 12, 12, 12, 15, 13	Good	new growth, not tagged	light flagging
13	Coast Live Oak	<i>Quercus agrifolia</i>	3	18, 20, 25	37	55	20, 23, 14, 20, 18, 25, 30, 20	Good	new growth on east side	somewhat sparse on northwest side, some dieback
14	Arroyo Willow	<i>Salix lasiolepis</i>	1	7	7	20	1, 1, 5, 8, 15, 15, 6, 1	Good	leaning south, not tagged	NA
15	Arroyo Willow	<i>Salix lasiolepis</i>	2	10, 8	13	30	15, 1, 1, 1, 1, 10, 12, 15	Good	leaning northwest	NA
16	Boxelder Maple	<i>Acer negundo</i>	5	10, 9, 8, 10, 8	20	35	20, 25, 25, 10, 8, 15, 10, 12	Good	growing adjacent to flowing creek, not tagged	NA
17	Arroyo Willow	<i>Salix lasiolepis</i>	10	9, 9	13	20	10, 10, 10, 8, 6, 8, 6, 6	Poor	not tagged	many dead branches and trunks
18	Arroyo Willow	<i>Salix lasiolepis</i>	10	6, 6	8	20	15, 12, 15, 8, 10, 10, 15, 16	Fair	not tagged	dead branches and trunks
19	Arroyo Willow	<i>Salix lasiolepis</i>	2	10, 7	12	30	12, 8, 15, 15, 10, 15, 15, 15	Good	not tagged	some dead branches
20	Coast Live Oak	<i>Quercus agrifolia</i>	2	13.5, 45	47	55	25, 25, 30, 25, 25, 20, 25, 25	Poor	selective pruning to remove dead and decaying lower branches	sparse crown dieback dead lower branches touching ground flagging, anthracnose
21	Coast Live Oak	<i>Quercus agrifolia</i>	1	25	25	55	20, 15, 18, 12, 25, 15, 30, 15	Good		deadwood in lower interior crown, some anthracnose
22	Coast Live Oak	<i>Quercus agrifolia</i>	1	28	28	55	30, 28, 25, 25, 20, 20, 20, 30	Fair	utility pole through crown, no significant previous pruning observed	sparse crown dieback
23	Coast Live Oak	<i>Quercus agrifolia</i>	3	18, 20, 21	34	50	20, 20, 18, 15, 25, 20, 25, 20	Good		somewhat sparse crown light flagging dead branches, deadwood
24	Coast Live Oak	<i>Quercus agrifolia</i>	9	5, 10, 4, 9, 1, 1, 1, 1, 6	15	30	15, 15, 10, 8, 5, 5, 8, 10	Good	not tagged	somewhat sparse crown, some anthracnose
25	Coast Live Oak	<i>Quercus agrifolia</i>	3	8, 1, 2	8	20	10, 8, 8, 10, 5, 5, 8, 8	Fair		sparse crown, anthracnose
26	Coast Live Oak	<i>Quercus agrifolia</i>	1	11	11	40	10, 10, 5, 5, 5, 8, 8, 10	Fair	growing adjacent to retaining wall south of creek	anthracnose, sparse crown dead branches
27	Coast Live Oak	<i>Quercus agrifolia</i>	3	10, 10, 12	19	40	10, 10, 15, 15, 10, 8, 5, 5	Good	growing adjacent to retaining wall south of creek	codominant stems
28	Arroyo Willow	<i>Salix lasiolepis</i>	15	7, 7	10	30	10, 10, 15, 20, 20, 15, 8, 10	Fair	not tagged, dripline at edge of proposed manhole	dead branches, sparse crown
29	Blue Elderberry	<i>Sambucus cerulea</i>	10	7, 7	10	20	15, 10, 8, 7, 16, 16, 15, 15	Fair	not tagged	many dead branches
30	Coast Live Oak	<i>Quercus agrifolia</i>	1	12	12	45	8, 8, 10, 10, 15, 15, 1, 1	Good	previously pruned	codominant stems
31	Coast Live Oak	<i>Quercus agrifolia</i>	3	16, 15, 14.5	26	55	25, 25, 20, 25, 30, 25, 15, 20	Good	previously pruned	codominant stems
32	California sycamore	<i>Platanus racemosa</i>	2	15, 18	23	50	20, 25, 28, 25, 28, 25, 20, 20	Good		NA

Tree ID #	Common Name	Scientific Name	Number of Trunks	Individual Trunk Diameters (inches)	Aggregate Trunk Diameters (inches)	Tree Height (feet)	Crown Spread (N, NE, E, SE, S, SW, W, NW)	Overall Health	Notes	Damage/Issues
33	California sycamore	<i>Platanus racemosa</i>	1	28	28	65	15, 12, 12, 20, 15, 15, 12, 20	Good	adjacent to parking lot	leaf miners
34	California sycamore	<i>Platanus racemosa</i>	1	18	18	60	20, 15, 18, 20, 18, 15, 15, 15	Good		woodpecker damage along trunk and branches
35	California sycamore	<i>Platanus racemosa</i>	1	13	13	65	3, 1, 1, 3, 5, 10, 8, 8	Fair	previously pruned	some dieback, anthracnose epicormic growth sparse crown
36	California sycamore	<i>Platanus racemosa</i>	1	11	11	45	10, 8, 8, 15, 12, 10, 10, 8	Good	previously pruned	uneven crown
37	California sycamore	<i>Platanus racemosa</i>	1	16	16	65	10, 12, 10, 20, 20, 25, 20, 15	Good	stress cracks on branches, previously pruned	some dieback
38	California sycamore	<i>Platanus racemosa</i>	1	20	20	35	25, 25, 25, 20, 25, 23, 25, 20	Good	previously pruned	leaf miners. weak lateral stems from previous pruning
39	Coast Live Oak	<i>Quercus agrifolia</i>	1	18	18	45	25, 20, 20, 18, 20, 15, 10, 10	Good	growing behind chain-link fence	NA
40	Coast Live Oak	<i>Quercus agrifolia</i>	1	9	9	45	2, 2, 2, 8, 10, 10, 10, 3	Good	growing behind chain-link fence	NA
41	Coast Live Oak	<i>Quercus agrifolia</i>	1	14	14	25	15, 20, 20, 18, 18, 10, 8, 5	Good	previously pruned	some anthracnose
42	Coast Live Oak	<i>Quercus agrifolia</i>	2	10, 6.5	12	30	10, 12, 8, 12, 10, 10, 12, 10	Good	previously pruned	some flagging, codominant stems
43	Coast Live Oak	<i>Quercus agrifolia</i>	1	13	13	30	8, 5, 5, 3, 3, 3, 3, 5	Good	previously pruned	some flagging
44	Coast Live Oak	<i>Quercus agrifolia</i>	2	7, 8	11	25	6, 5, 3, 3, 4, 4, 3, 4	Good	previously pruned	some flagging, codominant stems
358	Coast Live Oak	<i>Quercus agrifolia</i>	2	8, 8	11	25	5, 5, 5, 5, 5, 5, 5, 5	Good		
359	Coast Live Oak	<i>Quercus agrifolia</i>	1	11	11	25	10, 5, 5, 5, 5, 5, 8, 6	Good		
360	California black walnut	<i>Juglans californica</i>	1	17	17	30	5, 8, 5, 4, 8, 16, 15, 6	Poor		dead, snapped branches
361	Coast Live Oak	<i>Quercus agrifolia</i>	1	13	13	30	6, 6, 6, 6, 6, 6, 6, 6	Good		
362	California black walnut	<i>Juglans californica</i>	1	14	14	30	10, 8, 4, 4, 15, 10, 12, 12	Fair		

Appendix B

Tree Photographs



Tree #1 Coast Live Oak (*Quercus agrifolia*)



Tree #2 Coast Live Oak (*Quercus agrifolia*)



Tree #3 Coast Live Oak (*Quercus agrifolia*)



Tree #4 Coast Live Oak (*Quercus agrifolia*)



Tree #5 Coast Live Oak (*Quercus agrifolia*)



Tree #6 Coast Live Oak (*Quercus agrifolia*)



Tree #7 Coast Live Oak (*Quercus agrifolia*)



Tree #8 Coast Live Oak (*Quercus agrifolia*)



Tree #9 Coast Live Oak (*Quercus agrifolia*)



Tree #10 Coast Live Oak (*Quercus agrifolia*)



Tree #11 Coast Live Oak (*Quercus agrifolia*)



Tree #12 Coast Live Oak (*Quercus agrifolia*)



Tree #13 Coast Live Oak (*Quercus agrifolia*)



Tree #14 Arroyo Willow (*Salix lasiolepis*)



Tree #15 Arroyo Willow (*Salix lasiolepis*)



Tree #16 Boxelder Maple (*Acer negundo*)



Tree #17 Arroyo Willow (*Salix lasiolepis*)



Tree #18 Arroyo Willow (*Salix lasiolepis*)



Tree #19 Arroyo Willow (*Salix lasiolepis*)



Tree #20 Coast Live Oak (*Quercus agrifolia*)



Tree #20 Coast Live Oak (*Quercus agrifolia*)



Tree #20 Coast Live Oak (*Quercus agrifolia*)



Tree #21 Coast Live Oak (*Quercus agrifolia*)



Tree #22 Coast Live Oak (*Quercus agrifolia*)



Tree #23 Coast Live Oak (*Quercus agrifolia*)



Tree #24 Coast Live Oak (*Quercus agrifolia*)



Tree #25 Coast Live Oak (*Quercus agrifolia*)



Tree #26 Coast Live Oak (*Quercus agrifolia*)



Tree #26 Coast Live Oak (*Quercus agrifolia*)



Tree #27 Coast Live Oak (*Quercus agrifolia*)



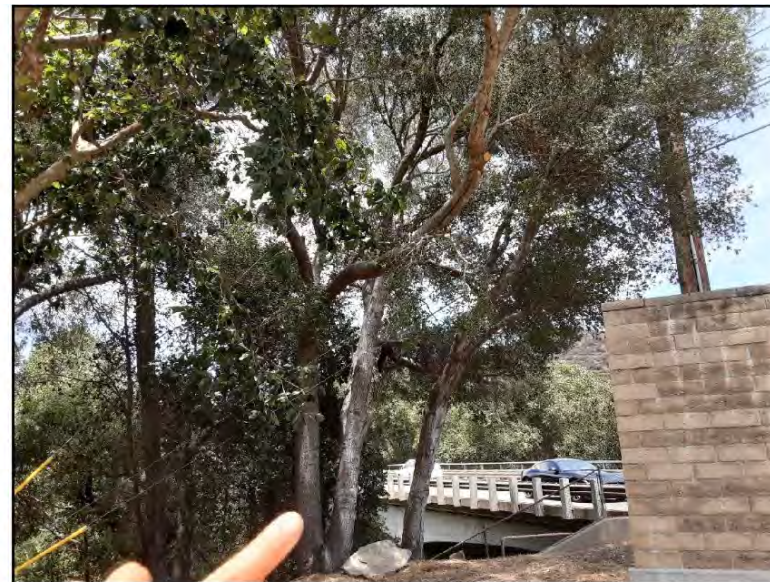
Tree #28 Arroyo Willow (*Salix lasiolepis*)



Tree #29 Blue Elderberry (*Sambucus cerulea*)



Tree #30 Coast Live Oak (*Quercus agrifolia*)



Tree #31 Coast Live Oak (*Quercus agrifolia*)



Tree #32 California sycamore (*Platanus racemosa*)



Tree #33 California sycamore (*Platanus racemosa*)



Tree #34 California sycamore (*Platanus racemosa*)



Tree #34 California sycamore (*Platanus racemosa*)



Tree #35 California sycamore (*Platanus racemosa*)



Tree #36 California sycamore (*Platanus racemosa*)



Tree #37 California sycamore (*Platanus racemosa*)



Tree #38 California sycamore (*Platanus racemosa*)



Tree #39 Coast Live Oak (*Quercus agrifolia*)



Tree #40 Coast Live Oak (*Quercus agrifolia*)



Tree #41 Coast Live Oak (*Quercus agrifolia*)



Tree #42 Coast Live Oak (*Quercus agrifolia*)



Tree #43 Coast Live Oak (*Quercus agrifolia*)



Tree #44 Coast Live Oak (*Quercus agrifolia*)



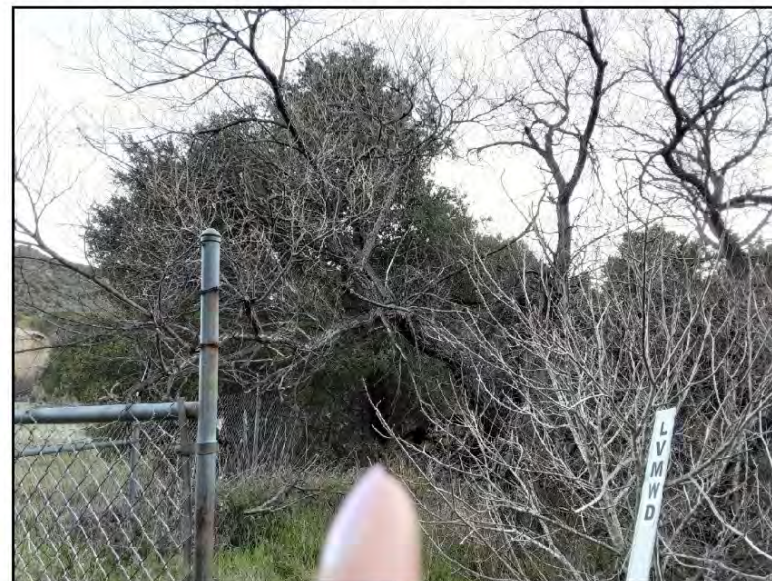
Tree #358 Coast Live Oak (*Quercus agrifolia*)



Tree #359 Coast Live Oak (*Quercus agrifolia*)



Tree #360 California black walnut (*Juglans californica*)



Tree #361 Coast Live Oak (*Quercus agrifolia*)



Tree #362 California black walnut (*Juglans californica*)